

Revised Final Plan
Attachment 9.12

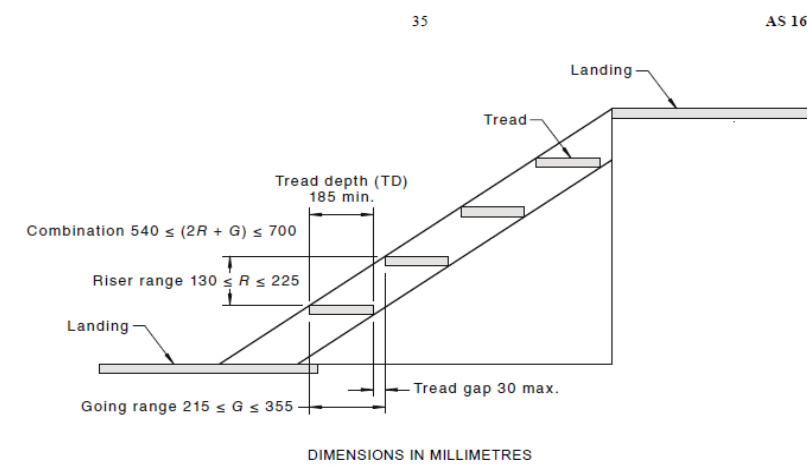
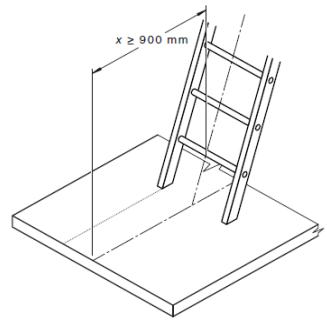
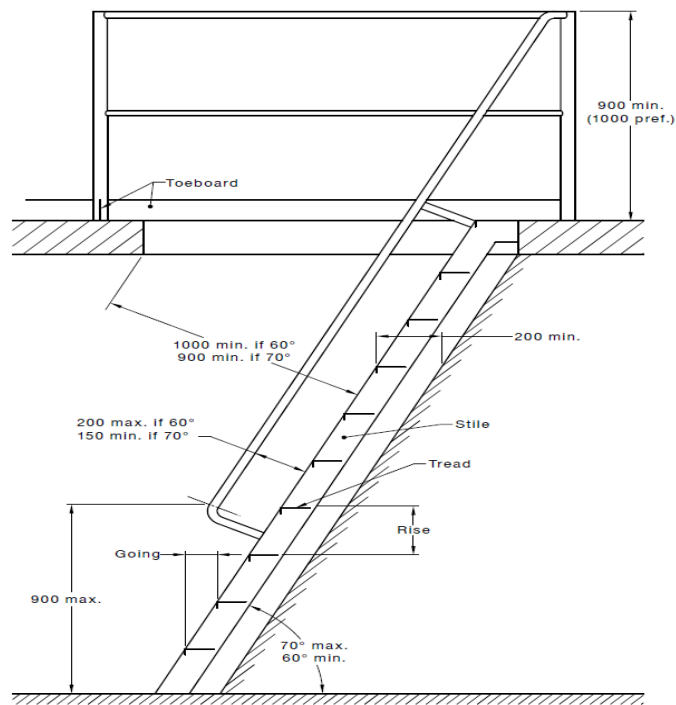
Structures & Operational Sites - Working at Heights - Appendix B

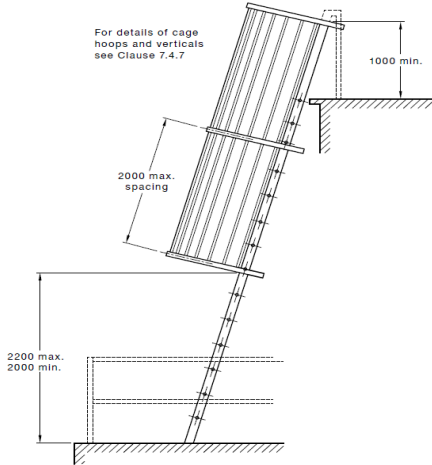
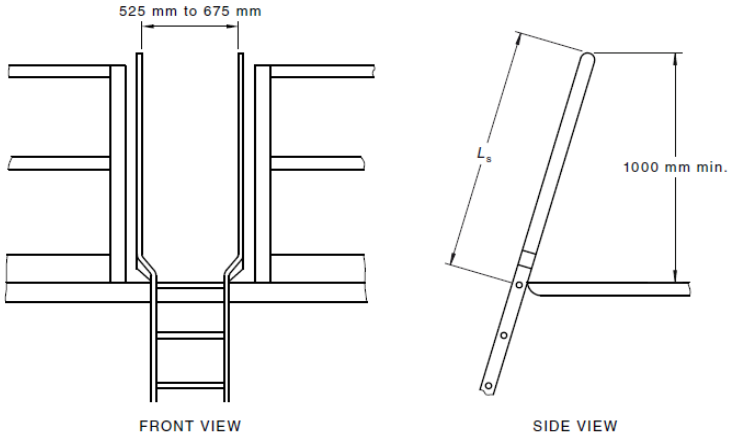
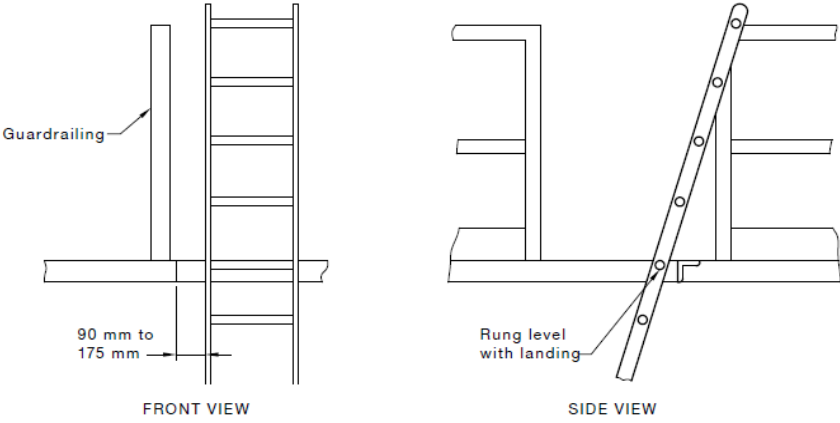
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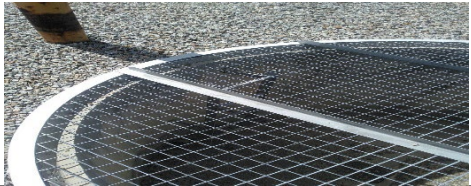










**Dampier Bunbury
Pipeline**




Design	Design Component	Requirement	AS 1657 : 2018
Walkway	Head room	2000mm	No stairs required. Minimum of 1 step required. Access stairs, ladder or sloping walkway required.
	Walkway width	Min 600mm	
	End of Height Difference between Walkways, Platforms and Landings	Clearly visable (Yellow) Non-slip nosing <300mm Min 300mm Max 450mm >450mm	
Handrail	Gap	Max 100mm from structure	1000mm or more if above 2m floor height
	Gap Bottom (Start Point) Height	Min 25mm Max 50mm between joins Max 90mm above landing Min 900mm Max 1100mm	
	Clearance Size Dia	Min 50mm Min 30mm Max 65mm	
Stairs	Mid rail	Max 450 from bottom with toe board 100mm, Max 450 from top	<div> <div>35</div> <div>AS 1657:2018</div>  </div>
	Treads	Clearly visable (Yellow) Non-slip nosing	
	Tread Depth	Min 185mm	
Ladders	Handrail	2 or more steps	<div>  </div>
	Bottom landing	900mm long	
	Width	Min 600mm	
Step Type Ladders	Flight	Min 2 Max 18 risers	<div>  </div>
	Riser	Min 130mm Max 225	
	Going	Min 215mm Max 355	
Ladders	Nosing	Clearly visable (Yellow)	<div> <div>900 min. (1000 pref.)</div> <div>Toeboard</div> <div>1000 min. if 60° 900 min. if 70°</div> <div>200 min.</div> <div>Stile</div> <div>Tread</div> <div>Rise</div> <div>Going</div> <div>200 max. if 60° 150 min. if 70°</div> <div>900 max.</div> <div>70° max. 60° min.</div> </div>
	Landing	Min 600mm from bottom tread	
	Landing	Width of stairs	
Step Type Ladders	Slope	Min 20 degrees Max 45 degrees	
	Rungs	Non-slip grip	
	Rungs	Min 20mm Max 50mm	
Ladders	Rungs From Bottom	<=150mm of landing	<div> <div>900 min. (1000 pref.)</div> <div>Toeboard</div> <div>1000 min. if 60° 900 min. if 70°</div> <div>200 min.</div> <div>Stile</div> <div>Tread</div> <div>Rise</div> <div>Going</div> <div>200 max. if 60° 150 min. if 70°</div> <div>900 max.</div> <div>70° max. 60° min.</div> </div>
	Landing	Vertical above landing	
	Landing bottom	Min 900mm long from bottom rung	
Step Type Ladders	Landing top	Min 600mm long from bottom rung	
	Landing top	Min 600mm width or width of landing which ever is greater	
	Ladder Enclosure (cage, side screen or other)	Swing gate at top Fall of >6 metres	










Design	Design Component	Requirement	AS 1657 : 2018
Ladder Cages	Cage From Bottom Landing	Min 2000mm Max 2200mm	 <p>For details of cage hoops and verticals see Clause 7.4.7</p> <p>2000 max. spacing</p> <p>2200 max. 2000 min.</p> <p>1000 min.</p>
	Cage Above Top Landing	Min 1000mm or to height of guardrail	
	Ladder Above Top Landing	Min 1000mm	
Step Through Ladders	Ladder Above Top Landing	Min 1000mm	 <p>525 mm to 675 mm</p> <p>1000 mm min.</p> <p>FRONT VIEW</p> <p>SIDE VIEW</p>
	Ladder Above Top Landing	Min 1000mm	 <p>Guardrailing</p> <p>90 mm to 175 mm</p> <p>FRONT VIEW</p> <p>SIDE VIEW</p> <p>Rung level with landing</p>

Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
MLV010-1	19/03/2024	All Areas	No design risks identified. Situational/task based risk may exist.				No Action Required.	No reference photo taken.			
MLV144-1	5/03/2024	MLV144 - All Areas	1) Access to Risers and vents ~1200mm for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height. 2) Cable markers / inspection pits pose a trip hazard.	C. Unlikely	2. Minor	Low	1) Option A: Install concrete landing for platform ladder to be set up on. Option B: Install a purpose built platform and access stairs or ladder that is AS compliant. 2) Relocate, accommodation into above works or build up blue				
MLV153-1	5/03/2024	MLV153 - All Areas	1) Access to Risers and Vents ~2000mm for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height. 2) Cable markers / inspection pits pose a trip hazard. 3) Spare piping is being stored onsite, near the roadside fencing.	C. Unlikely	3. Severe	Medium	1) Option A: Install concrete landing for platform ladder to be set up on. Option B: Install a purpose built platform and access stairs or ladder that is AS compliant. 2) Relocate, accommodation into above works or build up blue metal to eliminate the trip hazard. 3) Consider removing pipework that is not being used and stored onsite near the roadside fencing.	 			
MLV156 / MLV157-1	1/03/2024	MLV156 / MLV157 - Water Bath Heater	1) Access to Risers and Vents ~2000mm for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height. 2) The landing for the platform ladder does not meet AS1657 requirements (actual 560mm, requirement min	C. Unlikely	3. Severe	Medium	1) Option A: Install concrete landing for platform ladder to be set up on. Option B: Install a purpose built platform and access stairs or ladder that is AS compliant. 2) Pour a new landing or extend the existing landing.				
MLV156 / MLV157-2	1/03/2024	MLV156 / MLV157 - Mercaptan Tank and Bund	1.1) Steps provided on two sides of the bunds are loose and can move under your feet and do not meet the sizing requirements in AS1657. 1.2) Step up from the ground, to hop over the bund is 450mm which requires 1-2 stairs (if 2 handrails too) to provide safe access in line with AS1657. 2) Small piping poses a trip hazard if walking around the bund.	C. Unlikely	2. Minor	Low	1) Remove the temporary stairs and provide permanent access stairs that comply with AS1657. 2) Install a hop over or paint the pipes yellow so they stand out. 3) Consider installing hi vis (yellow) anti slip tread on the nosing of the platform where access will access.				
MLV102-1	12/02/2024	MLV102 - All Areas (except CS Pits)	1) Access to Risers and Vents for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height.	C. Unlikely	3. Severe	Medium	1) Option A: Install concrete landing for platform ladder to be set up on. Option B: Install a purpose built platform and access stairs or ladder that is AS compliant.				
MLV102-2	12/02/2024	MLV102 - 2 x CS Pits (1 inside fenced compound, 1 outside adjacent to compound)	1) Ladder does not extend 1m past the landing at the top of the ladder and does not have sufficient locations to hold onto when mounting / dismounting. 2) No non-slip tread on ladder rungs.	B. Remote	3. Severe	Medium	1) Woody or replace the ladder, ensuring it extends 1m past the top landing, with sufficient locations to hold onto when mounting / dismantling the ladder. 2) Modified or replacement ladder to have hi vis (yellow) nos				

Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
MLV095-1	6/02/2024	MLV095 and Eneabba Meter Station - Multiple Risers	1) Access to Risers and Vents for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height.	C. Unlikely	3. Severe	Medium	1) Option A: Install concrete landing for platform ladder to be set up on. Option B: Install a purpose built platform and access stairs or ladder that is AS compliant.				23/04/2024 Raised with Robert Van Der Wilk and requested the recommended actions are incorporated into the Eneabba Meter Station Re-Lifing Project, during the Design Review Meeting. 05/06/2024 Robert advised Paul Reilly he will address this action item.
MLV095-2	6/02/2024	MLV095 and Eneabba Meter Station - Inspection Pit	1) Ladder does not extend 1m past the landing at the top of the ladder and does not have sufficient locations to hold onto when mounting / dismounting. 2) No non-slip tread on ladder rungs.	B. Remote	3. Severe	Medium	1) Modify or replace the ladder, ensuring it extends 1m past the top landing, with sufficient locations to hold onto when mounting / dismounting the ladder. 2) Modified or replacement ladder to have hi vis (yellow) non-slip tread installed on the rungs.	 			23/04/2024 Raised with Robert Van Der Wilk and requested the recommended actions are incorporated into the Eneabba Meter Station Re-Lifing Project, during the Design Review Meeting. 05/06/2024 Robert has requested this item to be covered by Paul Reilly's W@H Improvement Project.
MLV095-3	6/02/2024	MLV095 and Eneabba Meter Station - Pav Hut	1) The landing for the stairs does not meet AS1657 requirements of 900mm. 2) Stair riser exceeds AS1657 requirement of 130-225mm (actual 300mmm). 3) No hi vis (yellow) tread installed onto the nosing of each stair.	C. Unlikely	2. Minor	Low	1) Pour a new landing. 2) Replace stair with AS1657 compliant stairs. 3) Install hi vis (yellow) tread onto the nosing of each stair.	 			23/04/2024 Raised with Robert Van Der Wilk and requested the recommended actions are incorporated into the Eneabba Meter Station Re-Lifing Project, during the Design Review Meeting. 05/06/2024 Robert has requested this item to be covered by Paul Reilly's W@H Improvement Project.
MLV095-4	6/02/2024	MLV095 and Eneabba Meter Station - Metering Skid	1) No non-slip tread on the edge of skid and nosing of stairs. 2) Requirement for handrail and stair risers in AS1657 not met. 3) Landing does not meet the AS1657 requirements and is currently blue metal.	C. Unlikely	2. Minor	Low	1) Install hi vis (yellow) non-slip tread installed on the edge of the skid and nosing of all stairs. 2) Replace stairs and install handrail that meets AS1657 requirements. 3) Pour a landing that meets AS requirements.	 			23/04/2024 Raised with Robert Van Der Wilk and requested the recommended actions are incorporated into the Eneabba Meter Station Re-Lifing Project, during the Design Review Meeting. 05/06/2024 Robert has requested this item to be covered by Paul Reilly's W@H Improvement Project.
MLV114-1	13/12/2023	MLV114 - All Areas	1) Access to Risers and Vents ~2000mm for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height.	C. Unlikely	3. Severe	Medium	1) Option A: Install concrete landing for platform ladder to be set up on. Option B: Install a purpose built platform and access stairs or ladder that is AS compliant.	 			

Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
MLV091-1	2/10/2023	MLV091 Nangetty Road Meter Station - Multiple Risers	1) Access to Risers and Vents for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height.	C. Unlikely	3. Severe	Medium	1) Option A: Install concrete landing for platform ladder to be set up on. Option B: Install a purpose built platform and access stairs or ladder that is AS compliant.				
MLV091-2	2/10/2023	MLV091 Nangetty Road Meter Station - Metering Skid	1) No non-slip tread on the edge of skid and nosing of stairs. 2) Landing does not meet the AS requirements and is currently blue metal.	C. Unlikely	2. Minor	Low	1) Install hi vis (yellow) non-slip tread installed on the edge of the skid and nosing of all stairs. 2) Pour a landing that meets AS requirements.				
MLV091-3	2/10/2023	MLV091 Nangetty Road Meter Station - Mercaptan Skid and Bund	1) No access stairs for personnel to use to enter / exit bund (height 400mm). Small concrete block sighted that may be used as a step.	D. Occasional	2. Minor	Medium	1.1) Install access stairs on two sides of the bund. If 2 or more steps are in place, then handrails are required. 1.2) Install hi vis (yellow) non-slip strip on the nosing of each stair. 1.3) Pour a landing for each access stairs, that meet AS requirements.				

Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
MLV009-1	26/07/2023	All Areas	No design risks identified. Situational/task based risk may exist.				No Action Required.	No reference photo taken.			
MLV066-1	22/05/2023	MLV066 - All Areas excluding the Inspection Pit	1) Access to Risers up to 2900mm and Vents up to 3340mm for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height.	C. Unlikely	3. Severe	Medium	1) Option A: Install concrete landing for platform ladder to be set up on. Option B: Install a purpose built platform and access stairs or ladder that is AS compliant.				
MLV066-2	22/05/2023	MLV066 - Inspection Pit	1) Ladder does not extend 1m past the landing at the top of the ladder and does not have sufficient locations to hold onto when mounting / dismantling. 2) No non-slip tread on ladder rungs.	B. Remote	3. Severe	Low	1) Modify or replace the ladder, ensuring it extends 1m past the top landing, with sufficient locations to hold onto when mounting / dismantling the ladder. 2) Modified or replacement ladder to have hi vis (yellow) non-slip tread installed on the rungs.				
MLV071-1	22/05/2023	MLV071 - All Areas	1) Access to Risers up to 2200mm and Vents up to 2500mm for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height.	C. Unlikely	3. Severe	Medium	1) Option A: Install concrete landing for platform ladder to be set up on. Option B: Install a purpose built platform and access stairs or ladder that is AS compliant.				






Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
MLV035-1	21/04/2023	MLV035 - All Areas	No design risks identified. Situational/task based risk may exist.				No Action Required.				
MLV042-1	21/04/2023	MLV042 - All Areas	1) Access to Risers and Vents for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height.	C. Unlikely	3. Severe	Medium	1) Option A: Install concrete landing for platform ladder to be set up on. Option B: Install a purpose built platform and access stairs or ladder that is AS compliant.				
MLV047-1	21/04/2023	MLV047 - All Areas	No design risks identified. Situational/task based risk may exist.				No Action Required.				
MLV054-1	21/04/2023	MLV054 - All Areas	No design risks identified. Situational/task based risk may exist.				No Action Required.				
MLV142-1	13/04/2023	MLV142 - Pav Hut (Cream Colour) - North Side	1) The Step Up is 330mm and does not meet AS requirements (≤300mm) slightly. 2) No hi vis (yellow) strip on the nosing (ends) of the stairs.	C. Unlikely	2. Minor	Low	1) No action required as only minimum exceedance of AS requirements. 2) Install hi vis (yellow) non-slip strip on the nosing of each stair.				
MLV142-2	13/04/2023	MLV142 - Pav Hut (Cream Colour) - West Side (north side pictured)	1) The Step Up is 310mm and does not meet AS requirements (≤300mm) slightly. 2) No hi vis (yellow) strip on the nosing (ends) of the stairs.	C. Unlikely	2. Minor	Low	1) No action required as only minimum exceedance of AS requirements. 2) Install hi vis (yellow) non-slip strip on the nosing of each stair.				
MLV142-3	13/04/2023	MLV142 - Green Hut - East Side	1.1) The stair risers are 100mm and 250mm and therefore do not meet the AS requirements (130-225mm). 1.2) The current state of the ground conditions has created a trip / fall hazard when using the door (e.g. concrete pad is not width to act as the landing).	C. Unlikely	2. Minor	Low	1) Install additional blue metal to create level ground and eliminate the trip / fall hazard when entering / exiting the hut.				
MLV142-4	13/04/2023	MLV142 - Green Hut - South Side	1.1) The stair risers are 100mm and 250mm and therefore do not meet the AS requirements (130-225mm). 1.2) The current state of the ground conditions has created a trip / fall hazard when using the door (e.g. concrete pad is not width to act as the landing).	C. Unlikely	2. Minor	Low	1) Install additional blue metal to create level ground and eliminate the trip / fall hazard when entering / exiting the hut.				
MLVXXX-1	2/02/2023	Example - TEG unit	1) Landing does not meet AS requirement of 900mm long			Low	1.1) Remove old landing and install new precast one 1.2) Pour new landing				






[illegible]





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Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Ashburton Port Meter Station - 1	16/07/2024	Ashburton Port Meter Station - Controls Shelter	1) No landing has been installed beneath where the step and handrails will be (once installed). Notes: - Step pictured at the Solar Skid is actually for the Controls Shelter according to the Construction Crew. - Handrails are inside the Controls Shelter, awaiting installation. - 16/07/2024 Raised with Jeromie Gasper as construction project is still in progress.	C. Unlikely	2. Minor	Low	1) Pour a landing. Notes: - The landing needs to be at least the width of the stairs (step is 1800mm wide). - The depth of landing will need to be 600mm from the bottom stair.				
Ashburton Port Meter Station - 2	16/07/2024	Ashburton Port Meter Station - Solar Skid x 2	1) No concrete landing for personnel to step on / off when accessing the panel side of the solar skid. 2) Step up from ground onto the skid exceeds the step up requirements under AS1657 (actual 320mm, 200-449mm needs 1 step). 3) No handrails to stop personnel falling or stepping off the skid and insufficient room when opening the panel door. Potential fall is 320mm. Distance from the panel to edge of skid is 710mm (minimum distance for platform and walkway is 600mm). Notes: - Pictured step is for the Controls Shelter according to the Construction Crew. - Raised with Jeromie Gasper as construction project is still in progress.	C. Unlikely	2. Minor	Low	1) Pour a landing for access point(s). 2.1) Option A: Have the landing site 50mm above ground level to eliminate the need of a intermediate step for access. 2.2) Option B: Install a intermediate step. 3) Consider installing handrails around the skid, taking into account distance of panel door opening.				
Pluto Interconnect Compressor / Metering Station - 15	8/07/2024	Oil IBC	1) If personnel stand on the bund, they are exposed to a fall. 2) If personnel use a ladder, they are exposed to a fall if the ladder slips on blue metal. Note: INX-19744 raised by Ben Riddle. The oil spear has to be put into the top of the oil pod, so you have to stand on the side of the bund or work from a ladder. Access frequency is every 15 days.	C. Unlikely	3. Severe	Medium	1) Redesign the job to use a pump permanently set up on the bund with a relief in it and feed the pump from the bottom of the IBC. This eliminates the risk of a fall from height and reduces the risk of oil spills on blue metal during transfer of oil. Suggestions from Ben Riddle in INX-19744.				
Spur 1 - 1	22/04/2024	Spur 1 - Hut	Assessed using surveillance photo. Additional photos requested to confirm accuracy of assessment. 1) No handrails are installed and therefore the AS requirement (2 or more stairs) is not being met. 2) The stairs do not run the full length until the landing and entrance of hut. However the Step Up does currently meet the AS requirement (200mm).	D. Occasional	3. Severe	Medium	1) Install handrails that run the full length of stairs and meet AS requirements. 2) Redesign the stairs to run from the landing to the entrance to the hut and meet the AS requirements and provide safe access. 3) Ensure hi vis (yellow) anti-slip tread is installed on the entire of				
Spur 1 - 2	22/04/2024	Spur 1 - Tower	No ladder access on tower is visible from surveillance photos. Scaffolding, EWP or other means of access would be required.				N.A.				








Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Spur 2 - 1	22/04/2024	Spur 2 - Hut	1) No handrails are installed and therefore the AS requirement (2 or more stairs) is not being met. 2) The stairs do not run the full length until the landing and entrance of hut. However the Step Up does currently meet the AS requirement (300mm)	D. Occasional	3. Severe	Medium	1) Install handrails that run the full length of stairs and meet AS requirements. 2) Redesign the stairs to run from the landing to the entrance to the hut and meet the AS requirements and provide safe access.				
Spur 2 - 2	22/04/2024	Spur 2 - Tower	No ladder access on tower is visible from surveillance photos. Scaffolding, EWP or other means of access would be required.				N.A.				
Spur 3 - 1	22/04/2024	Spur 3 - Hut	1) No handrails are installed and therefore the AS requirement (2 or more stairs) is not being met. 2) The stairs do not run the full length until the landing and entrance of hut. However the Step Up does currently meet the AS requirement (300mm) 3) No hi vis (yellow) anti-slip tread installed on the nosing of the stairs. 4) The landing is smaller then the size required in the AS (minimum 600mm depth from bottom stair). <i>Note: Assessed using surveillance photos. Onsite verification and measures required.</i>	D. Occasional	3. Severe	Medium	1) Install handrails that run the full length of stairs and meet AS requirements. 2) Redesign the stairs to run from the landing to the entrance to the hut and meet the AS requirements and provide safe access. 3) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of all stairs (width 840mm). 4) Remove the existing landing and pour a new landing that meets AS requirements.				
Spur 3 - 2	22/04/2024	Spur 3 - Tower	No ladder access on tower is visible from surveillance photos. Scaffolding, EWP or other means of access would be required.				N.A.				
Spur 4 - 1	22/04/2024	Spur 4 - Hut	1) No handrails are installed and therefore the AS requirement (2 or more stairs) is not being met. 2) The stairs do not run the full length until the landing and entrance of hut. However the Step Up does currently meet the AS requirement (300mm) 3) No hi vis (yellow) anti-slip tread installed on the nosing of the stairs. 4) The landing is smaller then the size required in the AS (minimum 600mm depth from bottom stair). <i>Note: Assessed using surveillance photos. Onsite verification and measures required.</i>	D. Occasional	3. Severe	Medium	1) Install handrails that run the full length of stairs and meet AS requirements. 2) Redesign the stairs to run from the landing to the entrance to the hut and meet the AS requirements and provide safe access. 3) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of all stairs (width 840mm). 4) Remove the existing landing and pour a new landing that meets AS requirements.				




Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Spur 4 - 2	22/04/2024	Spur 4 - Tower	1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access. 2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.	C. Unlikely	4. Major	High	1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access. 2) Install a certified fall restraint/arrest system that is suitable for the end users. 3) Assess if the installation a side				
Spur 5 - 1	22/04/2024	Spur 5 - Hut	1) No handrails are installed and therefore the AS requirement (2 or more stairs) is not being met. 2) The stairs do not run the full length until the landing and entrance of hut. However the Step Up does currently meet the AS requirement (300mm) 3) No hi vis (yellow) anti-slip tread installed on the nosing of the stairs. 4) The landing is smaller then the size required in the AS (minimum 600mm depth from bottom stair). Note: Assessed using surveillance photos. Onsite verification and measures required.	D. Occasional	3. Severe	Medium	1) Install handrails that run the full length of stairs and meet AS requirements. 2) Redesign the stairs to run from the landing to the entrance to the hut and meet the AS requirements and provide safe access. 3) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of all stairs (width 840mm). 4) Remove the existing landing and pour a new landing that meets AS requirements.				
Spur 5 - 2	22/04/2024	Spur 5 - TEG	1) No hi vis (yellow) anti-slip tread installed on the nosing of the stairs. 2) No handrails are installed and therefore the AS requirement (2 or more stairs) is not being met. Note: Non-compliance identified but not action is recommended as minimal risk of a fall from height and low usage. Assessed using surveillance photo. Additional photos requested to confirm accuracy of assessment.	B. Remote	2. Minor	Low	1) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of all stairs (width top step 870mm, bottom step 770mm). 2) No action required.				
Spur 5 - 3	22/04/2024	Spur 5 - Tower	1) Unlike some other Repeater Stations, the ladder at this location can be access from ground level. No gate or means of accessing the ladder on a platform at height to prevent unauthorised access, has been implemented. 2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury. 3) The width of the ladder appears it does not meet the AS requirements (375mm to 525mm) and may create a hazard to personnel using the ladder. 4) No hi vis (yellow) anti-slip tread installed on the ladder rungs. They are currently smooth metal rungs. Note: Assessed using surveillance photo. Additional photos requested to confirm	C. Unlikely	4. Major	High	1) Consider installing a lockable gate or similar and signage is provided to prevent unauthorised access. 2) Install a certified fall restraint/arrest system that is suitable for the end users. 3) Replace the ladder with a AS compliant ladder. 4) Install hi vis (yellow) anti-slip tread on the ladder rungs.				



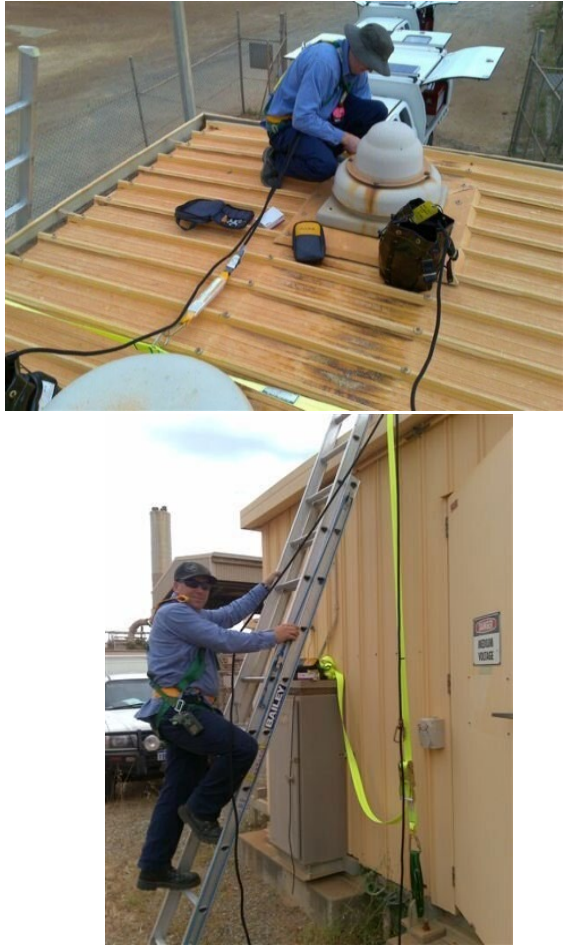
Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Spur 6 - 1	22/04/2024	Spur 5 - Hut	<p>1) No handrails are installed and therefore the AS requirement (2 or more stairs) is not being met.</p> <p>2) The stairs do not run the full length until the landing and entrance of hut. However the Step Up does currently meet the AS requirement (300mm)</p> <p>3) No hi vis (yellow) anti-slip tread installed on the nosing of the stairs.</p> <p>4) The landing is smaller then the size required in the AS (minimum 600mm depth from bottom stair).</p> <p>Note: Assessed using surveillance photos. Onsite verification and measures required.</p>	D. Occasional	3. Severe	Medium	<p>1) Install handrails that run the full length of stairs and meet AS requirements.</p> <p>2) Redesign the stairs to run from the landing to the entrance to the hut and meet the AS requirements and provide safe access.</p> <p>3) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of all stairs (width 840mm).</p> <p>4) Remove the existing landing and pour a new landing that meets AS requirements.</p>				
Spur 6 - 2	22/04/2024	Spur 5 - Tower	<p>1) Unlike some other Repeater Stations, the ladder at this location can be access from ground level. No gate or means of accessing the ladder on a platform at height to prevent unauthorised access, has been implemented.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p>	C. Unlikely	4. Major	High	<p>1) Consider installing a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Replace the ladder with a AS compliant ladder.</p> <p>4) Install hi vis (yellow) anti-slin</p>				
Solomon Meter Station - 1	8/04/2024	Hut	<p>Double Doors</p> <p>1) No landing installed and personnel are landing on dirt.</p> <p>Single Door</p> <p>2) Height for step up appears to exceed AS1657 requirements.</p> <p>Note: Assessed using surveillance photos. Onsite verification and measures required.</p>	C. Unlikely	2. Minor	Low	<p>Double Doors</p> <p>1.1) Pour a landing.</p> <p>Single Door</p> <p>2) Take measurements onsite to verify step up height. Install stairs and pour new landing if required.</p>				
Solomon Meter Station - 2	8/04/2024	Risers / Vents	<p>1) Access to some risers / vents for maintenance activities either requires a platform ladder set up on blue metal (slip risk) or use of a EWP (crush risk).</p> <p>Note: Assessed using surveillance photos. Onsite verification and measures required.</p>	C. Unlikely	3. Severe	Medium	<p>1) Option A: Install concrete landing for platform ladder to be set up on.</p> <p>Option B: Install a purpose built platform and access stairs or ladder that is AS compliant.</p>				
Solomon Meter Station - 3	8/04/2024	Passure Control Skid - External Edges with Equipment (e.g. Instrument Panels, Valves, PSV, Gauges)	<p>1) Personnel performing maintenance activities are required to stand on blue metal or concrete blocks and/or over stretch to access equipment on external sides of the skid.</p> <p>Height up to ~2200mm above ground level.</p> <p>Note: Photos and measurements provided by Kelvin Logan (FMO - Offline Crew).</p>	D. Occasional	2. Minor	Medium	<p>1.1) Install a purpose built platform and access stairs that is AS compliant.</p> <p>1.2) Pour a landing.</p>				
Solomon Meter Station - 4	8/04/2024	Metering Skid	<p>1) Has blue metal as the landing surface.</p> <p>2.1) Step up from ground level to the first stair appears to exceeds AS1657 requirements (300-450mm requires a step).</p> <p>2.2) The stair riser appears exceeds the AS1657 requirements (130-225mm).</p> <p>3) No hi vis (yellow) tread installed onto the nosing of each stair.</p>	C. Unlikely	2. Minor	Low	<p>1) Pour a landing to meet AS requirements.</p> <p>2) Verify step up and riser of stairs and if require, replace the stairs with AS1657 compliant stairs. If 2 or more stairs are required, then handrails must be installed.</p> <p>3) Install hi vis (yellow) tread onto the nosing of each stair.</p>				












Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Solomon Meter Station - 5	8/04/2024	Water Both Heaters x 2	Additional photos requested from Kelvin Logan/ Matthew Ware to complete assessment.								
Ashburton West Facility - 1	27/03/2024	All Areas	1) Access to Risers and Vents for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height.	C. Unlikely	3. Severe	Medium	1) Option A: Install concrete landing for platform ladder to be set up on. Option B: Install a purpose built platform and access stairs or ladder that is AS compliant.				
Ashburton West Facility - 2	27/03/2024	Mercaptain Tank, Injection Panel and Bund	1) No hop over on opposite side of the bund to where the concrete step is located. It is a common access path. 2) No hi vis nosing on stairs (width 1790mm). 3) No edge protection installed around platform. Potential fall of 400mm.	C. Unlikely	2. Minor	Low	1) Install a hop over. 2) Install hi vis (yellow) anti slip tread on the nosing of all stairs. 3) Consider installing handrails around the platform.				
Kwinana Nickel Refinery - 1	5/03/2024	Kwinana Nickel Refinery (KNR) - Hut Access Door	1) No hi vis (yellow) anti-slip tread installed on the nosing of the stairs.	C. Unlikely	2. Minor	Low	1) Install hi vis (yellow) anti-slip tread on the nosing of all stairs.				
Kwinana Nickel Refinery - 2	5/03/2024	Kwinana Nickel Refinery (KNR) - Metering / Pressure Control Skid	1) East side of skid does not have a landing. Personnel land onto blue metal currently. 2) Step up from the blue metal to the east side of the skid (380mm), does not meet AS requirements (300mm requirements). 3) No handrails installed to provide edge protection and prevent a fall from skid (300-380mm).	C. Unlikely	3. Severe	Medium	1) Pour a landing. 2) Install a interim step between the new landing and skid, if required to meet AS1657 requirements. 3) Consider installing handrails around open edges of skid, with designated access points that meet AS1657 requirements.				
Kwinana Nickel Refinery - 3	5/03/2024	Kwinana Nickel Refinery (KNR) - Risers / Vents adjacent to Metering / Pressure Control Skid	1) Access to Risers and Vents ~1500mm for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height.	C. Unlikely	3. Severe	Medium	1) Option A: Install concrete landing for platform ladder to be set up on. Option B: Install a purpose built platform and access stairs or ladder that is AS compliant.				












Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Kwinana Nickel Refinery - 4	5/03/2024	Kwinana Nickel Refinery (KNR) - Platform adjacent to Metering / Pressure Control Skid	<p>1.1) No concrete landing in place. Personnel landing onto blue metal on one side.</p> <p>1.2) Step up from from blue metal to first ladder rung (370mm) exceeds AS requirements (<=150mm).</p> <p>2) No hi vis anti slip tread on ladder rungs.</p> <p>3) No self closing gate installed at top of platform ladder x 2.</p> <p>4) Chain used in lieu of handrails. These would likley break in the event of a fall.</p>	C. Unlikely	3. Severe	Medium	<p>1) Pouring a landing that meets AS1657 requirements.</p> <p>1.2) Extend the ladder to landing if required, to comply with AS1657 requirements.</p> <p>2) Install hi vis (yellow) anti slip tread onto the ladder rungs.</p> <p>3) Install self closing gate that meets AS1657 requirements.</p> <p>4) Replace chains with handrails that meet AS1657 requirements.</p>				
Rockingham Meter Station - 1	5/03/2024	Rockingham Meter Station - Mercaptain Bund	<p>1) Kerbing on the east side of the Mercaptain Bund poses a trip / slip hazard and does not meet the AS1657 requirements for landings.</p> <p>2) No hi vis nosing on stairs.</p> <p>3) Step up from blue metal into bund (where stairs not available) exceeds (430mm) AS1657 requirements (300mm).</p>	C. Unlikely	2. Minor	Low	<p>1) Extend landing to meet AS1657 requirements.</p> <p>2) Install hi vis (yellow) anti slip tread on the nosing of all stairs.</p> <p>3) Install access stairs and landing that meets AS1657 requirements.</p>				
Rockingham Meter Station - 2	5/03/2024	Rockingham Meter Station - Pressure Control / Metering Skid - 2 x Access Points	<p><i>West Side (Smaller Step)</i></p> <p>1) No concrete landing. Currently stepping onto blue metal which was found to be slippery.</p> <p>2) No hi vis nosing on stairs (730mm width).</p> <p>3) Stair design does not meet AS1657</p>	C. Unlikely	2. Minor	Low	<p>1) Pour a landing for each set of access stairs.</p> <p>2) Install hi vis (yellow) anti slip tread on the nosing of all stairs.</p> <p>3) Replace step.</p>				
Rockingham Meter Station - 3	5/03/2024	Rockingham Meter Station - Pressure Control / Metering Skid - Walkway / Equipment Access	<p><i>Side Access Along Skid</i></p> <p>1) Stair design does not meet AS1657 requirements</p> <p>2) No hi vis nosing on stairs (730mm width).</p> <p>3) No concrete landing. Currently stepping onto blue metal which was found to be slippery.</p> <p>4) Potential for personnel to knock body parts on equipment protruding into access points.</p> <p><i>Skid Walkway Access</i></p> <p>5) Walkway width changes without warning, giving potential for personnel to fall ~500mm and cause injury.</p>	C. Unlikely	2. Minor	Low	<p>1) Replace stairs.</p> <p>2) Install hi vis (yellow) anti slip tread on the nosing of all stairs.</p> <p>3) Pour a landing for each set of access stairs.</p> <p>4) Eliminate access points or install padding (e.g. scaff pad) or paint protruding equipment to reduce risk of injuries.</p> <p>5.1) Option A: Widen walkway to eliminate change or reduce to ALARP. Option B: Install handrail, gates and kick plates to eliminate potential to fall.</p>				
Rockingham Meter Station - 4	5/03/2024	Rockingham Meter Station -Access Platform	<p>1) Ladder rungs are smooth and does not have anti slip tread.</p> <p>2) Ladder is not install on centre of landing. The landing does not meet AS1657 requirements (e.g. actual 580mm vs required 900mm depth).</p>				<p>1) Install hi vis (yellow) anti slip tread onto all ladder rungs.</p> <p>2) Replace the landing.</p>				






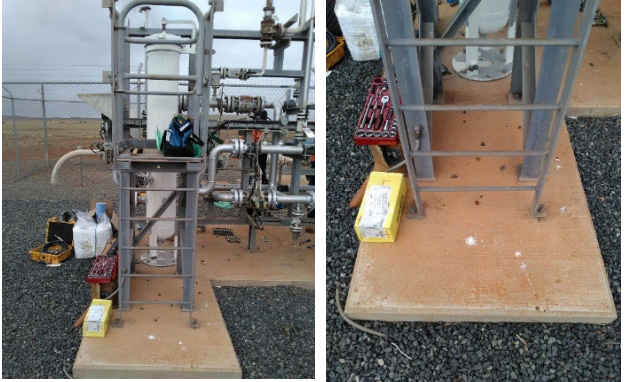
Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Rockingham Meter Station - 5	5/03/2024	Rockingham Meter Station - Hut	<p>1) Step up from stair into Hut exceeds AS1657 requirements (430mm requires at least 1 interim step).</p> <p>2) No hi vis nosing on stairs (730mm width).</p> <p>3) No concrete landing. Currently stepping onto blue metal which was found to be slippery.</p>				<p>1) Remove the existing concrete step and replace with AS1657 compliant stairs.</p> <p>2) Install hi vis (yellow) anti slip tread on the nosing of all stairs.</p> <p>3) Pour a landing.</p>	 			
Wagerup West - 1	5/03/2024	All Areas	<p>1) Access to Risers and Vents ~2000mm for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height.</p>	C. Unlikely	3. Severe	Medium	<p>1) Option A: Install concrete landing for platform ladder to be set up on.</p> <p>Option B: Install a purpose built platform and access stairs or ladder that is AS compliant.</p>	 			
Wagerup West - 2	5/03/2024	Redundant Equipment / Pipes Onsite	<p>1) Redundant equipment and concrete footings found in two areas of site.</p> <p>2) Spare piping is being stored onsite, near the roadside fencing. Potential theft risk?</p>	B. Remote	2. Minor	Low	<p>1) Consider removal of redundant equipment onsite or barricade area.</p> <p>2) Consider removing pipework that is not being used and stored onsite near the roadside fencing.</p>				
Wellesley Meter Station - 2	5/03/2024	Platform Adjacent to Metering / Pressure Control Skid	<p>1) No top handrail for section facing the riser.</p> <p>2) No hi vis (yellow) tread installed on of each ladder rung.</p> <p>3) No landing for the ladder and ladder is suspended above the ground.</p>	C. Unlikely	3. Severe	Medium	<p>1) Install the missing top handrail.</p> <p>2) Install hi vis (yellow) tread onto each ladder rung.</p> <p>3.1) Pour a landing.</p> <p>3.2) Extend the ladder to the landing, ensuring AS1657 requirements are met (e.g. step up).</p>				
Wellesley Meter Station - 3	5/03/2024	Vents on the West Side of the Metering / Pressure Control Skid	<p>1.1) Access to Risers and Vents ~2500mm for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height.</p> <p>1.2) Existing landing impacts access to Vents and Hand Valves. Trip / slip off landing is possible with potential sprains / strain type injuries</p>	C. Unlikely	3. Severe	Medium	<p>1.1) Option A: Install concrete landing for platform ladder to be set up on.</p> <p>Option B: Install a purpose built platform and access stairs or ladder that is AS compliant.</p> <p>1.2) Extend the landing to accommodation the above and accessing hand valves.</p>				






Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Wellesley Meter Station - 4	5/03/2024	Battery Room - Double Doors	<p>1) No handrails have been installed and AS1657 require them (2 or more stairs).</p> <p>2) No concrete landing. Currently stepping onto blue metal which was found to be slippery.</p>	C. Unlikely	2. Minor	Low	<p>1) Install handrails on both sides of the stairs, in line with AS1657 requirements.</p> <p>2) Consider pouring a landing in line with the access stairs and that meets the AS requirements.</p>				
Wellesley Meter Station - 5	5/03/2024	Electrical Hut - Access Door and Rear Platform	<p>1) No handrails have been installed and AS1657 require them (2 or more stairs). <i>Side access door only.</i></p> <p>2) No concrete landing for side access doors and rear platform. Currently stepping onto blue metal which was found to be slippery.</p>	C. Unlikely	2. Minor	Low	<p>1) Install handrails on both sides of the stairs, in line with AS1657 requirements.</p> <p>2) Consider pouring a landing in line with the access stairs and that meets the AS requirements.</p>				
Clifton Road Meter Station-1	1/03/2024	Metering Skid	<p>1) Has blue metal as the landing surface.</p> <p>2.1) Step up from ground level to the first stair (340mm) exceeds AS1657 requirements (300-450mm requires a step).</p> <p>2.2) The stair riser (240mm) exceeds the AS1657 requirements (130-225mm).</p> <p>3) No hi vis (yellow) tread installed onto the nosing of each stair.</p>	C. Unlikely	2. Minor	Low	<p>1) Pour a landing to meet AS requirements.</p> <p>2) Replace the stairs with AS1657 compliant stairs. If 2 or more stairs are required, then handrails must be installed.</p> <p>3) Install hi vis (yellow) tread onto the nosing of each stair.</p>				
Clifton Road Meter Station-2	1/03/2024	Pav Hut - Access Doors	<p>1) The landing does meet AS requirements (e.g. 600mm depth).</p>	D. Occasional	2. Minor	Medium	<p>1.1) Extend the landing.</p> <p>1.2) Install a step to assist with access and egress, if the AS requirement for step ups requires it (300mm to 450mm requires 1 step).</p>				
Clifton Road Meter Station-3	1/03/2024	Pav Hut - Roof	<p>1) Roof access periodically required for maintenance work. Currently performed with personnel working in FIPS.</p> <p>Note: Same Hazard / Design issue as raised for another Facilities Site by Andrew Hynes.</p>	C. Unlikely	4. Major	High	<p>1) Consider installing a platform and access stairs / ladder. This will prevent a fall and reliance on PPE.</p>				
Clifton Road Meter Station-4	1/03/2024	Repeater Tower	<p>1) No access platform provided for ease of access to the ladder.</p> <p>Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a</p>				






Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Wellesley Meter Station - 1	1/03/2024	Access Stairs for Metering / Pressure Control Skid and Hand Valves	1) No hi vis (yellow) anti-slip tread installed on the nosing of the several stairs or does not cover the full length of the stair. 2) No concrete landing. Currently stepping onto blue metal which was found to be slippery. 3) Several gaps where people can fall (250-300mm) or take shortcuts and potential knock into equipment (injury / equipment damage).	C. Unlikely	2. Minor	Low	1) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of all stairs (full width). 2) Consider pouring a landing in line with the access stairs and that meets the AS requirements. 3) Consider installing handrail and kick plates to eliminate them from being used as a shortcut.				
Eneabba Meter Station - 1	6/02/2024	MLV095 and Eneabba Meter Station - All Areas	Refer to MLV Sites tab > MLV095 and Eneabba Meter Station								
Kwinana Junction Meter Station - 1	20/12/2023	Platform for Scrubber	1) The gap between the stairs and the structure exceeds the AS requirements (max 100mm) and thus a second handrail is required. 2) The gap between the existing handrail and structure on the top landing exceeds AS requirements (max 100mm). 3) No landing is available at the bottom of stairs. 4) No hi vis (yellow) anti-slip tread installed on the nosing of the stairs. Note: Design issue raised by FMOs.	B. Remote	3. Severe	Low	1) Install a handrail on the open side of the staircase. 2) Modify the platform and handrail to eliminate the gap or reduce until it meets the AS requirement (max 100mm) 3) Pour a new landing that meets AS requirements (including step up distance). 4) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of all stairs.				
Worsley Meter Station - 1	19/12/2023	Pav Hut - Roof	1) Roof access periodically required for maintenance work. Currently performed with personnel working in FIPS. Note: Hazard / Design issue raised by Andrew Hynes. Advised this same issue appears on a number of other sites.	C. Unlikely	4. Major	High	1) Consider installing a platform and access stairs / ladder. This will prevent a fall and reliance on PPE.				







Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Worsley Meter Station - 2	19/12/2023	Pav Hut - Access Doors	<p>1) The stairs do not run the full length until the landing and entrance of hut. This has resulted in the Step Up not meeting the AS requirement.</p> <p>2) No hi vis (yellow) anti-slip tread installed on the nosing of the stairs.</p> <p>3) No landing available on South side. Personnel stepping onto / off blue metal which can be slippery</p> <p>4) Landing and Concrete Step on the East side do not meet AS requirements and poses a trip / slip fall.</p>	D. Occasional	3. Severe	Medium	<p>1) Redesign the stairs to run from the landing to the entrance to the hut and meet the AS requirements and provide safe access. This includes handrails if two steps or more are required.</p> <p>2) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of all stairs (width 850mm).</p> <p>3) Pour a landing that meets AS requirements.</p> <p>4) Modify the step and landing to meet AS requirements.</p>	 			
Worsley Meter Station - 3	19/12/2023	Riser - Filter	<p>1) No hi vis (yellow) anti-slip tread installed on the nosing of the stairs.</p> <p>Note: Hazard / Design issue raised by Andrew Hynes. Advised this same issue appears on a number of other sites.</p>	C. Unlikely	2. Minor	Low	<p>1) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of all stairs.</p>				
Worsley Meter Station - 4	19/12/2023	SWC Run 1 and Run 2	<p>1.1) Step up appears to exceed AS requirements. Measurements required to confirm.</p> <p>1.2) No hi vis (yellow) anti-slip tread installed on the nosing of the stairs.</p> <p>2) No concrete landing. Currently stepping onto blue metal which was found to be slippery.</p> <p>Note: Hazard / Design issue raised by Andrew Hynes. Advised this same issue appears on a number of other sites.</p>	C. Unlikely	3. Severe	Medium	<p>1.1) If measurements confirm step up / riser heights exceed AS requirements, then modify the stair(s) to meet them.</p> <p>1.2) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of all stairs.</p> <p>2) Consider pouring a landing in line with the access stairs and that meets the AS requirements.</p>	 			
Worsley Meter Station - 5	19/12/2023	Heater Platform	<p>1) No hi vis anti-slip tread has been installed on ladder rungs.</p>	C. Unlikely	2. Minor	Low	<p>1) Replacement ladder to have hi vis (yellow) non-slip tread installed on the rungs.</p>				
Pluto Interconnect Compressor / Metering Station - 14	27/11/2023	Platforms for Hand Valves	<p>1) The step up from the ground to the first stair exceeds AS requirements.</p> <p>2) No concrete landing. Currently stepping onto blue metal which was found to be slippery.</p> <p>Note: Raised by FMOs during Monthly Workgroup Meeting.</p>	C. Unlikely	2. Minor	Low	<p>1) Modify the stairs to include 1 or more stairs and associated handrails, to ensure AS requirements are met.</p> <p>2) Pour a landing for each set of access stairs.</p>				
Cockburn Cement Meter Station - 1	5/10/2023	Cockburn Cement Meter Station - All Areas	<p>No design risks identified. Situational/task based risk may exist.</p>				N.A.				
Mondarra Meter Station - 1	5/10/2023	Mondarra Meter Station - Metering Skid	<p>1) Concrete slab used for stairs but do not meet AS requirements.</p> <p>2) Landing on one side does not meet AS requirements. The other side has blue metal as landing which can be slippery.</p> <p>3) No hi vis nosing on stairs and edge of platform.</p> <p>Note: Height of fall 600mm.</p>	C. Unlikely	3. Severe	Medium	<p>1) Redesign the stairs to meet AS requirements (e.g. implement a 3rd step). If 2 or more steps are in place, then handrails are required.</p> <p>2) Landing to be poured to suit new stair design and AS requirements.</p> <p>3) Install hi vis (yellow) non-slip tread installed on the nosing of all stairs.</p>	 			
Mondarra Meter Station - 2	5/10/2023	Mondarra Meter Station - Metering Skid - Platform Landed on Skid	<p>1) No hi vis nosing on stairs and edge of platform.</p> <p>2) No edge protection on the platform. Depending on the side, there is potential for a fall through the pipework onto ground below or grid mesh deck.</p>	C. Unlikely	3. Severe	Medium	<p>1) Install hi vis (yellow) non-slip tread installed on the nosing of all stairs.</p> <p>2) Install edge protection on platform.</p>				




