

**High Risk Activity (where a work permit is always required in addition to documented risk assessment)**

Hazardous Activity	Description
<b>Asbestos work</b>	<p>Must be done under permit. Z's position is that any works involving maintenance, modification or removal of building structures or other assets containing asbestos must be completed by a licensed asbestos removal contractor, regardless of the size of asbestos to be removed.</p> <p>Where the presence of asbestos is unknown, the activity must be undertaken as if asbestos was known to be present.</p> <p>For any work involving asbestos the Permit Issuer must ensure that;</p> <ul style="list-style-type: none"> <li>• Health and Safety at Work (Asbestos) Regulations 2016 have been reviewed and assure themselves that the work to be completed complies with the regulations.</li> <li>• Related guidance documents contained on the WorkSafe website have been reviewed and assure themselves that the work to be completed complies follows this guidance</li> </ul> <p>Any asbestos work is must follow the Asbestos Management Plan (HS-IOA-PRO-010)</p> <p>Refer to WorkSafe NZ guidance material - <a href="https://worksafe.govt.nz/topic-and-industry/asbestos/working-with-asbestos/">https://worksafe.govt.nz/topic-and-industry/asbestos/working-with-asbestos/</a></p>
<b>Canopy or Shop Roof construction and/or installation</b>	<p>Lifting of canopy structure into final position, installation of roof cladding on canopy, shop and other buildings. Refer to the Site HSSE Guide for Construction and Maintenance</p>
<b>Confined space entry (CSE)</b>	<p>Entry to an enclosed or partially enclosed space which is not intended or designed primarily as a place of work; may have restricted means for entry and exit; and may have an atmosphere which contains potentially harmful levels of contaminant; not have a safe oxygen level; or cause engulfment.</p> <p>Tank top manway risers &gt;1.5m below ground level require a permit before entry.</p> <p>To determine whether the work space is considered confined space, the <i>Confined Space Risk Rating Decision Tree</i> is to be followed. The decision tree is based on the definition of confined space in AS/NZS 2865.</p> <p>If confined space: Work Permit AND Confined Space permit-to-work certificate AND Safe Work Methods Statement for hazardous work involved</p> <p>All requirements set out in AS/NZS 2865 are to be followed by competent persons.</p> <p>Refer to Z's <a href="#">Safe Work Practice for Confined Space Entry (HS-IOA-PRO-012)</a></p>
<b>Crane work or load lifting or rigging operations</b>	<p>Use of cranes and mechanical lifting equipment (including hiabs) on site. Rigging refers to the use of mechanical load-shifting equipment and associated gear to move, place or secure a load. Lifting loads with rigging predominantly involves working and/or load traversing at height. Risks of workers falling, or suspended loads falling must be considered.</p> <p>For standard deliveries of stock or delivery of and movement of construction materials on Z sites, a work permit is not required. Ensure documented risk assessments for the task is in place, e.g. JSAs, safe work method statements.</p> <p>Refer to Z's <a href="#">Safe Work Practice for Lifting Operations (HS-IOA-PRO-014)</a></p>



