

Procedure

Work Safety and Wellbeing

Lock out – Tag out (LOTO)

1. Purpose

The purpose of this procedure is to detail the requirements and the process required to minimise and prevent the risk of uncontrolled movement of equipment or release of energy that could lead to an incident or personal injury, environmental impact or asset damage at West Moreton Health (WMH) sites and locations.

This document describes the responsibilities of persons required for LOTO and safe isolation of equipment and systems at WMH. It includes the minimum mandatory requirements for LOTO and ensures a safe and consistent LOTO process.

2. Scope

This document applies to all staff including contractors, consultants, labour hire workers and others engaged in work activities on or near systems or equipment containing forms of energy that may (during maintenance or other works) require lock out-tag out at any West Moreton sites and locations.

The processes contained herein are to be implemented where the activation or energisation of plant or equipment will risk injury to personnel or damage to equipment or assets. This document covers plant, equipment and services, including but not limited to the following:

- Gravity
- Air handling units
- Boilers
- Chillers
- Confined space
- Compressed air
- Electrical equipment / circuits (capacitors / inductors)
- High voltage
- Live work
- Fire systems
- Gases
- Fuels (petrol, diesel, LPG)
- Hydraulics
- Radiation (U.V., Radio Frequency)
- Heat
- Pressure vessels
- Chemicals
- Fluids under pressure (water, effluent, air or hydraulic oil)
- Steam
- Other sources of stored energy

Energy Sources may need to be isolated individually, or in conjunction with other persons and/or isolation points.

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3. Statement / Commitment

WMH is committed to the health and wellbeing of all workers (including staff and contractors) through the appropriate management of the Lock out / Tag out process, aimed at preventing and minimising hazards and incidents. WMH will ensure all workplace hazards and risks are managed by elimination or control, using a risk management approach, in accordance with this procedure.

4. Principles

The principles of this procedure are based on statutory requirements and standard industry practice. WMH is committed to the highest standards of staff safety and uses best practice methodologies to create a safe work environment for our staff and others. The safety of our people is our highest priority. We strive to and are committed to, continuous and sustainable improvement of health and safety management.

5. Process

5.1 Lock out – Tag out (LOTO) equipment

There are two administrative control mechanisms used for preventing equipment from operating in the workplace.



Lock out

Lock out is a physical lock and (“**Danger Isolation, Do Not Operate**”) tag placed on plant or equipment to hold an energy isolation device in a safe position to prevent the operation of the equipment, until the Lock out device is removed by the person who placed the lock. If a Lock out process is required, then a Permit to Work is also required to facilitate this process.

Tag out (Out of Service / Do not operate)

Tag out is when a “**Caution, Do Not Operate**” tag is placed on a piece of plant or equipment to indicate that the equipment being controlled must not be operated, until the tag out device is removed by the person who placed the tag or by a technician following the repair of the equipment and before it is placed back into service.

Examples of Lock out equipment are shown below:



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Personal Isolation Locks and their attached Danger Tags are the minimum requirement for isolation devices under this procedure and must be used wherever a means of securing the device through application of a lock is required.

An out-of-service tag must not be used during lock out and isolation. Therefore, if an out-of-service tag was attached due to breakdown or faulty equipment, it should be removed and replaced with a danger tag while the installation, plant or equipment is isolated for the purpose of repair.

If the equipment cannot be repaired in the location in which it is situated, the repairer must attach a **new** Danger Tag and notify Infrastructure and Assets (I&A) through the [maintenance repair process](#) (iCMMS request for non-urgent maintenance) about the faulty equipment.

General Safety Precautions

Prior to starting work, determine if a LOTO process is required. If yes, then a Permit to Work is also required.

If so, confirm if a Work Instruction or Safe Work Method Statement (SWMS) exists. If a SWMS is in place, the worker must follow the SWMS instruction until they have confirmed the site and task are safe to proceed.

If not, then a SWMS must be developed for the task, including the issuing of a Permit to Work, and the use of the LOTO process.

All equipment to be maintained or serviced shall be assumed to be hazardous until;

- all sources of energy to the equipment has been positively isolated in an approved manner, and
- isolation effectiveness has been proven, or confirmed, in an approved manner, and
- all isolation points have been clearly identified, and
- appropriate procedures for dissipating or restraining stored energy sources have been conducted, and
- a risk assessment has been conducted to confirm the site is safe to access.

5.2 Lock out – Tag out Requirements

Before any item of plant is inspected, maintained, cleaned or repaired, where practicable, it must be shut down and its energy sources locked out and tagged 'out of service'. LOTO and safe isolation is a procedure used to ensure equipment and systems are properly shut down and not able to be restarted during the conducting of works, and/or if there is a risk that the equipment could be returned to service. It requires energy sources to be isolated and rendered inoperative before any maintenance work commences.