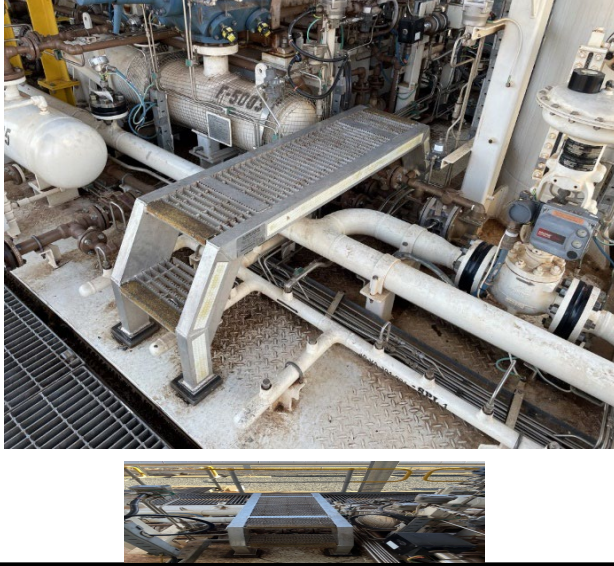



Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Mondarra Meter Station - 3	5/10/2023	Mondarra Meter Station - Metering Skid - 2 x Platforms For Risers	1) Chain has been used in lieu of a self closing gate at the entrance of the two platforms. Chain will break in the event of a fall and self closing gates are a AS requirement. 2) No hi vis (yellow) anti-slip tread installed on the ladder rungs.	C. Unlikely	3. Severe	Medium	1) Replace the chains with a self closing gate. 2) Install hi vis (yellow) anti-slip tread to all ladder rungs. 3) Pour a new landing for each platform.				
Mondarra Meter Station - 4	5/10/2023	Mondarra Meter Station - Confined Space Pit - Access Ladder For Hand Valve	1) Ladder does not extend 1m (~800mm) past the landing at the top of the ladder and does not have sufficient locations to hold onto when mounting / dismantling. 2) No non-slip tread on ladder rungs.	B. Remote	3. Severe	Medium	1) Modify or replace the ladder, ensuring it extends 1m past the top landing, with sufficient locations to hold onto when mounting / dismantling the ladder.				
Mondarra Meter Station - 5	5/10/2023	Mondarra Meter Station - Pav Hut	1) Landing does not meet the AS requirements and is currently blue metal.	B. Remote	2. Minor	Low	1) Pour a landing that meets AS requirements.				
Mondarra Storage - 1	5/10/2023	Mondarra Storage - All Areas	No design risks identified. Situational/task based risk may exist.				N.A.				
Waitsia Inlet Meter Station - 1	5/10/2023	Waitsia Inlet Meter Station - Filter Skid	1) Access stairs for platform used to access HV-106D is missing one handrail (left hand side). Holes already drilled into support. 2) No concrete landing. Currently stepping onto blue metal which was found to be slippery.	C. Unlikely	2. Minor	Low	1) Consider installing a handrail on the left hand side of the stairs, that matches the existing handrail on the right hand side. 2) Consider pouring a landing in line with the access stairs and that meets the AS requirements.				
Waitsia Inlet Meter Station - 2	5/10/2023	Waitsia Inlet Meter Station - Metering Skid	1) No hi vis (yellow) anti-slip tread installed on the nosing of the stairs. 2) No concrete landing. Currently stepping onto blue metal which was found to be slippery.	C. Unlikely	2. Minor	Low	1) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of all stairs. 2) Consider pouring a landing in line with the access stairs and that meets the AS requirements.				
Waitsia Inlet Meter Station - 3	5/10/2023	Waitsia Inlet Meter Station - Shelters For Cyclinders and Electrical Distribution Boards	No design risks identified. Situational/task based risk may exist.				N.A.				
Dampier Facilities - 1	29/08/2023	Vent Adjacent to Main Gate	1) No method for accessing the vent for maintenance / inspection purposes. Potential fall of ~5m	B. Remote	3. Severe	Low	1) Install a platform and landing that complies with AS1657.				
Dampier Facilities - 2	29/08/2023	Platforms for HV211 and HV237	1) Chain has been used in lieu of a handrail at the top of the platform, adjacent to the Bettic Equipment or Valves Chain will break in the event of a fall and therefore will not meet AS 1657 requirements for guardrails. 2) No hi vis (yellow) tread installed onto each ladder rung (450mm).	C. Unlikely	3. Severe	Medium	1) Replace the chain with a handrail that meets AS 1657 requirement. 2) Hi vis (yellow) non-slip tread to be installed on the ladder rungs.				Review of Gorgon Meter Station identified that Chevron has similar platforms with a different design for the handrail that enables access to equipment. They curve the handrail below or above the equipment so you have unrestricted access but still have edge protection to protect against a fall. Photos are available for reference.
Dampier Facilities - 3	29/08/2023	Platforms for HV242 and HV243	1) The landing for the stairs does not meet AS1657 requirements of 900mm. 2) No hi vis (yellow) tread installed onto the nosing of each stair (1000mm). 3) No edge protection to prevent a fall from platform. Note: Step up from landing (currently blue metal) is 300mm so no intermediate step is required.	C. Unlikely	2. Minor	Low	1) Pour a new landing. 2) Install hi vis (yellow) tread onto the nosing of each stair. 3) Install edge protection for platform.				
Dampier Facilities - 4	29/08/2023	Platforms for HV220 and HV241	1) No hi vis (yellow) tread installed onto each ladder rung (450mm).	C. Unlikely	2. Minor	Low	1) Hi vis (yellow) non-slip tread to be installed on the ladder rungs.				


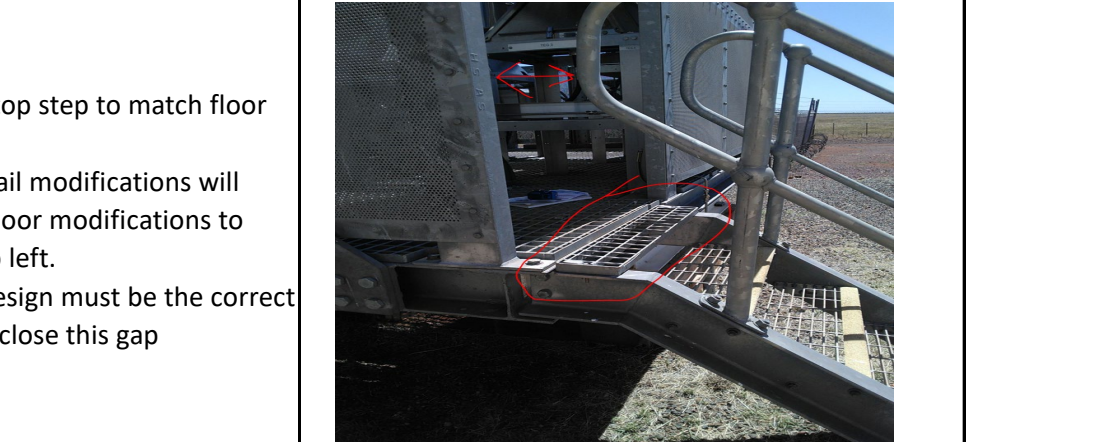

Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Dampier Facilities - 5	29/08/2023	GEA 1	<p>1) The Step Up from the ground to the step / door is 410mm which exceeds AS1657 requirements.</p> <p>2) No hi vis (yellow) anti-slip tread installed on the nosing of the lip of the stair at one access door.</p>	D. Occasional	3. Severe	Medium	<p>1) Install 1 intermediate step between the landing and doorway at each of the 3 doors.</p> <p>2) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of stairs.</p>				
Dampier Facilities - 6	29/08/2023	GEA 1 After Cooler Fans	1) No hi vis (yellow) tread installed onto each ladder rung (500mm width).	C. Unlikely	2. Minor	Low	1) Hi vis (yellow) non-slip tread to be installed on the ladder rungs (500mm).				
Dampier Facilities - 7	29/08/2023	Access Stairs Between GEA 1 and After Cooler Fans	1) The existing hi vis (yellow) anti-slip tread installed on some of the stairs are significantly worn and may impact their effectiveness.	C. Unlikely	2. Minor	Low	1) Replace the hi vis (yellow) non-slip tread on each stair (1000mm width).				
Dampier Facilities - 8	29/08/2023	Middle Platform (Access Way) For After Cooler Fans	1) No hi vis (yellow) tread installed onto each ladder rung.	C. Unlikely	2. Minor	Low	1) Hi vis (yellow) non-slip tread to be installed on the ladder rungs (500mm).				
Dampier Facilities - 9	29/08/2023	Top Platform for each After Cooler Fan	<p>1.1) There is no method for accessing this platform from the below walkway without climbing onto structural steel and being exposed to a fall.</p> <p>1.2) Gap between the existing handrail and the structure on both sides of the platform. This poses a potential of a slip / trip.</p>	C. Unlikely	4. Major	High	<p>1.1) Install signage to highlight the fall from height risk until a suitable means of access is installed.</p> <p>1.2) Modify the platform to - allow for safe access to the top of the fans; - eliminate or reduce the gap between the existing handrail and floor / structure.</p>				
Maitland Estate Meter Station - 1	29/08/2023	Access Ladder / Platform For Riser	<p>1) The depth landing (e.g. 460mm) does not meet AS requirement (e.g. 600mm).</p> <p>2) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p>	C. Unlikely	2. Minor	Low	<p>1) Pour a new landing.</p> <p>2) Ensure hi vis (yellow) anti-slip tread is installed on the rungs.</p>				


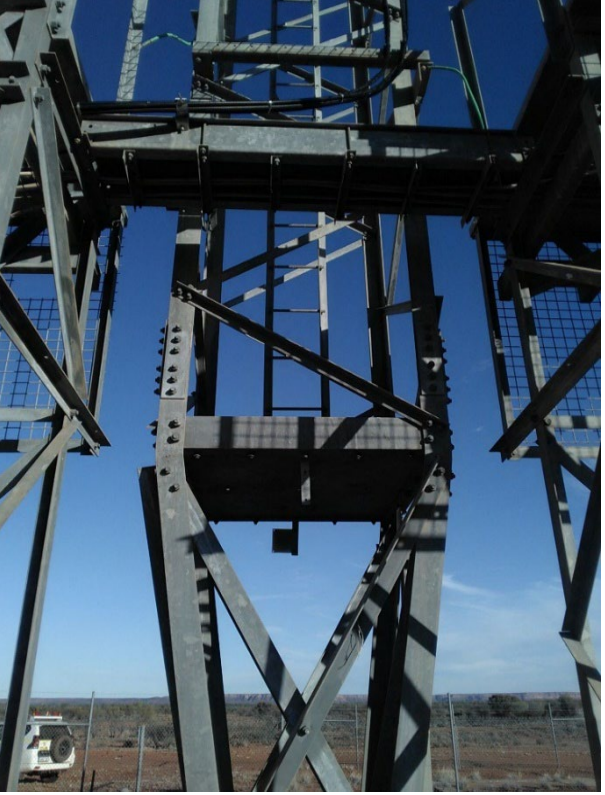


Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Pluto Interconnect Compressor / Metering Station - 11	25/08/2023	Battery Room / Hut - 3 x Access Doors	1) 1 Set of Stairs (centre are not centred and small concrete blocks have potential to move.	C. Unlikely	2. Minor	Low	1) Remove the existing steps and landing. Pour a new landing and install a new step that are centred with the access door.				
Pluto Interconnect Compressor / Metering Station - 8	25/08/2023	Access Platform For Compressor Package	1) No hi vis (yellow) anti-slip tread installed on the ladder rungs.	C. Unlikely	2. Minor	Low	1) Install hi vis (yellow) anti-slip tread to all ladder rungs.				
Della Road Meter Station	11/08/2023	Pav Huts	1) The landing does meet AS requirements (e.g. 600mm depth). Employees also reported historical events where personnel have tripped over / on the landing when entering / exiting Pav Huts. Note: FMOs - Facilities reported this same hazard / design issue exists on multiple sites including Forestdale and Whelshpool Meter Stations. 2) Cable Pit adjacent to Pav Hut entrance, posing a trip hazard to personnel.	D. Occasional	2. Minor	Medium	1.1) Extend the landing. 1.2) Install a step to assist with access and a grab, if the AS requirement for step ups requires it (300mm to 400mm requires 1 step). 2) Relocate the Cable Pits to locations outside of access paths, where it is practical to do so. The remaining pits are to be painted with hi vis colour or have hi vis tape applied to highlight them.				
Pluto Interconnect Compressor / Metering Station - 10	11/08/2023	Actuated Valve - ZV101	1) No hi vis (yellow) anti-slip tread installed on the ladder rungs.	C. Unlikely	2. Minor	Low	1) Install hi vis (yellow) anti-slip tread to all ladder rungs				
Pluto Interconnect Compressor / Metering Station - 12	11/08/2023	Shelby Power Gas Engine Alternators (x 2)	Non-Grid Mesh Steps Side 1) The landing on this side of both alternators does not meet AS1657 requirements, nor does it provide a stable platform to work from. It also poses a trip hazard when accessing the emergency stop button and cabinets. Grid Mesh Steps Side 2) Step up from ground level to grid mesh steps does not meet AS1657 requirements. Step up is 360mm and therefore an additional step is required. 3) The Grid Mesh Steps are being used as a work platform but their design pose a risk (e.g. small size, no handrails). 4) No hi vis tread on the nosing of the stairs.	C. Unlikely	2. Minor	Low	Non-Grid Mesh Steps Side 1) Pour a new landing. Grid Mesh Steps Side 2) 3.1) Option A: Replace the access step with a purpose build access stairs and platform, with edge protection. 3.2) Option B: Install additional step and retrofit handrails. 4) Install hi vis tread on the nosing of all stairs.				




Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Pluto Interconnect Compressor / Metering Station - 13	11/08/2023	Inspection Pit For Main Tapping - DBNGP	1) No access ladder has been installed.	B. Remote	3. Severe	Low	1) Install a ladder that is AS1657 compliant.				
Pluto Interconnect Compressor / Metering Station - 3	11/08/2023	Vent Stack	1) No method for accessing could be identified. Note: Potential fall of ~5m.	C. Unlikely	3. Severe	Medium	1) Install a purpose built platform and access stairs or ladder that is AS compliant.				
Pluto Interconnect Compressor / Metering Station - 4	11/08/2023	Multiple Platforms to Access Hand Valves, including - HV100A - HV100B - HV124 - HV125 - HV127	1) Chain has been used in lieu of a handrail for two sides of this platform. Chain will break in the event of a fall. 2) No hi vis (yellow) anti-slip tread installed on the ladder rungs.	C. Unlikely	2. Minor	Low	1) Replace the chains with a handrail with a lockable gate for access. 2) Install hi vis (yellow) anti-slip tread to all ladder rungs.	 			
Pluto Interconnect Compressor / Metering Station - 5	11/08/2023	Multiple Hand Valves	1) Existing landings are off centre and insufficient size to position a platform ladder or safety step, to access the hand valves. This creates the risk off a fall.	C. Unlikely	3. Severe	Medium	Option A: Install concrete landing for platform ladder to be set up on. Option B: Install a purpose built platform and access stairs or ladder that is AS compliant.				

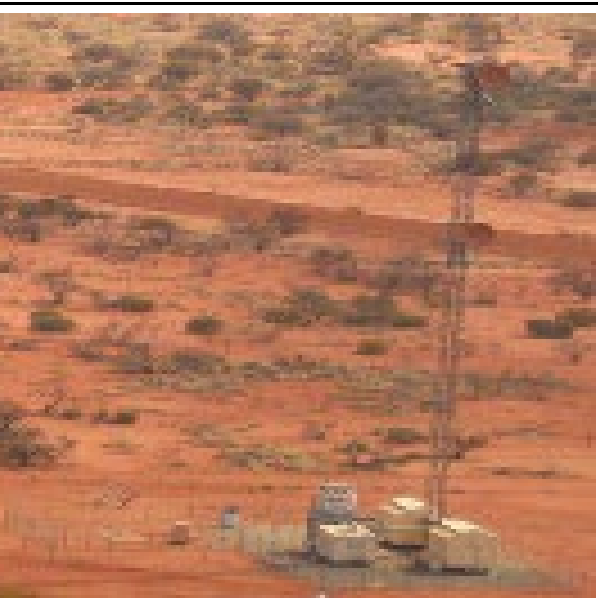

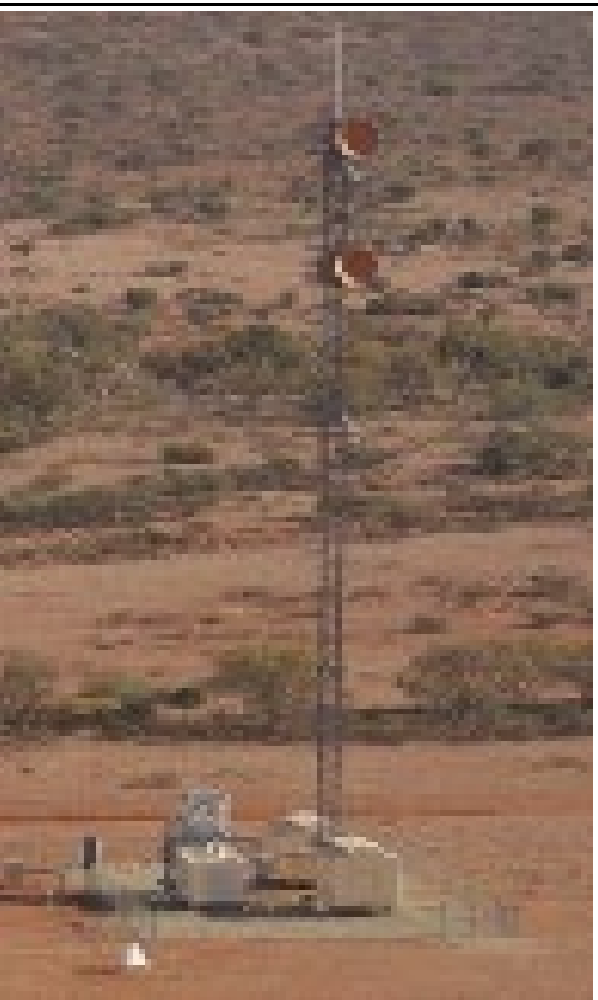

Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Pluto Interconnect Compressor / Metering Station - 6	11/08/2023	Hand Valve 107 Platform	1) No hi vis (yellow) anti-slip tread installed on the ladder rungs.	C. Unlikely	2. Minor	Low	1) Install hi vis (yellow) anti-slip tread to all ladder rungs				
Pluto Interconnect Compressor / Metering Station - 7	11/08/2023	Compressor North Ladder	1) No hi vis (yellow) anti-slip tread installed on the ladder rungs.	C. Unlikely	2. Minor	Low	1) Install hi vis (yellow) anti-slip tread to all ladder rungs				
Pluto Interconnect Compressor / Metering Station - 9	11/08/2023	Access Platform for Flange	1) No hi vis (yellow) anti-slip tread installed on the ladder rungs. 2) Self closing gate is no longer self closing and therefore does not meet AS1657 requirements.	C. Unlikely	2. Minor	Low	1) Install hi vis (yellow) anti-slip tread to all ladder rungs. 2) Repair or replace the gate to ensure it is self closing using gravity, spring or other means.				
Cape Preston Meter Station - 1	26/07/2023	All Areas	No design risks identified. Situational/task based risk may exist.				No Action Required.	No reference photo taken.			
AGR Meter Station - 1	25/07/2023	Mercaptain Tanks (Style 1 x 2)	1.1) The Step Up from the ground to the higher stair is 440mm and therefore the AS requirement requires a minimum of 1 step be provided. 1.2) The upper stair is being utilised as a landing to work from. This upper stair does not meet the AS requirements for a landing (e.g. depth is 400mm, requirement is 600mm minimum, no handrail). 2) No hi vis (yellow) anti-slip tread installed on the nosing of the stairs.	C. Unlikely	3. Severe	Medium	1) Redesign the access method and landing / work platform to meet AS requirements (including edge protection). 2) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of stairs (2 sides' width >1000mm, 1 side's width x >1900mm) or ladder rungs (if replaced).				
AGR Meter Station - 2	25/07/2023	Mercaptain Tank (Style 2)	1) The Step Up from the ground to the landing / work platform (grid mesh) is 370mm and therefore the AS requirement (300-450mm) requires a minimum of 1 step be provided.	B. Remote	3. Severe	Medium	1) Install a intermediate step between the ground and landing / work platform to meet AS requirements. 2) Ensure hi vis (yellow) anti-slip				
AGR Meter Station - 3	25/07/2023	Access Stairs from Side Gate to Mercaptain Vessels Bund	1) The depth landing (e.g. 300mm) does not meet AS requirement (e.g. 600mm). The edge of the landing (blue metal side) also has a curved edge posing an additional risk of a rolled ankle. 2) No hi vis (yellow) anti-slip tread installed on the nosing of the stairs.	C. Unlikely	2. Minor	Low	1) Pour a new landing. 2) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of stairs.				