Hazardous Activity	Description
<b>Critical Safety Device override (C1)</b>	<p>Activity is considered high risk if a standard operating procedure has not already been approved and the activity involves overriding or disabling a safety-critical device. This applies when leaving a site operating with a disabled safety-critical device.</p> <p>Returning a Critical Safety Device in to service is also considered a high-risk activity.</p> <p>C1 CSDs are as defined using the Major Hazard Facility regulations.</p> <p>Any situations involving a CSD override must be managed by a SOP or Management of Change (MOC)</p> <p>For a more detailed definition of C1 and C2 safety critical device refer to <i>HS-IOA-PRO-002 - Z's approach to managing asset integrity</i>.</p>
<b>Demolition</b>	<p>Demolition work means any work that involves the demolition or dismantling of a structure or part of a structure that is load-bearing or is related to the physical integrity of the structure. It does not include: the dismantling of formwork, falsework, scaffolding or other structures designed or used to provide support, access or containment during construction work, or the removal of power, light or telecommunication poles.</p> <p>No work permit is required for soft strip-out, except where asbestos may be involved. Refer to the Z Site HSSE Guide for Construction and Maintenance and WorkSafe guidance on demolition work (and refurbishment).</p>
<b>Drilling of monitoring wells or soil borings – Mechanical drilling</b>	<p>Drilling and test borings for soil, groundwater, and bedrock investigations where there is use of mechanical drills.</p> <p>Refer to the Z Site HSSE Guide for Construction and Maintenance</p>
<b>Dusty construction works from dry concrete, stone, brick</b>	<p>Drilling, abrasive blasting, cutting, grinding, fettling, mixing, handling, dry shovelling and tunnelling (when materials containing silica are cut, ground, drilled or otherwise disturbed).</p> <p>Refer to WorkSafe NZ guidance material – <a href="https://worksafe.govt.nz/topic-and-industry/dust-and-fumes/dust/silica-dust-in-the-workplace/">https://worksafe.govt.nz/topic-and-industry/dust-and-fumes/dust/silica-dust-in-the-workplace/</a></p>
<b>Energised high-pressure system work (Schedule 1)</b>	<p>Work on pressurised systems as defined in the Health and Safety in Employment (Pressure Equipment, Cranes, Passenger Ropeways) Regulations 1999 – Schedule 1.</p> <p>For the purpose of Z PTWS, the definition does not include energising equipment and lines for testing or samples, or air compressors.</p>
<b>Excavations</b>	<p>Excavations that are likely to have the following hazards and risks, including trenching activities:</p> <ul style="list-style-type: none"> <li>• Presence of utilities – where the location of utilities is unknown or uncertain, the risk of the activity is to be considered as high</li> <li>• Near or below the footing of structures, e.g. retaining walls, building foundations, existing trench.</li> <li>• Presence and amount of contaminated soil</li> <li>• Excavations &gt;/= 1.5 m</li> <li>• Soil condition – any activity requiring battering or shoring of a trench &gt;1.5m deep</li> <li>• Historical or significant site – if there are any cultural or historical sensitivities associated with the work site the activity is to be considered as high risk</li> <li>• Water table level</li> <li>• Method of excavation</li> <li>• Tasks that require entry to excavations may be work in confined space.</li> </ul> <p>Refer to confined space decision tree. This includes work in any tank pit or separator excavation (refer to confined space entry requirements)</p>