The isolated energy sources must be locked, and a tag placed on the lock identifying the person who has placed it. The person then holds the key ensuring that only they can start the equipment or system. This prevents accidental start-up of a machine or system while a worker is in direct contact with the equipment.

Examples of energy sources include electricity, hydraulic pressure, compressed air or gas, gravity, kinetic spring tension and moving parts. All equipment, machinery, plant and services, shall be assumed to be hazardous until all energy sources have been:

- Identified
- Positively isolated
- Discharged or stored energy released
- Locked and/or tagged out

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Isolations are discipline specific and must only be performed within the individual workers training, licencing (where required by legislation) qualifications, competency and authorisation.

5.2.1 Out of Service / Do Not Operate Tags for faulty, broken or malfunctioning equipment.

The aim of an Out of Service / Do Not Operate tag is to protect people and equipment by alerting them the equipment is faulty, broken or malfunctioning. Refer to [Appendix 1](#) for guidance on the use of Out of Service / Do Not Operate tags.

5.3 Permit to work

Isolation of plant and equipment must only be carried out under a [Permit to Work](#).

The following principles ensure the safe LOTO and isolation of West Moreton equipment and services through:

- safe LOTO and isolation processes, to ensure that an accidental release of hazardous energy does not occur
- identification of key responsibilities
- that entry to a restricted area is tightly controlled
- monitoring of the LOTO and isolation processes

This process is only to be conducted by the Infrastructure and Assets (I&A) Officer in Charge (OIC) who is responsible for:

- the permit to work system, LOTO and the isolation process;
- managing the application and removal of personal LOTO locks and tags by the work party.

5.4 Isolation Permit

An [Isolation Permit to Work](#) must be approved and LOTO equipment issued prior to any isolations occurring. It provides a formal check to ensure all elements of a safe system of work are in place before people are allowed to isolate machinery or systems.

The permit must be completed in writing and:

- specify the location to which the permit relates
- record the names of persons performing the isolation and the period the work will be carried out
- set out risk control measures based on the risk assessment
- contain space for an acknowledgement that the isolation has been completed and all persons have left the location.

The permit must be kept at the works location until the work is completed. It should be displayed in a prominent place to facilitate signing and clearance. Each worker must be able to understand the permit conditions. The permit is also a written record that all workers have exited the hazardous location on completion of the works.

A new or separate permit must be completed whenever:

- the isolation team exits and then re-enters at another location
- more than one team enters the isolation location from separate locations
- new hazards arise, or you become aware of a change, in which case the risk assessment must be updated
- there has been an evacuation and the team plan to re-enter the evacuation location.

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Under no circumstances shall any person carry out work under another person's isolation permit.

5.5 Application of Lock out – Tag out (LOTO)

The following steps are to be followed where LOTO and isolation is required before a task can be completed:

1. Decide if plant/equipment/services need to be isolated from its source of energy. Complete a [Request to Perform Work](#), associated risk assessments and/or Safe Work Method Statements (SWMS). Isolation Permits will only be issued under the Permit to Work system.
2. Inform ward / department / facility of the intended interruption to plant / equipment / services, as required.
3. Survey the equipment for sources of energy (e.g. electrical, pneumatic, fluids and steam; hazards such as biological, chemical and environmental etc).
4. Identify and record all sources of supply / energy and the isolation points on the Isolation Permit.
5. Perform a controlled stop of plant and equipment as required.
6. Identify stored energy (e.g. air accumulators, capacitors, inductors, batteries and uninterruptable power supplies (UPS)) and render safe by bleeding, purging or discharging energy.
7. Perform isolation in accordance with drawings and demonstrated plant knowledge (refer to Table 1: Hazard Level Assessment and Table 2: Hazard Level Isolation Guide).
8. Attach an appropriate locking device to plant / equipment / service and completed Lock out Tags in accordance with the LOTO process:
 - Red = personal lock or single point isolation
 - Yellow = multi point isolation. (If multiple isolations or trades on site a lock box may be required.)

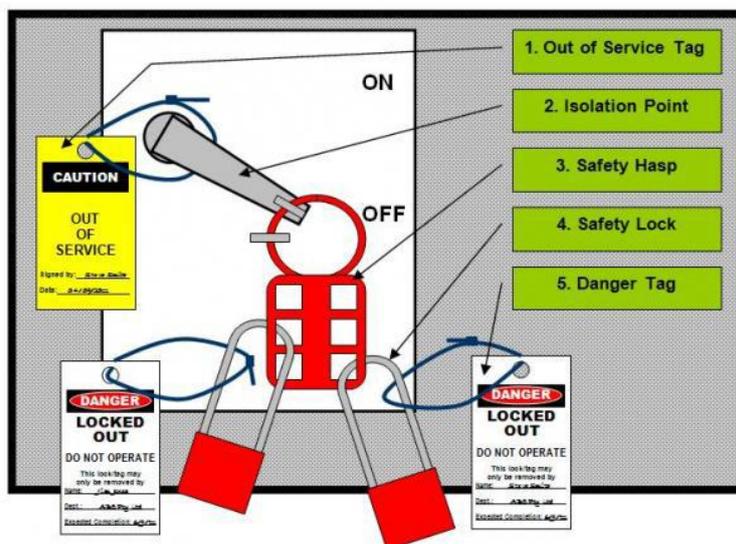
Personal locks (i.e. red locks) **MUST ONLY BE** used by I&A employees (supplied by I&A) and contractors.