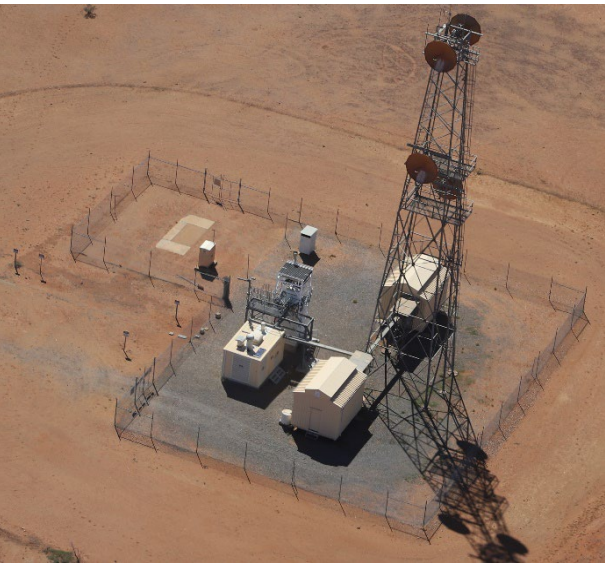
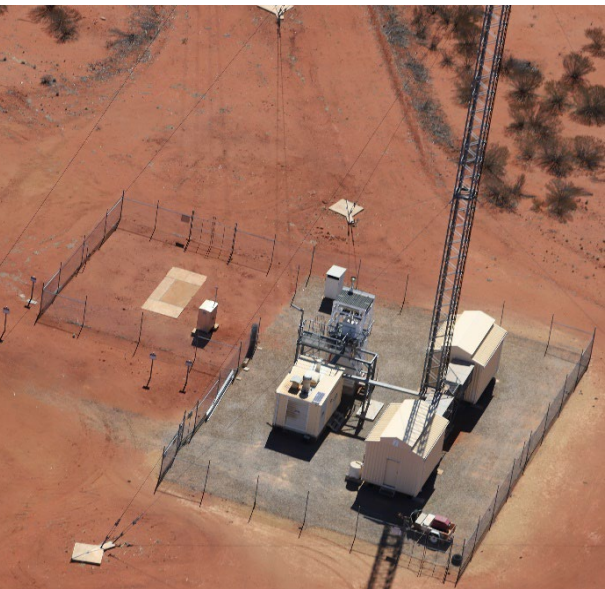




Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
AGR Meter Station - 4	25/07/2023	2 x Mercaptain Vessels	1) Gate no longer self closes. 2) No non-slip tread on the access ladder rungs.	B. Remote	2. Minor	Low	1) Repair or replace the gate to ensure it is self closing and meets AS requirements. 2) Install hi vis (yellow) non-slip tread on the ladder rungs.				
AGR Meter Station - 5	25/07/2023	Multiple Risers	1) Access to Risers and Vents up to 2800mm for maintenance tasks currently completed using a platform ladder on blue metal. This creates the potential for the ladder to be unstable and cause a fall from height.	C. Unlikely	3. Severe	Medium	1. 1) Option 1: Install a access ladder and platform that meets AS requirements (preferred option). 1.2) Option 2: Implement a 1500 x 1500 precast concrete for ladder to sit on to access the risers.				
AGR Meter Station - 6	25/07/2023	2 x Inspection Pits	1) Ladder does not extend 1m past the landing at the top of the ladder and does not have sufficient locations to hold onto when mounting / dismantling. 2) No non-slip tread on ladder rungs.	B. Remote	3. Severe	Medium	1) Modify or replace the ladder, ensuring it extends 1m past the top landing, with sufficient locations to hold onto when mounting / dismantling the ladder. 2) Modified or replacement ladder to have hi vis (yellow) non-slip tread installed on the rungs.				
Pluto Interconnect Compressor / Metering Station - 1	23/06/2023	Pluto Compressor Package - Step Over Platform	1.1) The platform feet have been fastened with silicone adhesive only, which has failed and the platform is therefore free to move. 1.2) The only thing restraint movement of the platform is a loop of instrument tubing which is live. This tubing also obstructs the landing (trip hazard). 2) There is no handrails or kickboards fitted. Note: Raised by Andrew Stanwix.	C. Unlikely	3. Severe	Medium	1.1) Temporary solution - Install a information tag to raise awareness and then install ratchet strap(s) to hold the platform in place. Done. 1.2) Permanent solution - Fabricate and install a permanent solution that meets AS requirements. 2) Ensure handrails and kick plates are installed in line with the AS requirements applicable to the permanent solution.				
Pluto Interconnect Compressor / Metering Station - 2	23/06/2023	Reofitted Platform On The South Side of the Compressor Package (Package Exhaust)	1) No edge protection for platform. Potential for fall ~1m and onto potentially hot equipment. 2) Structural cross beam adjacent to walkway that personal must duck under to access this platform. These pose a hazard for bumping their head (previous MTI at TGS). Faded hi vis tape currently in place.	D. Occasional	3. Severe	Medium	1) Install handrails and gate to provide 360 edge protection. 2.1) Option A: Eliminate the cross beams if engineering allows for it. 2.2) Option B: Install padding to protect people if contact is made. Example product is Scaff Pads.				
Pinjar Metering Station (Power Station) - 1	20/06/2023	Heaters - Top Platform	1) No non-slip tread on ladder runs. 2) Landing does not meet the AS requirements and is currently blue metal. Note: - Findings are based on photo and feedback from Adrian Taylor.	B. Remote	2. Minor	Low	1) Install hi vis (yellow) non-slip tread installed on the rungs. 2) Pour a landing that meets AS requirements.				
Mandurah Gate Meter Station - 1	13/04/2023	Pav Hut	1) The step up (riser) does not meet the AS requirements (130-225mm).			Low	1.1) Implement a interim step to assist with access and egress. 1.2) Modify the landing to accommodate the new step.				


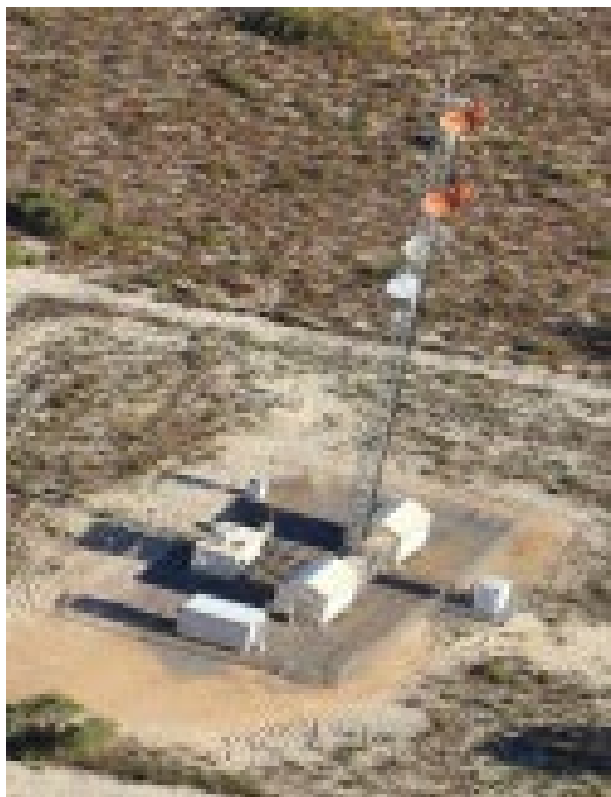


Reference	Date Added	Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	Date Planned For Completion	Date Completed	Comments
Example - 1	2/02/2023	Example - TEG unit	1) Landing does not meet AS requirement of 900mm long				1.1) Remove old landing and install new precast one 1.2) Pour new landing				
Example - 1	2/02/2023	TEG Unit	1) Top step does not meet AS 2) Gap on top handrail is too big as per AS				1) Raise top step to match floor 2) Handrail modifications will require floor modifications to close gap left. Future design must be the correct width to close this gap				
Worsley Meter Station - 6		Meter Hut	1.1) Step up appears to exceed AS requirements. Measurements required to confirm. 1.2) No hi vis (yellow) anti-slip tread installed on the nosing of the stairs. 2) Concrete landing may need modification to suit any installation of stairs. Note: Hazard / Design issue raised by Andrew Hynes. Advised this same issue appears on a number of other sites.	C. Unlikely	2. Minor	Low	1.1) If measurements confirm step up / riser heights exceed AS requirements, then modify the stair(s) to meet them. 1.2) Ensure hi vis (yellow) anti-slip tread is installed on the nosing of all stairs. 2) Consider modifying the landing to meet the AS requirements.				




Reference	Date added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date planned for completion	Date completed	Comments
R013-4	21/04/2023	Repeater Station 13 - Communications Tower	<p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	3. Severe	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					
R017-4	21/04/2023	Repeater Station 17 - Communications Tower	<p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					Discuss with Dane. The suggested solutions may not be value add as the Contractor using double lanyard to be hooked up.
R025-4	22/05/2023	Repeater Station 25 - Smaller Communications Tower	<p>1) Unlike some other Repeater Stations, the ladder at this location can be access from ground level. No gate or means of accessing the ladder on a platform at height to prevent unauthorised access, has been implemented.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) The width of the ladder (250mm) does not meet the AS requirements (375mm to 525mm) and may create a hazard to personnel using the ladder.</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs. They are currently smooth metal rungs.</p> <p>Note: Discuss findings and actions with Dane.</p>	C. Unlikely	4. Major	High	<p>1) Consider installing a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Replace the ladder with a AS compliant ladder.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					Discuss with Dane to find out if this asset is live or redundant.
R025-5	22/05/2023	Repeater Station 25 - Larger Communications Tower	<p>1) Unlike some other Repeater Stations, the ladder at this location can be access from ground level. No gate or means of accessing the ladder on a platform at height to prevent unauthorised access, has been implemented.</p> <p>2) The Step Up to access the first ladder rung (520mm) exceeds the AS requirements (≈150mm).</p> <p>3) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs. They are currently smooth metal rungs.</p> <p>Note: Discuss findings and actions with Dane.</p>	C. Unlikely	4. Major	High	<p>1) Consider installing a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Extend the ladder to the landing.</p> <p>3) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					


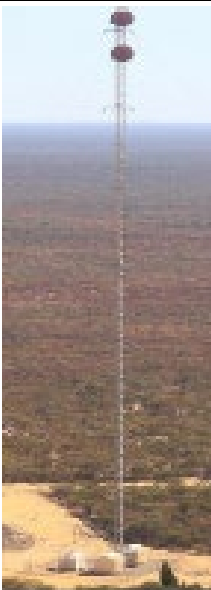




R039-5	13/12/2023	Repeater Station 39 - Communications Tower	<p>1) Unlike some other Repeater Stations, the ladder at this location can be access from ground level. No gate or means of accessing the ladder on a platform at height to prevent unauthorised access, has been implemented.</p> <p>2) The Step Up to access the first ladder rung (520mm) exceeds the AS requirements (= <150mm).</p> <p>3) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs. They are currently smooth metal rungs.</p> <p>5) The landing for the ladder does not meet AS1657 requirements of 900mm from the bottom lung.</p> <p>Note: Discuss findings and actions with Dane.</p>	C. Unlikely	4. Major	High	<p>1) Consider installing a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Extend the ladder to the landing.</p> <p>3) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p> <p>5) Pour a new landing.</p>					
R034-5	12/02/2024	Repeater Station 34 - Communications Tower	<p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					
Wagerup Repeater Station - 3	5/03/2024	Wagerup Repeater Station - Yellow Hut Roof Access	<p>1) Roof access periodically required for maintenance work. Currently performed with personnel working in FIPS.</p> <p>Note: Same Hazard / Design issue as raised for another Facilities Site by Andrew Hynes.</p> <p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p>	C. Unlikely	4. Major	High	<p>1) Consider installing a platform and access stairs / ladder. This will prevent a fall and reliance on PPE.</p>					
R001-7	4/04/2024	Repeater Station 1 - Communications Tower	<p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>Assessed using surveillance photo. Additional photos requested to confirm accuracy of assessment.</p>	C. Unlikely	3. Severe	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p>					
R004-4	4/04/2024	Repeater Station 4 - Communications Tower	<p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p>	C. Unlikely	3. Severe	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p>					
R010-7	4/04/2024	Repeater Station 10 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p>	C. Unlikely	3. Severe	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p>					




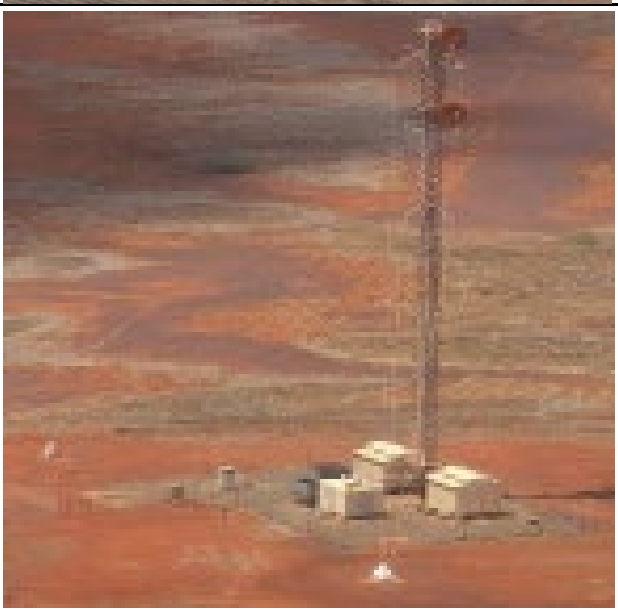
R011-7	4/04/2024	Repeater Station 11 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p>	C. Unlikely	3. Severe	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p>					
R012-7	4/04/2024	Repeater Station 12 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	3. Severe	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					
R014-7	4/04/2024	Repeater Station 14 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	3. Severe	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					
R015-5	4/04/2024	Repeater Station 15 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	3. Severe	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					

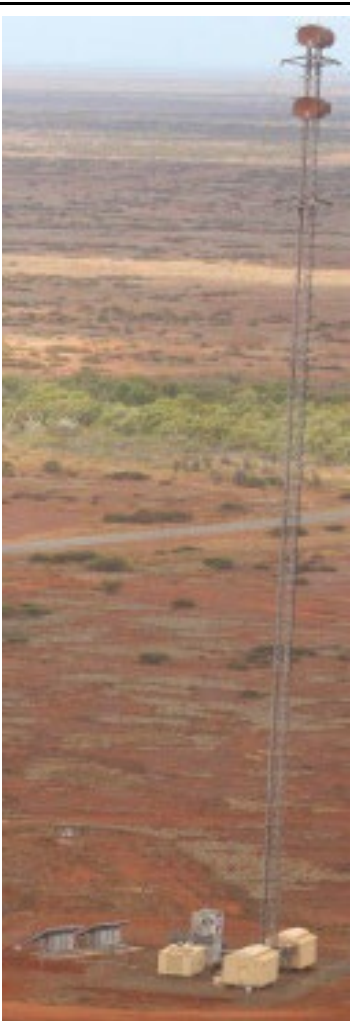


R018-8	4/04/2024	Repeater Station 18 - Communications Tower	Assessed using surveillance photo. Site visit required to obtain additional photos and measurements. 1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access. 2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.	C. Unlikely	4. Major	High	1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access. 2) Install a certified fall restraint/arrest system that is suitable for the end users. 3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.					
R019-8	4/04/2024	Repeater Station 19 - Communications Tower	Assessed using surveillance photo. Site visit required to obtain additional photos and measurements. 1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access. 2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.	C. Unlikely	4. Major	High	1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access. 2) Install a certified fall restraint/arrest system that is suitable for the end users. 3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.					
R020-8	4/04/2024	Repeater Station 20 - Communications Tower	Assessed using surveillance photo. Site visit required to obtain additional photos and measurements. 1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access. 2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.	C. Unlikely	4. Major	High	1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access. 2) Install a certified fall restraint/arrest system that is suitable for the end users. 3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.					
R022-8	4/04/2024	Repeater Station 22 - Communications Tower	Assessed using surveillance photo. Site visit required to obtain additional photos and measurements. 1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access. 2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury. 3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m). 4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.	C. Unlikely	4. Major	High	1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access. 2) Install a certified fall restraint/arrest system that is suitable for the end users. 3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users. 4) Install hi vis (yellow) anti-slip tread on the ladder rungs.					
R023-8	4/04/2024	Repeater Station 23 - Communications Tower	Assessed using surveillance photo. Site visit required to obtain additional photos and measurements. 1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access. 2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.	C. Unlikely	4. Major	High	1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access. 2) Install a certified fall restraint/arrest system that is suitable for the end users. 3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.					
R024-8	4/04/2024	Repeater Station 24 - Communications Tower	Assessed using surveillance photo. Site visit required to obtain additional photos and measurements. 1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access. 2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.	C. Unlikely	4. Major	High	1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access. 2) Install a certified fall restraint/arrest system that is suitable for the end users. 3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.					