Hazardous Activity	Description
<p><b>Hot work in a hazardous zone</b></p>	<p>Hot work is any work that may produce a source of ignition. This includes using any equipment that is not rated for use in a hazardous zone. It also includes any work that may result in a spark entering a hazardous zone, such as:</p> <ul style="list-style-type: none"> <li>• Welding, soldering</li> <li>• Fires or naked flames</li> <li>• Use of non-flameproof or non-intrinsically safe electrical equipment.</li> <li>• Blow-torches, flame cutting, any work involving an open flame</li> <li>• Sparking from jack hammers or concrete saws</li> <li>• Power cutting, drilling, grinding</li> <li>• Use of portable electric heaters</li> <li>• Electrical tools or equipment that are not explosion-proof or intrinsically safe</li> <li>• Sandblasting operations</li> <li>• Operation of internal combustion engines</li> <li>• Work on live electrical conductors and opening live electrical enclosures</li> </ul> <p>Hot work in hazardous zones are as per the Classification of Hazardous areas AS/NZS60079.10.1:2009. Areas are to be considered as hazardous zones when the areas are defined in site Hazardous Zone drawings or where certain conditions could create the presence of vapours, i.e. during tanker or tank truck discharge, or when wind conditions move vapours to certain areas.</p> <p>Diesel storage and dispensing facilities do not have Hazardous Zones as defined in AS/NZS60079.10.1. However any hot works undertaken on a diesel tank or its fittings shall require a Hot Work Permit to be issued.</p>
<p><b>Live electrical work</b></p>	<p>In principle, any live electrical work for Z can and must be avoided. If the activity meets the definition of high risk prescribed live electrical work as detailed in the Electricity (Safety) Regulations 2010, and it cannot be isolated, then it is to be considered high-risk for Z.</p> <p>An exception to this definition is where work is being undertaken for the purpose of fault finding.</p> <p>Refer to Z's <a href="#">Safe Work Practice for Electrical Work (HS-IOA-GUI-015)</a></p>
<p><b>Live energised product line work</b></p>	<p>Includes non-routine work not covered by an approved standard operating procedure on pressurised or live energised product lines where product is present (for example, modifications to existing fuel lines).</p> <p>Does not include energising equipment and lines for testing or samples, or de-energised lines.</p> <p>Refer to <a href="#">Lock Out, Tag Out Procedure (HS-IOA-PRO-009)</a></p>
<p><b>Non-routine work on fuel storage tank tops</b></p>	<p>Includes repairs and maintenance work undertaken from or on the top of tanks.</p>
<p><b>Removal of substances containing lead</b></p>	<p>Work that may expose workers to lead such as entry to and cleaning of tanks previously used to store leaded products or with lead lining or coating.</p>
<p><b>Tank removal and/or installation</b></p>	<p>Where tanks are being removed</p> <p>Where tanks are being replaced or installed at a new site.</p> <p>Refer to the <i>Site HSSE Guide for Construction and Maintenance</i></p>
<p><b>Work at height exceeding 1.8 metres</b></p>	<p>Height is measured from the lowest point of the worker's body.</p> <p><b>Note:</b> All regulatory requirements must be met when using a scaffold, scissor lift, boom lift, or permanent ladder.</p>



Hazardous Activity	Description
	<p>For work &lt;5 m when working on scaffold or EWP (a work permit is not be required. Ensure documented risk assessments for the task is in place, e.g. JSAs, safe work method statements, and SOPs.</p> <p>Refer to Z's <a href="#">Safe Work Practice for Working at Heights (HS-IOA-GUI-010)</a></p>
<p><b>Working on a non-trafficable secondary surface</b></p>	<p>Includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>• ceiling cavities</li> <li>• On or within 2 m of brittle roofs</li> <li>• On or within 2 m skylights</li> <li>• single skin, under slung canopies</li> </ul> <p>Refer to the <i>Site HSSE Guide for Construction and Maintenance</i></p>
<p><b>WorkSafe NZ Notifiable Work</b></p>	<p>Anything that has not been already covered in this table and is considered Notifiable Work by WorkSafe NZ.</p> <p>Follow guidance provided by WorkSafe NZ is available for the activity type <a href="https://worksafe.govt.nz/notifications/hazardous-work/">https://worksafe.govt.nz/notifications/hazardous-work/</a></p>