R031-5	4/04/2024	Repeater Station 32 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					
R032-5	4/04/2024	Repeater Station 32 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					
R038-5	4/04/2024	Repeater Station 38 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p>					
R040-5	4/04/2024	Repeater Station 40 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					

R041-5	4/04/2024	Repeater Station 41 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p>	C. Unlikely	4. Major	High	<p>1) Consider installing a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Extend the ladder to the landing.</p> <p>3) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p> <p>5) Pour a new landing.</p>					
R033-5	8/04/2024	Repeater Station 33 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					
R035-5	8/04/2024	Repeater Station 35 - Telecommunications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					

R042-2	8/04/2024	Repeater Station 42 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	4. Major	High	<p>1) Consider installing a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Extend the ladder to the landing.</p> <p>3) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p> <p>5) Pour a new landing.</p>					
R027-4	12/04/2024	Repeater Station 27 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p>					
R028-4	12/04/2024	Repeater Station 28 - Communications Tower	<p>Assessed using surveillance photo.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>	 				
R029-3	12/04/2024	Repeater Station 29 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>	 				






R030-5	12/04/2024	Repeater Station 30 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					
R036-5	12/04/2024	Repeater Station 36 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					
R037-5	12/04/2024	Repeater Station 37 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					
R002-7	22/04/2024	Repeater Station 2 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	3. Severe	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					

R003-7	22/04/2024	Repeater Station 3 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	3. Severe	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					
R006-7	22/04/2024	Repeater Station 6 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	3. Severe	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					
R007-7	22/04/2024	Repeater Station 7 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	3. Severe	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					



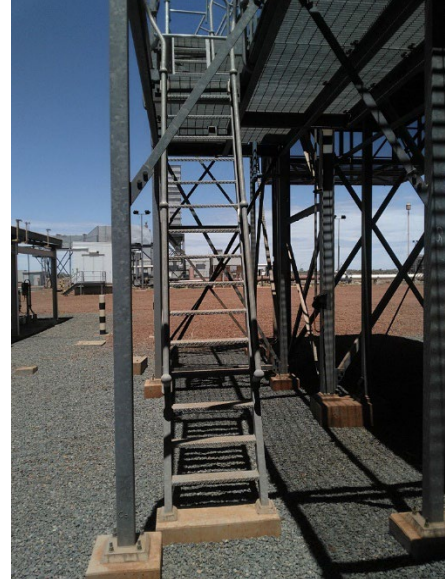
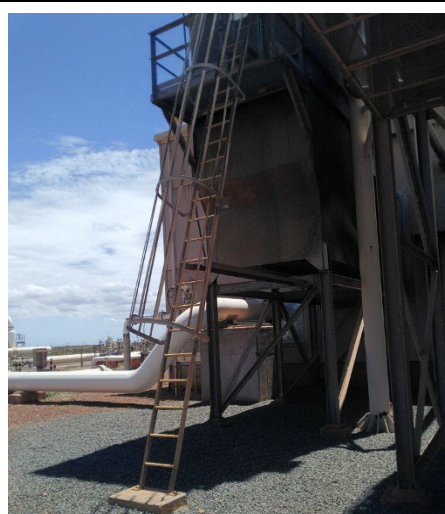






R008-7	22/04/2024	Repeater Station 8 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that would likely result in a fatality or serious injury.</p> <p>3) No ladder enclosure has been installed for the ladder to meet AS requirements (where a fall of more than 6m).</p> <p>4) No hi vis (yellow) anti-slip tread installed on the ladder rungs.</p> <p>Findings on hold pending discussion with Dane. Refer to comments.</p>	C. Unlikely	3. Severe	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type of enclosure to prevent a sideways fall from the ladder, if practical for the end users.</p> <p>4) Install hi vis (yellow) anti-slip tread on the ladder rungs.</p>					
R026-4	12/04/2026	Repeater Station 26 - Communications Tower	<p>Assessed using surveillance photo. Site visit required to obtain additional photos and measurements.</p> <p>1) No access platform provided for ease of access to the ladder. Note: This may have not be provided for the purpose of preventing unauthorised access.</p> <p>2) No fall restraint/arrest system in place for personnel using the ladder. This exposes personnel to a significant fall that</p>	C. Unlikely	4. Major	High	<p>1) Install a access stairs/ladder and platform to enable access to the ladder. Ensure a lockable gate or similar and signage is provided to prevent unauthorised access.</p> <p>2) Install a certified fall restraint/arrest system that is suitable for the end users.</p> <p>3) Assess if the installation a side screen, ladder cage or other type</p>					

Compressor Station	Total site specific risks identified
CS1	19
CS2	13
CS3	36
CS4	28
CS5	37
CS6	40
CS7	52
CS8	76
CS9	48
CS10	47
Total	396

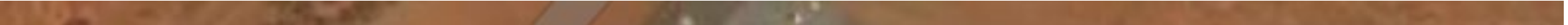
High risk only
4
4
4
3
5
8
9
7
3
8
55

c	Date Added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date Planned for Completion	Date Completed	Comments
CS01-1	2/02/2023	Example - Lube oil cooler unit 1	1) Landing does not meet AS requirement of 900mm 2) Stair treads too narrow and no non-slip				1.1) Remove old landing and install new precast one 1.2) Pour new landing 2.1) Replace ladder with new treads and non-slip		Replace ladder and landing. Pour new landing			
CS01-17	7/02/2023	Unit 2 - Lower Access Stairs for First Platform (Crane)	1) No hi vis (yellow) tread installed onto the nosing of stairs (width 550mm). 2) No self closing gate installed at the top of the stairs. 3) Greater potential to fall if facing away from the stairs when descending. Note: Based on CS06 assessment.	D. Occasional	3. Severe	Medium	1) Install hi vis (yellow) tread onto the nosing of the stairs. 2) Install a self closing gate at the top of the stairs. 3) Install signage on both sides of the gate to instruct personnel to only descend the stairs whilst facing towards the stair.	No photos available. Refer to CS06.				
CS01-18	7/02/2023	Unit 2 - Access Stairs from Level 1 Platform (Rail Height) to Level 2 Walkway for Crane Access	1) Handrail does not provide adequate protection to prevent a fall over the stair's handrail. 2) No hi vis (yellow) tread installed onto the nosing of stairs. 3) No self closing gate installed at the top of the stairs. 4) Greater potential to fall if facing away from the stairs when descending. Note: Based on CS06 assessment.	D. Occasional	3. Severe	Medium	1) Install an additional handrail on both sides of the stair to provide protection against falling over handrail. 2) Install hi vis (yellow) tread onto the nosing of the stairs. 3) Install a self closing gate at the top of the stairs. 4) Install signage on both sides of the gate to instruct personnel to only descend the stairs whilst facing towards the stair.	No photos available. Refer to CS06.				
CS01-19	7/02/2023	Unit 2 - Access Stairs for Level 1 (Rail Height) on Other Side of Crane Platform	1) Handrail does not provide adequate protection to prevent a fall over the stair's handrail. 2) No hi vis (yellow) tread installed onto the nosing of stairs. 3) No self closing gate installed at the top of the stairs. 4) Greater potential to fall if facing away from the stairs when descending. Note: Based on CS06 assessment.	D. Occasional	3. Severe	Medium	1) Install an additional handrail on both sides of the stair to provide protection against falling over handrail. 2) Install hi vis (yellow) tread onto the nosing of the stairs. 3) Install a self closing gate at the top of the stairs. 4) Install signage on both sides of the gate to instruct personnel to only descend the stairs whilst facing towards the stair.	No photos available. Refer to CS06.				
CS01-20	7/02/2023	Unit 2 - Access to Crane Platform (Level 2)	1) Chain has been used in lieu of a self closing gate at the top of the ladder on the portable platform. The chain will break in the event of a fall and therefore will not meet AS 1657 requirements for guardrails. 2) Gap the walkway platform and crane platform is 500mm, exposing personnel to a fall of ~7m. 3) No hi vis (yellow) tread installed onto the nosing of platform (open edge). Note: Based on CS06 assessment.	C. Unlikely	4. Major	High	1) Modify both platforms so the chain can be replaced with a self closing gate or equivalent that meets AS1657 requirements. 2.1) Modify the design to reduce the gap to ALARP (100mm gap between handrails is acceptable under AS1657). 2.2) Determine if FIPS and anchor points are required after the design review has been completed. This is when personnel are moving between platforms.	No photos available. Refer to CS06.				
CS01-2	22/02/2023	Diesel Fuel Tank / Bowser	1) Handrail does not meet AS1657 requirement of 900mm (~600mm actual recorded). 2) No gate at the top of the work platform. Potential fall of 1.9m	D. Occasional	3. Severe	Medium	1.1) Replace the access ladder and platform with access stairs and platform, with handrails. 1.2) Modify the bund if required to accommodate the new platform and access stairs / ladder. 2) Self closing gate to be installed at the top of the platform.					
CS01-3	22/02/2023	Water Treatment Plant - Pit Inside Building	1) Poor access / egress from ladder. 2) The foot of the ladder does not rest on or terminate above the landing. There is also no clear handgrips to assist the person using the ladder. Therefore it does not meet AS 1657 requirements. 3) No non-slip tread on ladder rungs.	C. Unlikely	3. Severe	Medium	1) Consider the position of the ladder when being redesigned, to allow for safe access / egress. 2) Redesign the ladder and hand grips to provide suitable access and meet AS1657 requirements. 3) Replacement ladder to have hi vis (yellow) non-slip tread installed on the rungs.					
CS01-4	22/02/2023	GEA Fuel Gas Skid	1) Step up / down from grid mesh platform is 450mm and the current design is not compliant with AS 1657 (300-450mm requires a minimum of 1 step). 4 locations of this identified. 2) No hi vis (yellow) strip on the nosing (ends) of the grid mesh platform. 4 locations of this identified.	C. Unlikely	2. Minor	Low	1) Install a step between the landing and grid mesh platform to provide safe access at each location. 2) Install hi vis (yellow) non-slip strip on the nosing of each grid mesh platform (4 locations) as well as stairs installed under Action 1.					
CS01-5	22/02/2023	ACS Lube Oil Cooler	1) Two ladders have landings that does not meet the AS1657 requirements. 2) Two ladders are currently installed on top of concrete steps due to being the incorrect size.	C. Unlikely	3. Severe	Medium	1) Pour a new landing for each ladder. 2) Replace both ladders with the correct size, to ensure it runs from the landing to the platform.					

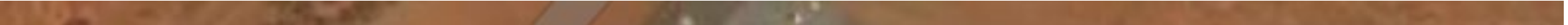








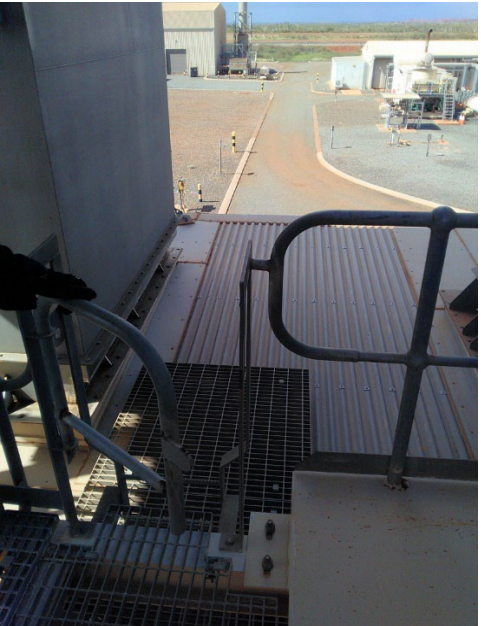



	Date Added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date Planned for Completion	Date Completed	Comments
CS01-6	22/02/2023	ACS Lube Oil Cooler - Platform (East Side)	1) On the middle platform, there is no mid rail between the existing handrail and the access ladder to the top platform. This has created the potential for a fall from height.	B. Remote	3. Severe	Medium	1) On the middle platform, install a handrail between the existing handrail and the ladder to the top platform.					
CS01-7	22/02/2023	Compressor Unit 1 - After Cooler Fans - Top Platform	1) No handrail on the western end of the top platform. Personnel at risk of a fall ~5m when performing maintenance activities on the piping.	C. Unlikely	3. Severe	High	1) Modify the platform and handrails to provide access for maintenance tasks without being exposed to the risk of a fall.	No photos available. Refer to CS08.				
CS01-8	22/02/2023	ACS Fuel Gas Skid (South Side)	1) Step up / down from grid mesh platform is 450mm and the current design is not compliant with AS 1657 (300-450mm requires a minimum of 1 step). There is 2 locations of this.	C. Unlikely	2. Minor	Low	1) Install step(s) between the landing and grid mesh platform to provide safe access at each end.					
CS01-9	22/02/2023	ACS Inlet Duct	1) The landing for the ladder does not meet AS1657 requirements of 900mm from the bottom lung. 2) The angle of the slope (58.40 degrees) below the AS1657 requirements for step type ladders of Min 60 degrees and Max 70 degrees. Calculation Notes: 3.8m Rise (height), 2.2m Run (length), 16 Runs (steps). *To be verified by JW. 3) Handrail does not meet AS requirements by beginning within a max of 900mm of the landing. 4) Nosing of stairs does not have hi vis (yellow) tread installed. 5) Greater potential to fall if facing away from the stairs when descending.	B. Remote	3. Severe	Low	1) Pour a new landing. 2) Install a new staircase that complies with AS1657. The new stairwell will need to be installed with a different orientation to avoid head height hazards (e.g. cross beams). 3) Modify the handrail to meet the AS requirements. 4) Ensure the stairs have hi vis (yellow) tread installed on the nosing of each stair. 5) Install signage on both sides of the gate to instruct personnel to only descend the stairs whilst facing towards the stair.				IW to double check calculation is accurate. Calculator used - https://www.calculator.net/stair-calculator.html?run=2.2&rununit=meter&totalrun=5&totalrununit=meter&ctype=one&totalheight=3.8&totalheightunit=meter&x=83&y=17	
CS01-10	22/02/2023	ACS Exhaust Duct	1) The landing for the ladder does not meet the AS1657 requirements of 900mm from the bottom lung.	B. Remote	2. Minor	Low	1) Pour a new landing.					
CS01-11	22/02/2023	Blow Flask Skid	1) Step up / down from grid mesh platform is 450mm and the current design is not compliant with AS 1657 (300-450mm requires a minimum of 1 step). There is 2 locations of this. 2) No hi vis (yellow) strip on the nosing (ends) of the grid mesh platform. There is 2 locations of this.	C. Unlikely	2. Minor	Low	1) Install a step between the landing and grid mesh platform to provide safe access at each end. 2) Install a hi vis (yellow) non-slip strip on the nosing of each end of the platform and installed stairs.					
CS01-12	22/02/2023	Fuel Reduction Skid (West Side of Plant)	1) Step up / down from grid mesh platform is 450mm and the current design is not compliant with AS 1657 (300-450mm requires a minimum of 1 step). There is 2 locations of this. 2) No hi vis (yellow) strip on the nosing (ends) of the grid mesh platform. There is 2 locations of this.	C. Unlikely	2. Minor	Low	1) Install a step between the landing and grid mesh platform to provide safe access at each end. 2) Install hi vis (yellow) non-slip strip on the nosing of each end of the platform.					
CS01-13	22/02/2023	Confined Space - Access Ladder (West Side of Plant)	1) The Control Box adjacent to ladder is partially obstructing access. 2) Ladder does not extend 1m past the landing at the top of the ladder and does not have sufficient locations to hold onto when mounting / dismounting. 3) No non-slip tread on ladder rungs.	C. Unlikely	4. Major	High	1) Consider relocating the control box to provide unobstructed access to the ladder or alternatively relocate the ladder. 2) Replace the ladder, ensuring it extends 1m past the top landing, with sufficient locations to hold onto when mounting / dismounting the ladder. 3) Replacement ladder to have hi vis (yellow) non-slip tread installed on the rungs.					
CS01-14	22/02/2023	After Cooler Fans - Access Ladders	1) The landing for the ladder does not meet the AS1657 requirements of 900mm from the bottom lung.	C. Unlikely	2. Minor	Low	1) Pour a new landing.					
CS01-15	22/02/2023	After Cooler Fans - Top Platform	1) No handrails have been installed on the sloping edges adjacent to the 2 x grid mesh staircases. This is located on the top of the platform. 2) No hi vis (yellow) tread on the nosing of the stairs. 3) Cables installed in the access way between the after cooler fans, creating a trip hazard.	C. Unlikely	3. Severe	Medium	1) Install handrails to prevent access to the sloping edges. 2) Install hi vis (yellow) tread on the nosing of the stairs. 3) Re-route the cables to outside of the walkway.					
CS01-16	22/02/2023	After Cooler Fans - Top Platform	1) No guarding has been installed on the top of the fan enclosures, to prevent access during operation. Multiple fans at this location.	C. Unlikely	4. Major	High	1) Install a grid mesh hatch or similar and attach it to the existing structure.					

c	Date Added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date Planned for Completion	Date Completed	Comments
CS01-21												
CS01-22												
CS01-23												
CS01-24												
CS01-25												
CS01-26												
CS01-27												
CS01-28												
CS01-29												
CS01-30												
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CS01-42												
CS01-43												
CS01-44												
CS01-45												
CS01-46												



c	Date Added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date Planned for Completion	Date Completed	Comments
CS01-47												
CS01-48												
CS01-49												
CS01-50												
CS01-51												











Reference	Date Added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date Planned for Completion	Date Completed	Comments
C502-1	2/02/2023	Example - Lube oil cooler unit 1	1) Landing does not meet AS requirement of 900mm 2) Stair treads too narrow and no non-slip				1.1) Remove old landing and install new precast one 1.2) Pour new landing 2.1) Apply non slip to tread nose					
C502-2	21/02/2023	Diesel Fuel Tank / Bowser	1) Handrail does not meet AS 1657 requirement of 900mm (~900mm actual recorded). 2) No gate at the top of the work platform. Potential fall of 1.9m	D. Occasional	3. Severe	Medium	1.1) Replace the access ladder and platform with access stairs and platform, with handrails. 1.2) Modify the bund if required to accommodate the new platform and access stairs / ladder. 2) Self closing gate to be installed at the top of the platform.					
C502-3	21/02/2023	After Cooler Fans - Top Platforms	1) Several locations where there is a gap between the existing handrails and the fan enclosures exceeds the AS 1657 allowance (max 100mm). This creates the potential for a person to fall from height resulting in a fatality or significant injury due to the total fall distance.	C. Unlikely	4. Major	High	1) Extend the handrail to the fan enclosures to eliminate exposure to a unprotected edge.					
C502-4	21/02/2023	After Cooler Fans - Top Platforms	1) No guarding has been installed on the top of the fan enclosures, to prevent access during operation. Multiple fans at this location.	C. Unlikely	4. Major	High	1) Install a grid mesh hatch or similar and attach it to the existing structure.					
C502-5	21/02/2023	After Cooler Fans - Top Platforms	1) 2 x Pins sticking out from the handrail, exposing personnel to injury.	C. Unlikely	2. Minor	Low	1.1) Hazard raised in InControl (#18423) by DBP Head of Health and Safety - Transmission 1.2) The protruding pins are to be cut and grinded until flush with the handrail.					
C502-6	21/02/2023	Unit 2 - Access Platform for Bettic Equipment	1) Chain has been used in lieu of a handrail at the top of the platform, adjacent to the Bettic Equipment. Chain will break in the event of a fall and therefore will not meet AS 1657 requirements for guardrails.	C. Unlikely	3. Severe	Medium	1) Replace the chains with handrails that meets AS 1657 requirement.					
C502-7	21/02/2023	Unit 2 - Middle Platform (North Side)	1) Self closing gate leads onto a section of roof with no edge protection in place. This exposes personnel on the roof, to a potential for a fall from height resulting in a fatality or significant injury.	C. Unlikely	4. Major	High	1.1) Install edge protection along the exposed edges of the roof. 1.2) Install signage to highlight the fall from height risk until edge protection is installed.					
C502-8	21/02/2023	Unit 2 - Middle Platform (East Side)	1) There is a gap between the existing handrail and structure, which exceeds the AS 1657 requirements (<= 100mm).	B. Remote	3. Severe	Low	1) Extend the handrail towards the structure to reduce the gap. Ensure the hatch can still be operated without obstruction.					
C502-9	21/02/2023	Unit 2 - Middle Platform (East Side)	1) Ladder to access the top platform does not have high vis (yellow) non-slip tread fitted to the rungs.	D. Occasional	2. Minor	Low	1) Retrofit the ladder with hi vis (yellow) non-slip tread to the rungs.					
C502-10	21/02/2023	Unit 2 - Middle Platform (South Side)	1) When the existing gate is opened to allow mobile plant lifting loads onto/off the platform, it creates the potential for a person fall from height. A fall from this location would likely result in a fatality or significant injury.	C. Unlikely	4. Major	High	1.1) Recommend replacing the existing gate with a purpose built safety gate (i.e. UMZ18 Mezzanine Safety Gate). This type of gate eliminates the risk. It should be painted a hi vis colour (i.e. yellow) and have pinch point stickers or similar installed on the safety gate. 1.2) Install signage to highlight the fall from height risk until an alternative safety gate is installed.					




















[illegible]










[illegible]

Reference	Date added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date planned for completion	Date completed	Comments
CS03-1	2/02/2023	Example - Lube oil cooler unit 1	1) Landing does not meet AS requirement of 900mm 2) Stair treads too narrow and no non-slip				1.1) Remove old landing and install new precast one 1.2) Pour new landing 2.1) Replace ladder with new treads and non-slip		Replace ladder and landing. Pour new landing			
CS03-1	21/04/2023	Diesel Fuel Tank / Bowser	1) Handrail does not meet AS requirement of 900mm (~570mm). 2) No gate at the top of the work platform. 3) Landing does not meet AS requirements. Obstructed by bunding.	D. Occasional	3. Severe	Medium	1) Replace the access ladder and platform with access stairs and platform, with handrails and hi vis tread. 2) Self closing gate to be installed at the top of the platform. 3) Ensure the landing on the redesigned access stairs and platform meet the AS requirements. Modifying the bund if required.					100% sanity check of findings, solutions and grammer - up to here.
CS03-2	21/04/2023	Storage Tank Adjacent to Diesel Fuel Tank	1) Reo-bar used as ladder runs and this does not meet AS requirement. 2) No handrails have been installed. 3) Landing does not meet AS requirements. Obstructed by bunding. 4) Temporary step up does not meet AS requirement for Riser 130mm to 225mm (~300mm per step).	D. Occasional	3. Severe	Medium	1) Replace the access ladder and install an platform with access stairs and platform, with handrails and hi vis tread. 2) Self closing gate to be installed at the top of the platform. 3) Ensure the landing on the redesigned access stairs and platform meet the AS requirements. Modify the bund if required. 4) Remove the temporary stairs and tag out of service until they can be modified to meet AS requirements or is disposed of.					
CS03-3	21/04/2023	Water Treatment Plant - 2 x Exterior Tanks	1) No platform available to access the inspection hatch on the top of the two tanks. Likely platform ladder on blue metal or standing on the concrete pad the tank sits on is used for access. Potential fall of 2080mm.	C. Unlikely	2. Minor	Low	1) Install a landing, step up and platform that complies with AS requirements. Ask a FMO or Dave Martin if we would perform a task to access the top. If no, hid the cell.					
CS03-4	21/04/2023	Water Treatment Plant - 2 x Inspection Pits Inside Plant	1) Poor access / egress from ladder. 2) The foot of the ladder does not rest on or terminate above the landing. There is also no clear handgrips to assist the person using the ladder. Therefore it does not meet AS 1657 requirements. 3) No non-slip tread on ladder rungs.	B. Remote	4. Major	Medium	1) Consider the position of the ladder when being redesigned, to allow for safe access / egress. 2) Redesign the ladder and hand grips to provide suitable access and meet AS1657 requirements. 3) Replacement ladder to have hi vis (yellow) non-slip tread installed on the rungs. Do we ever access these? For what? Frequency? Ask FMO.					
CS03-5	21/04/2023	Compressed Air Unit For Battery Rooms	1) No non-slip tread on ladder runs. 2) Landing does not meet the AS requirements. 3) ~200mm Gap between the vessel and the handrail is not compliant with AS requirements (max 100mm).	B. Remote	2. Minor	Low	1) Install hi vis (yellow) non-slip tread installed on the rungs. 2) Extend landing to meet AS requirements. 3) Extend the handrail to within 100mm of the vessel. Change to recommend the ladder is removed if it not required. Ask a FMO or David Martin from this work group.					
CS03-6	21/04/2023	Fuel Gas Skid For Stage 1 Unit	1) Step up / down from the grid mesh platform is 390mm and is therefore non-compliant with AS1657 (130-225mm). There is 2 locations of this.	C. Unlikely	2. Minor	Low	1) Install a step between the landing and grid mesh platform to provide safe access at each end.					
CS03-7	21/04/2023	Unit 1 After Coolers - South Access Ladder	1) Landing does not meet the AS requirements (size and step up from ground.	C. Unlikely	2. Minor	Low	1) Modify the size of the landing to meet AS requirements (including step up from ground to landing and size of landing).					












Reference	Date added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date planned for completion	Date completed	Comments
CS03-8	21/04/2023	Unit 1 After Coolers - West Access Ladder	1) Landing does not meet the AS requirements (size and step up from ground.	C. Unlikely	2. Minor	Low	1) Modify the size of the landing to meet AS requirements (including step up from ground to landing and size of landing).					
CS03-9	21/04/2023	Unit 1 After Cooler Fans - Top Platform	1) No handrail on the western end of the top platform. Personnel at risk of a fall ~5m when performing maintenance activities on the piping.	C. Unlikely	3. Severe	High	1) Modify the platform and handrails to provide access for maintenance tasks without being exposed to the risk of a fall.	No photos available. Refer to CS08.				
CS03-10	21/04/2023	ACS Inlet Duct	1) The landing for the ladder does not meet AS1657 requirements of 900mm. 2) The angle of the slope (58.40 degrees) exceeds AS1657 requirements of Min 20 degrees and Max 45 degrees. Calculation Notes: 3.8m Rise (height), 2.2m Run (length), 16 Runs (steps). 3) The steps nosing do not have no hi vis non-slip tread fitted and posings a slip/fall risk. 4) Handrail does not meet AS requirements by beginning within a max of 900mm of the landing. 5) Greater potential to fall if facing away from the stairs when descending.	C. Unlikely	3. Severe	Medium	1) Pour a new landing. 2) Install a new stairwell that complies with AS1657. The new stairwell will need to be installed with a different orientation to avoid head height hazards (e.g. cross beams). 3) Hi vis non-slip tread is also to be fitted to the nosing of each stair. 4) Modify the handrail to meet the AS requirements. 5) Install signage on both sides of the gate to instruct personnel to only descend the stairs whilst facing towards the stair. Check AS requirement for when the handrail can stop. Check AS requirement for the tread depth for this type of staircase. May differ.	 				
CS03-11	21/04/2023	ACS Inlet Duct - Middle Deck Access Ladder	1) The steps are small in size (~110mm), have no hi vis non-slip tread fitted, do not meet AS1657 requirements and posings a slip/fall risk. 2) Handrail does not meet AS requirements by not extending the full length of the stairs.	B. Remote	2. Minor	Low	1) Ensure the new stairwell has suitably sized steps that meet AS1657 requirements. Hi vis non-slip tread is also to be fitted to the nosing of each stair. 2) Extend the handrail the full length of the stairs. Check tread size in AS.					
CS03-12	21/04/2023	ACS Inlet Duct - Middle Deck	1) ~230mm Gap between the structure and the handrail is not compliant with AS requirements (max 100mm). 2) No kick plate installed on the end of the grid mesh facing the ducting. This creates a slip/fall and dropped object risk. Note: The small piece of metal on the edge of the ducting was identified and removed and subsequently a hazard report raised.	B. Remote	2. Minor	Low	1) Modify the handrail to extend within 100mm of the structure. 2) Install a kick plate along the open edge of the grid mesh.					
CS03-13	21/04/2023	ACS Inlet Duct - Top Deck	1) The landing for the ladder does not meet AS1657 requirements of 900mm. 2) The steps are small in size (~110mm), have no hi vis non-slip tread fitted, do not meet AS1657 requirements and posings a slip/fall risk. 3) Handrail does not meet AS requirements by not extending the full length of the stairs.	C. Unlikely	3. Severe	Medium	1) Modify the platform to provide adequate landing or modify the access method. 2) Ensure the new stairwell has suitably sized steps or a access ladder that meet AS1657 requirements. Hi vis non-slip tread is also to be fitted to the nosing of each stair. 3) Extend the handrail the full length of the stairs.					
CS03-14	21/04/2023	ACS Exhaust Duct	1) The landing for the ladder does not meet AS1657 requirements of 900mm.	B. Remote	2. Minor	Low	1) Pour a new landing.					
CS03-15	21/04/2023	Access Stairs Over Ground Level Pipework - Several Locations	1) The landing for the stairs does not meet AS1657 requirements of 900mm. 2) No hi vis (yellow) tread installed onto the nosing of each stair.	C. Unlikely	2. Minor	Low	1) Pour a new landing. 2) Install hi vis (yellow) tread onto the nosing of each stair.					

Reference	Date added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date planned for completion	Date completed	Comments
CS03-16	21/04/2023	Fuel Reduction Skid (West Side of Plant)	1) Step up / down from the grid mesh platform is 370mm and is therefore non-compliant with AS1657 (130-225mm). There is 2 locations of this	B. Remote	2. Minor	Low	1) Install a step between the landing and grid mesh platform to provide safe access at each end.					
CS03-17	21/04/2023	Unit 1 Pressure Reduction Skid	1) No hi vis (yellow) strip on the nosing (ends) of the grid mesh platform.	B. Remote	2. Minor	Low	1) Install hi vis (yellow) non-slip strip on the nosing of the skid's access point.					
CS03-18	21/04/2023	Unit 1 Vessel - Access Platform	1) The ladder does not meet AS requirements (e.g. run full length to the landing, step up too great). 2) Gap between the handrail and structure 130mm and does not meet AS requirements (max 100mm). <i>Note: Comment only given the small difference above the AS requirement.</i>	C. Unlikely	3. Severe	Medium	1.1) Install a landing that meets AS requirements. 1.2) Modify the ladder so its runs to the new landing and the first step up meets AS requirements.	 				
CS03-19	21/04/2023	Unit 1 Compressor Oil Cooler Fans Access Stairs	1) The landing for the stairs does not meet AS1657 requirements of 900mm. 2) The handrail does not run the full length of the stairs, increasing the potential of being unable to arrest a slip / fall. 3) No hi vis (yellow) tread installed onto each stair.	C. Unlikely	3. Severe	Medium	1) Pour a new landing. 2) Modify the handrail to run the full length of the stairs. 3) Install hi vis (yellow) tread onto each stair.					
CS03-20	21/04/2023	Unit 1 Compressor Oil Cooler Fans Platform	1) The existing handrail does not extend around the outside of the fan enclosure on other side. This creates the risk of a fall of ~1.9m.	C. Unlikely	3. Severe	Medium	1) Install additional handrails and supporting structure around both fan enclosures.					
CS03-21	21/04/2023	GEA 1 and 2 - Oil / Hydraulic Fluid Tank	1) The stairs riser (260mm) does not meet AS requirements. The stairs are being used as a work platform. 2) No hi vis (yellow) tread installed onto each stair.	C. Unlikely	3. Severe	Medium	1.1) Install a platform with stair access to replace the temporary stairs. <i>Note: If 3 stairs will be required so handrails will also be required.</i> 2) Install hi vis (yellow) tread onto each stair					
CS03-22	21/04/2023	GEA 1 and 2 - Fuel Gas Skid	1) The step up (370mm) from the ground to the grid mesh platform exceeds AS requirements (130-225mm).	C. Unlikely	2. Minor	Low	1) Install a step between the landing and grid mesh platform to provide safe access at the four access points.					
CS03-23	21/04/2023	Desiccant Dryers x 2	1) The landing (280mm) does not meet AS requirement of 600mm (Depth). 2) No hi vis (yellow) tread installed on the nosing of the platform. 3) Cable tray adjacent to step ups is a trip hazard and the hi vis tape has faded.	B. Remote	2. Minor	Low	1) Remove old landing and pour a new landing. 2) Install hi vis (yellow) tread onto the nosing of the two access points. 3.1) Relocate the cable tray to eliminate the trip hazard if practically possible. 3.2) If the cable tray can not be relocated then apply new hi vis tape.					







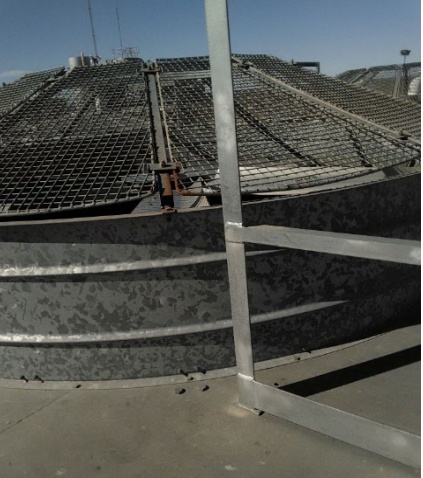

Reference	Date added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date planned for completion	Date completed	Comments
CS03-24	21/04/2023	Unit 3 - Combustible Liquid Tank	<p>1) The stairs do not meet AS requirements (e.g. first step's riser is 360mm, no handrails, no hi vis nosing). The stairs are being used as a work platform</p> <p>Potential for a fall from the stop stair is 760mm.</p>	C. Unlikely	3. Severe	Medium	1) Replace the concrete stairs with a work platform and access stairs that is AS compliant.					
CS03-25	21/04/2023	Unit 3 Pipework (South Side) - Access Ladder	<p>1) Gate is not self closing (manual drop bar) and therefore is not AS compliant. It is also reliant on human behaviour to close the gate after each use.</p> <p>2) No hi vis (yellow) tread is installed on the nosing of top platform / top ladder rung.</p> <p>3) Ladder is not positioned in the centre of the landing (grid mesh platform) and landing is insufficient size.</p>	C. Unlikely	2. Minor	Low	<p>1) Replace the existing gate with a self closing gate.</p> <p>2) Install hi vis (yellow) tread on the nosing top platform / top ladder rung.</p> <p>3) Modify the grid mesh landing to meet AS requirements.</p>	 				
CS03-26	21/04/2023	Unit 3 Pipework (South Side) - Platform	<p>1) Gap (200mm) between the grid mesh and adjacent pipework does not meet AS requirements.</p> <p>2) Gap (260mm) between the handrails and adjacent pipework does not meet AS requirements.</p>	C. Unlikely	1. Trivial	Low	<p>1) Modify the platform and install kick plates to reduce the risk of a trip / fall through the open edges.</p> <p>2) Modify the handrail to eliminate or reduce the gap between the handrail and adjacent pipework.</p>	 				
CS03-27	21/04/2023	After Cooler Fans - Fans 5-10 - 4 x Access Ladders For Top Platform	1) The ladder does not run the full length to the landing at ground level (ground to first rung is 440mm) and is therefore does not meet AS requirements.	C. Unlikely	2. Minor	Low	1) Modify the ladder to ensure it runs full length and risers meet AS requirements.					
CS03-28	21/04/2023	After Cooler Fans - Fans 5-10 - Top Platform	<p>1) No hatches installed on the top of the 6 x after cooler fans. Exposure to a fall and contact with fan blades if not isolated.</p> <p>2) Some handrails have a gap (up to 140mm) between the handrail and adjacent structure (e.g. fan enclosures) which exceeds AS requirements.</p>	C. Unlikely	4. Major	High	<p>1) Install a hatch on each after cooler fan without one.</p> <p>2) Modify the handrail to eliminate gaps that exceed 100mm.</p>	 				
CS03-29	21/04/2023	After Cooler Fans - Fans 5-10 - Middle Platform	1) Gap between the handrail and structure exceeds AS requirements.	C. Unlikely	3. Severe	Medium	1) Modify the handrail to eliminate gaps that exceed 100mm.					








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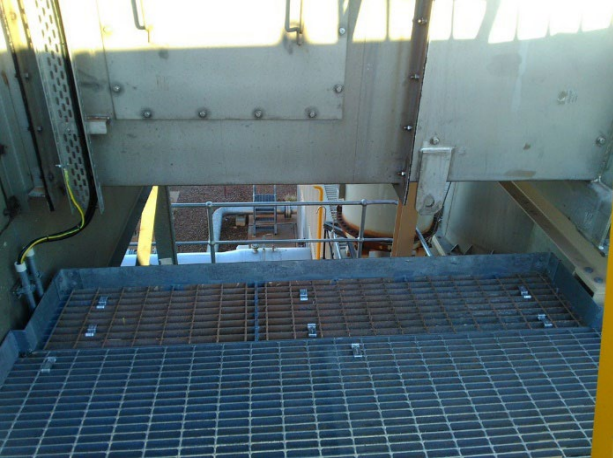

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Reference	Date added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date planned for completion	Date completed	Comments
CS04-1	2/02/2023	Example - Lube oil cooler unit 1	1) Landing does not meet AS requirement of 900mm 2) Stair treads too narrow and no non-slip.				1.1) Remove old landing and install new precast one 1.2) Pour new landing 2.1) Replace ladder with new treads and non-slip		Replace ladder and landing. Pour new landing			
CS04-1	21/04/2023	Diesel Fuel Tank / Bowser	1) Handrail does not meet AS requirement of 900mm (~650mm). 2) No gate at the top of the work platform. 3) Landing does not meet AS requirements. Obstructed by bunding. 4) Personnel are standing on the top of the bunding to access the opposite end of the tank (e.g. to conduct dip stick check).	D. Occasional	3. Severe	Medium	1) Replace the access ladder and platform with access stairs and platform, with handrails and hi vis tread. This should be installed on the other side of the tank to support improvements to the land (3.) 2) Self closing gate to be installed at the top of the platform. 3) Ensure the landing on the redesigned access stairs and platform meet the AS requirements. 4.1) Implement a platform and access stairs or ladder. 4.2) Modify the bund to accommodate the access platform.	 				
CS04-2	21/04/2023	Storage Tank Adjacent to Diesel Fuel Tank	1) Reo-bar used as ladder runs and this does not meet AS requirement. 2) No handrails have been installed. 3) Landing does not meet AS requirements. Obstructed by bunding. 4) Personnel are standing on the top of the bunding to access the opposite end of the tank (e.g. to conduct dip stick check).	D. Occasional	3. Severe	Medium	1) Replace the access ladder and install an platform with access stairs and platform, with handrails and hi vis tread. 2) Self closing gate to be installed at the top of the platform. 3) Ensure the landing on the redesigned access stairs and platform meet the AS requirements. 4.1) Implement a platform and access stairs or ladder. 4.2) Modify the bund to accommodate the access platform.	 				
CS04-3	21/04/2023	Water Treatment Plant - 2 x Storage Tanks	1) No access stairs / ladder and platform to access the top hatch. Likely personnel use a ladder and existing concrete bund (on one tank only). This creates the risk of a fall during inspection of the tank and other related activities. Fall from the top of the tank ~2.5m or from top of concrete bund 750mm.	B. Remote	3. Severe	Low	1) Install access stairs or ladder and platform with self closing gate, hi vis (yellow) tread on rungs/stair nosing, handrails, etc. to be AS compliant.					
CS04-4	21/04/2023	Water Treatment Plant - 2 x Inspection Pits Inside Plant	1) Poor access / egress from ladder. 2) The foot of the ladder does not rest on or terminate above the landing. There is also no clear handgrips to assist the person when mounting and dismounting the ladder. Therefore it does not meet AS 1657 requirements. 3) No non-slip tread on ladder rungs.	B. Remote	4. Major	Medium	1) Replace and reposition to the ladder to allow safe access / egress. 2) Redesign the ladder and hand grips to provide suitable access and meet AS1657 requirements. 3) Replacement ladder to have hi vis (yellow) non-slip tread installed on the rungs.					
CS04-5	21/04/2023	Unit 1 Vessel - Access Platform	1) The ladder does not meet AS requirements, including the ladder does run full length to the landing and the step up is 220mm (AS <=150mm). 2) Gap between the handrail and structure (130mm) and does not meet AS requirements (max 100mm). Note: Comment only given the small difference above the AS requirement.	C. Unlikely	3. Severe	Medium	1.1) Install a landing that meets AS requirements. 1.2) Modify the ladder so its runs to the new landing and the first step up meets AS requirements. 2) No action required.	 				Module may be redundant.