**Medium Risk Activity (where a work permit is not required unless determined by the business unit)**

Activity	Description
<b>Critical Safety Device override (C2)</b>	<p>This activity requires a permit where a standard operating procedure has not already been approved and the activity involves overriding or disabling a C2 safety-critical device. This applies when leaving a site operating with a disabled C2 safety-critical device. Returning a C2 Critical Safety Device in to service requires a work permit.</p> <p>C2 CSDs are present on both Network and Supply sites. For a more detailed definition of C2 safety critical device refer to HS-IOA-PRO-002 - Z's approach to managing asset integrity. Any situations involving a CSD override must be managed by a SOP or Management of Change (MOC)</p>
<b>Drilling of monitoring wells or soil borings - No mechanical drilling</b>	Drilling and test borings for soil, groundwater, and bedrock investigations where mechanical drills are NOT used.
<b>Excavation</b>	Excavations not assessed as high risk Refer to Z's <a href="#">Safe Work Practice for Excavations (HS-IOA-GUI-011)</a>
<b>Energised pressure system work (Schedule 2)</b>	<p>Work on a pressurised system that does not meet the definition of a pressure vessel (as defined in the Health and Safety in Employment (Pressure Equipment, Cranes, Passenger Ropeways) Regulations 1999, Schedule 1), e.g. included in Schedule 2 of the PECPR regulations:</p> <p>Refer to <a href="#">Lock Out, Tag Out Procedure (HS-IOA-PRO009)</a></p>
<b>Hot work OUTSIDE hazardous zone</b>	Hot work outside of the hazardous zones, including, but not limited to welding, grinding, portable heat sources.
<b>Non-powered hoist use involving a suspended load</b>	Where goods or equipment are lifted and moved using non-powered mechanical means
<b>Pump-out of product from tanks</b>	Pump out of product from storage tanks using non-fixed piping and transfer pumps, e.g. pumpout of contaminated product, or at a facility where flexible hoses or temporary piping is required.
<b>Restricted space</b>	<p>Work on restricted spaces not considered as confined space (when using the Confined Space Decision Tree). Examples of restricted spaces not considered confined space may include:</p> <ul style="list-style-type: none"> <li>manhole risers or tank sumps &lt;1.5m</li> <li>interceptors or grease traps</li> <li>ceiling spaces that do not meet the definition of a confined space</li> </ul>
<b>Work at height &lt;1.8 metres</b>	Height is measured from the lowest point of the worker's body.
<b>Work offsite in roadways</b>	Work in roadways, e.g. connection of services including sewer, electrical power, or water utilities or drainage.



Activity	Description
<p><b>Work on low-voltage equipment and circuits</b></p>	<p>Any voltage exceeding 50 volts AC or 120 volts ripple-free DC but not exceeding 1,000 volts AC or 1,500 volts ripple-free DC. For example: 50 V alternating current and 120 V direct current up to 1,000 V AC and 1500 V DC</p> <p>Includes fault finding, trouble shooting, and/or diagnostics on electrical equipment where the equipment will be energised to allow this. All other de-energised prescribed electrical work, including additions and alterations to final circuits, or the installation of new and replacement equipment.</p> <p>'Lock Out, Tag Out' is to be applied for all repairs and replacement of parts. Refer to <a href="#">Lock Out, Tag Out Procedure (HS-IOA-PRO-009)</a></p>
<p><b>Any other activity</b></p>	<p>Any other activity that has a medium residual risk when assessed using the HITRA process, or any other activity as determined by Z Energy's senior management and/or senior permit issuer to be assessed as a medium risk activity when using the HITRA process and Z's Risk Assessment Matrix, or any other activity that would benefit from being managed using the same PTWS approach as a medium risk activity.</p>



## Low Risk Activity (where a work permit is not required)

Activity	Description
<b>Critical Safety Device override (C3)</b>	<p>This activity is considered low risk where a standard operating procedure has not already been approved and the activity involves overriding or disabling a C3 safety-critical device. This applies when leaving a site operating with a disabled C3 safety-critical device.</p> <p>C3 CSDs are present on both Network and Supply sites.</p> <p>For a more detailed definition of C3 safety critical device refer to <i>HS-IOA-PRO-002 - Z's approach to managing asset integrity</i>.</p> <p>Any situations involving a CSD override must be managed by a SOP or Management of Change (MOC)</p>
<b>Internal office maintenance</b>	<p>General maintenance within an office building where no part of the activity is considered as Medium or High risk</p> <ul style="list-style-type: none"><li>• plastering and painting</li><li>• repairs to office equipment i.e. photocopiers, desks</li></ul>
<b>Utilities repairs</b>	<p>Repairs to utilities, outside hazardous zones, where no part of the activity is considered as Medium or High risk</p>
<b>Window washing (ground level)</b>	<p>Window washing that is undertaken from ground level</p>
<b>Gardening / Lawn mowing</b>	<p>Any work on gardens, lawns or trees that is undertaken without power tools and from ground level</p>