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CS04-6	21/04/2023	Unit 1 Compressor Oil Cooler Fans Access Stairs	<p>1) The landing for the stairs does not meet AS1657 requirements of 600mm minimum.</p> <p>2) The length of the handrail when compared to the full length of the stairs and landing, is not compliant with the AS requirements. The current design also increases the potential of being unable to arrest a slip / fall.</p> <p>3) No hi vis (yellow) tread installed onto each stair.</p>	C. Unlikely	3. Severe	Medium	<p>1) Pour a new landing.</p> <p>2) Modify the handrail to run the full length of the stairs.</p> <p>3) Install hi vis (yellow) tread onto each stair.</p>					Module may be redundant.
CS04-7	21/04/2023	Unit 1 Compressor Oil Cooler Fans Platform	<p>1) The existing handrail does not extend around the outside of the fan enclosure on other side. This creates the risk of a fall of ~1.9m.</p>	C. Unlikely	3. Severe	Medium	<p>1) Install additional handrails and supporting structure around both fan enclosures.</p>					Module may be redundant.
CS04-8	21/04/2023	Unit 1 Washdown Waste Tank	<p>1) Metal box currently being provided for access to the inspection hatch. Metal box is 400mm high and potentially slippery under some circumstances. Access provided does not meet AS requirements.</p> <p>Note: Feedback onsite was they believed this tank and therefore the metal box were redundant.</p>	B. Remote	2. Minor	Low	<p>1.1) If redundant, remove the metal box and dispose it.</p> <p>1.2) If not redundant, replace the metal box with access stairs and platform that meet AS requirements.</p>					
CS04-9	21/04/2023	Unit 1 Suction Scrubber	<p>1) The gap (450-500mm) between the handrail and structure exceeds the AS requirement (max 100mm). Note: The pipework reduces the potential to fall through the identified gaps, to ground level.</p> <p>2) The ladder rungs do not have hi vis (yellow) tread installed.</p>	C. Unlikely	2. Minor	Low	<p>1) Consider modifying the handrail to eliminate or reduce the gap to meet the AS requirement.</p> <p>2) Install hi vis (yellow) tread to all ladder rungs and the nosing of the platform / top rung.</p>					
CS04-10	21/04/2023	Unit 1 Pressure Reduction Skid	<p>1) Landing and step up / down is impacted by a existing pipework. Therefore the AS requirements are not being met and a trip hazard is present.</p> <p>2) No hi vis (yellow) strip on the nosing (ends) of the grid mesh platform.</p>	B. Remote	2. Minor	Low	<p>1) Install a step and platform over the pipework, that meet AS requirements (e.g. hi vis nosing, step riser height).</p> <p>2) Install hi vis (yellow) non-slip strip on the nosing of the skid's access point.</p>					Module may be redundant.
CS04-11	21/04/2023	Confined Space - Access Ladder (West Side of Plant)	<p>1) Ladder does not extend 1m (~800mm) past the landing at the top of the ladder and does not have sufficient locations to hold onto when mounting / dismounting.</p> <p>2) No non-slip tread on ladder rungs.</p>	B. Remote	3. Severe	Medium	<p>1) Modify or replace the ladder, ensuring it extends 1m past the top landing, with sufficient locations to hold onto when mounting / dismounting the ladder.</p> <p>2) Modified or replacement ladder to have hi vis (yellow) non-slip tread installed on the rungs.</p>					
CS04-12	21/04/2023	After Cooler Fans - Fans 7-9 - Top Platform	<p>1) Gaps between some handrails and existing structures (e.g. fan enclosures) that exceed AS requirements (max 100mm) identified.</p>	B. Remote	3. Severe	Medium	<p>1) Modify the handrail to eliminate gaps that exceed 100mm.</p>					
CS04-13	21/04/2023	After Cooler Fans - Fans 4-6 - Middle Platform	<p>1) Ladder to access the top platform doesn't not have guard rails behind it, to prevent a person who falls going over the middle platform's handrails.</p>	B. Remote	3. Severe	Medium	<p>1) Install additional handrails behind the ladder to prevent a fall from the ladder to over the handrail.</p>					

Reference	Date added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date planned for completion	Date completed	Comments
CS04-14	21/04/2023	After Cooler Fans - Fans 1-3 and 4-6 - Top Platform	No design risks identified. Situational/task based risk may exist.				No Action Required.					
CS04-15	21/04/2023	Unit 3 Combustible Liquids Tank	1.1) The current temporary access stairs requires a person to stand on the cable tray to access the inspection hatch. It also creates the potential for someone to walk down the cable tray as a shortcut. The current design creates the potential for a 600mm fall and cause damage to property. 1.2) The temporary access stairs riser (300mm) do not meet the AS requirements (130-225mm). 2) No hi vis (yellow) tread installed on the nosing of the stairs. Stair width is 1020mm.	C. Unlikely	3. Severe	Medium	1) Replace the access stairs with a platform and access stairs that are AS compliant (e.g. handrails, hi vis tread on nosing) and allows access to the hatch and valve (if required). The existing unit is to be modified or disposed off. 2) Install hi vis (yellow) tread onto the nosing of the stairs.					
CS04-16	21/04/2023	Desiccant Dryers x 2	1) The landing (280mm) does not meet AS requirement of 600mm (Depth). 2) No hi vis (yellow) tread installed on the nosing of the platform. 3) Cable tray adjacent to step ups is a trip hazard and the hi vis tape has faded.	B. Remote	2. Minor	Low	1) Remove old landing and pour a new landing. 2) Install hi vis (yellow) tread onto the nosing of the two access points. 3.1) Relocate the cable tray to eliminate the trip hazard if practically possible. 3.2) If the cable tray can not be relocated then apply new hi vis tape.					
CS04-17	21/04/2023	GEA 1 Exhaust System	1) No hi vis (yellow) tread installed on the ladder rungs.	B. Remote	2. Minor	Low	1) Install hi vis (yellow) tread to all ladder rungs and the nosing of the platform / top rung.					
CS04-18	21/04/2023	GEA 3 and 4 Electrical Boards	1) No hi vis (yellow) tread installed on the nosing of the stairs and platform.	B. Remote	2. Minor	Low	1) Install hi vis (yellow) tread onto the nosing on the stairs and platform.					
CS04-19	21/04/2023	GEA Fresh Oil and Waste Oil Tanks	1) The existing stairs are not sufficiently sized to provide easy access to both inspection hatches. This will encourage personnel to over-reach to utilise the hatches.	C. Unlikely	3. Severe	Medium	1) Replace the stairs with purpose fit and AS compliant platform and access stairs.					
CS04-20	21/04/2023	GEA 1 - Top Platform	1) Access stairs are not AS compliant, including tread depth (actual 90mm, required 185mm), riser (actual 230mm, required 130-225mm) and width (actual 590mm, required 600mm minimum). 2) No hi vis (yellow) tread installed on the nosing of the stairs and platform.	C. Unlikely	3. Severe	Medium	1) Replace the stairs with an AS compliant equivalent. 2) Ensure the replacement stairs have hi vis (yellow) tread installed on the nosing on the stairs and platform.					

Reference	Date added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date planned for completion	Date completed	Comments
CS04-21	21/04/2023	GEA 1 to 4 - Access / Egress Points	1) Some access stair(s) do not have hi vis (yellow) tread installed on the nosing of each stair. 2) The landing for some access points do not meet AS requirements. Note: Discussions with FMOs confirmed the access doors with no landings are used during tasks.	D. Occasional	2. Minor	Low	1) Install hi vis (yellow) tread on the nosing on the stairs. 2) Extend the landing.					
CS04-22	21/04/2023	Unit 2 - Access Ladder From Ground Level	1) No hi vis (yellow) tread installed on the ladder rungs. Note: GT Air Inlet System Replacement works was being undertaken at time of inspection. The danger tape was associated with these works and will be removed at the conclusion.	C. Unlikely	2. Minor	Low	1) Install hi vis (yellow) tread to all ladder rungs and the nosing of the platform / top rung.					
CS04-23	21/04/2023	Unit 2 - Lowest Platforms	1) Chain has been used in lieu of a handrail for two sides of this platform. Chain will break in the event of a fall. 2) There is no method for accessing this platform from the below walkway without climbing onto structural steel and being exposed to a fall. Additionally no top rail has been installed on the interior sides of the platform (closest side to the fans). 3) Gaps (~270mm) between the handrail for the walkaway and adjacent platform exceeds AS requirements (100mm max).	C. Unlikely	4. Major	High	1) Replace the chains with a handrail with a lockable gate for access. 2.1) Install signage to highlight the fall from height risk until a suitable means of access is installed. 2.2) Modify the platform to allow for safe access ladder or stairs from the adjacent walkway or ground level. 3) Modify the handrail to eliminate or reduce the gaps to below the AS requirements.					
CS04-24	21/04/2023	Unit 2 - Middle Platform (North Side)	1) Self closing gate leads onto a section of roof with no edge protection in place. This exposes personnel on the roof, to a potential for a fall from height resulting in a fatality or significant injury. Note: GT Air Inlet System Replacement works was being undertaken at time of inspection. The construction materials are associated with these works and will be removed at the conclusion.	C. Unlikely	4. Major	High	1.1) Install edge protection along the exposed edges of the roof. 1.2) Install signage to highlight the fall from height risk until edge protection is installed.					
CS04-25	21/04/2023	Unit 2 - Middle Platform (South Side)	1) When the existing gate is opened to allow mobile plant lifting loads onto/off the platform, it creates the potential for a person fall from height. A fall from this location would likely result in a fatality or significant injury. Note: GT Air Inlet System Replacement works was being undertaken at time of inspection. The danger tape was associated with these works and will be removed at the conclusion.	C. Unlikely	4. Major	High	1.1) Recommend replacing the existing gate with a purpose built safety gate (i.e. UMZ18 Mezzanine Safety Gate). This type of gate eliminates the risk. It should be painted a hi vis colour (i.e. yellow) and have pinch point stickers or similar installed on the safety gate. 1.2) Install signage to highlight the fall from height risk until an alternative safety gate is installed.					
CS04-26	21/04/2023	Unit 2 - Second From The Top Platform (East Side)	1) No hi vis (yellow) tread installed on the ladder rungs.	C. Unlikely	2. Minor	Low	1) Install hi vis (yellow) tread to all ladder rungs and the nosing of the platform / top rung.					
CS04-27	22/04/2023	Unit 2 - Second From The Top Platform (West Side)	1) Gap between the kickboard and the exhaust ducting is 410mm high and 2040mm wide. Potential for a person to fall if it was accessed.	B. Remote	3. Severe	Medium	1) Consider installing a handrail or similar, between the exhaust system and the kick plate.					
CS04-28	22/04/2023	Unit 2 - Second From The Top Platform (North Side)	1) No hi vis (yellow) tread installed on the ladder rungs.	C. Unlikely	2. Minor	Low	1) Install hi vis (yellow) tread to all ladder rungs and the nosing of the platform / top rung.					

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Reference	Date added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date planned for completion	Date completed	Comments
CS05-1	2/02/2023	Example - Lube oil cooler unit 1	<p>1) Landing does not meet AS requirement of 900mm</p> <p>2) Stair treads too narrow and no non-slip</p>				<p>1.1) Remove old landing and install new precast one</p> <p>1.2) Pour new landing</p> <p>2.1) Replace ladder with new treads and non-slip</p>		Replace ladder and landing. Pour new landing			
CS05-1	23/05/2023	Diesel Fuel Tank	<p>1.1) Handrail does not meet AS requirement of 900mm.</p> <p>2) No gate at the top of the work platform.</p> <p>3) Landing does not meet AS requirements. Obstructed by bunding.</p>	D. Occasional	3. Severe	Medium	<p>1) Replace the access ladder and platform with access stairs and platform, with handrails and hi vis tread.</p> <p>2) Self closing gate to be installed at the top of the platform.</p> <p>3) Ensure the landing on the redesigned access stairs and platform meet the AS requirements. Modifying the bund if required.</p>	 				
CS05-2	23/05/2023	Compressed Air Unit For Battery Rooms	<p>1) No non-slip tread on ladder runs.</p> <p>2) The ladder does not run to the landing and the step up exceeds the AS requirements (= <150mm).</p> <p>3) Landing does not meet the AS requirements and is current blue metal and a pit lid.</p> <p>4) ~200mm Gap between the vessel and the handrail is not compliant with AS requirements (max 100mm).</p>	B. Remote	2. Minor	Low	<p>1) Install hi vis (yellow) non-slip tread installed on the rungs.</p> <p>2) Extend the ladder to the landing.</p> <p>3) Pour a landing to meet AS requirements.</p> <p>4) Extend the handrail to within 100mm of the vessel.</p>	 				
CS05-3	23/05/2023	Energen DEA - 2 x Sides	<p>1) Temporary steps (width 1000mm, depth 300mm) have been provided on both sides to enable access to the work platform. The temporary steps complies with the AS requirement with the exemption of: - Step up from the ground to first step (300mm) and from the last stair onto the work platform (380mm) (AS requirement is 300-450mm requires a minimum of 1 step be provided); - Riser is 300mm (AS requirement is 130-225mm).</p> <p>2) No handrails have been installed for the access stairs.</p> <p>3) The work platform has no edge protection installed (width 2500mm, depth 290mm). This creates a fall risk of 1000mm. Note: Conversations with FMOs confirmed that the black work platform is used during inspection and maintenance tasks and when refuelling.</p> <p>4) No hi vis (yellow) tread installed on the nosing of the stairs and work platform.</p>	D. Occasional	3. Severe	High	<p>1) Remove the temporary stairs with a purpose built access stairs that complies with the AS requirements.</p> <p>2) The replacement access stairs are designed and installed with both handrails in place.</p> <p>3) Redesign or replace the work platform with a purpose build platform that complies with the AS requirements including adequate edge protection.</p> <p>4) Install hi vis (yellow) non-slip tread installed on the nosing of the stairs and work platform.</p>	 				

Reference	Date added	Location on Site	Issue	Likelihood	Consequence	Risk Score	Suggestions	Evidence	What is being completed	Date planned for completion	Date completed	Comments
CS05-4	23/05/2023	GEA Oil / Hydraulic Fluid Tank x 2	<p>1) The stairs are being used as a work platform. The dimensions (large stair width 2400mm, depth 520mm, riser 220mm, small stair width 570mm, depth 220mm, riser 220mm) suit stairs but not as a work platform and creates the risk of a fall.</p> <p>2) No hi vis (yellow) tread installed onto each stair.</p>	C. Unlikely	3. Severe	Medium	<p>1.1) Install a platform with stair access to replace the temporary stairs. Note: If 3 stairs will be required so handrails will also be required.</p> <p>2) Install hi vis (yellow) tread onto each stair.</p>					
CS05-5	23/05/2023	GEA Fuel Gas Skid	<p>1) The nosings of the platforms and platform stairs do not have hi vis tread installed.</p> <p>2) The landing for the north platform stairs (depth 400mm) does not meet the AS requirements (min 600mm).</p> <p>3) Step up for the platform (400mm) exceeds the AS requirements (300-450mm requires a minimum of one step).</p>	C. Unlikely	2. Minor	Low	<p>1) Install hi vis (yellow) non-slip tread installed on the nosing of the platforms and access stairs.</p> <p>2) Pour a new landing.</p> <p>3) Implement a step for each of the 4 access points for the 2 platforms.</p>					
CS05-6	23/05/2023	Water Treatment Plant - Pit Inside Building	<p>1) Poor access / egress from ladder.</p> <p>2) The foot of the ladder does not rest on or terminate above the landing. There is also no clear handgrips to assist the person when mounting and dismounting the ladder. Therefore it does not meet AS 1657 requirements.</p> <p>3) No non-slip tread on ladder rungs.</p>	C. Unlikely	3. Severe	Medium	<p>1) Consider the position of the ladder when being redesigned, to allow for safe access / egress.</p> <p>2) Redesign the ladder and hand grips to provide suitable access and meet AS1657 requirements.</p> <p>3) Replacement ladder to have hi vis (yellow) non-slip tread installed on the rungs.</p>					
CS05-7	23/05/2023	Water Treatment Plant - Access Door	<p>1) Step up from the inside of the Water Treatment Plant, to the outside is 310mm were the AS requires at least 1 step be in place (300-450mm). Note: Included to raise awareness only. Signage has already been installed on the door prior to the audit being conducted.</p> <p>2) Loose panel of grid mesh being used as a boot cleaner. Potential for it to shift under the foot of a user resulting in an injury.</p>	C. Unlikely	2. Minor	Low	<p>1) No action required.</p> <p>2) Replace the grid mesh panel with a purpose built boot cleaner.</p>	