Note: All LOTO and isolations must only be attached and removed by the I&A OIC, not a by a contractor.

9. Confirm isolation adequacy and effectiveness through testing (electrical) and/or verification (mechanically).

Note: Verification must be carried out by each person attaching a personal lock.
10. Apply signage or tape prominently to equipment, area, or controls to inform that work is in progress and to identify work site, where required.
11. Update Plant Outage Schedule.
12. Monitor the integrity of the LOTO process for the duration of the work activity. Ensure all workers involved are adhering to West Moreton safety procedures.

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A typical lock out – tag out set up

5.6 Removal of Lock out – Tag out (LOTO)

The following steps are to be followed to remove a LOTO and safe isolation:

1. Ensure work is completed and made safe, personnel notified, equipment guards are in place, general housekeeping conducted and required documentation completed.
2. Remove locks and tags.
3. Reverse isolation and restore plant to operational configuration, which may include purging hazardous gases.
4. Return equipment to service and conduct tests and checks, as required, such as, but not limited to, polarity, purity or phase rotation.
5. Confirm safe operation of equipment. Once works have been completed and proven safe, return equipment to service.

Note: Place equipment or service on stand-by or back-up, overnight or for 24hrs; to ensure repair or maintenance is effective, as required.

6. Once equipment is functioning correctly, remove “Out of Service” signage from equipment.
7. Inform ward/department/facility that works are complete.
8. Return Lock Box (if multiple trades or isolations) and update Plant Outage Schedule.
9. Record all work undertaken as per site procedures and store equipment tags and contractor personal tags for one month.

5.7 Failure or breach of LOTO process

In the event of a breach of LOTO or isolation processes, the Facility Maintenance Manager/Senior Maintenance Supervisor is to:

- a. Investigate the alleged breach and possible reasons for the breach.
- b. Submit an Incident Report through Riskman and notify Work Safety and Wellbeing.
- c. Determine appropriate action to be taken.

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5.8 LOTO lock left unattended

If a personal lock remains attached but the personnel responsible for the lock is absent and/or unable to return to the site, the I&A Facility Maintenance Manager/Senior Maintenance Supervisor is to appoint (in writing) an authorised I&A OIC to:

1. Investigate the plant or equipment to determine if it's safe to remove lock/tag or isolation.
2. Thoroughly check that equipment has all covers in place, equipment is correctly assembled, hazards are identified and controlled, and personnel associated are safe.
3. If the equipment or service is deemed:
 - a. Unsafe - maintain the lock out and ensure a completed Out of Service tag remains attached to the equipment lock.
 - b. Safe - remove the lock/tag or isolation.
4. Contact the owner of the personal lock advising that their access to site has been cancelled and they must report to I&A.
5. Submit an Incident Report through Riskman and notify Work Safety and Wellbeing section.

Table Key:

- HG: Harmful Gas
- NHL: Non-Harmful Liquid
- HL: Harmful Liquid
- VHG: Very Harmful Gas
- NHG: Non-Harmful Gas
- VHL: Very Harmful Liquid

LIQUIDS			
	AS 4343 fluid type	Vessel Hazard Level	Pipeline Hazard Level
Town water	NHL		E
Cooling water (CW)	NHL		D
Demineralised water	NHL		E
Treated water	NHL		E
Condensate	NHL		D
Hydraulic oils	HL	E	E
Lube & Transit oils	HL	C	E
Feed water	HL/HG	B	B
Ammonia Aqueous 1%	HG	D	E
Caustic Soda 50%	VHL	B	E
Trisodium Phosphate	VHL	E	C
Hydrazine 0.5%	VHL	D	E
Morpholine 1%	VHL	D	E
Fuels	VHL	B	E
Sulphuric Acid	VHL	B	E
GASES			
Vacuum	NHG		E
Flue gas	HG		E
Boiler gas	NHG		E
Nitrogen	NHG		E
Nitrogen Liquified	HG	C	
Compressed Air	NHG		E
Steam main steam	HG	B	B
Steam main sampling (25mm)	HG		C
Steam Aux steam	HG		C
Steam reheat sampling (100mm)	HG		C
Steam drains (50mm)	HG		C
Steam drains (25mm)	HG		C

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Ammonia Anhydrous	VHG		E
Hydrogen HP	VHG	B	B
Hydrogen MP	VHG	B	C
Chlorine	VHG	B	E
Gas – Methane / Natural Gas	VHG		B
Gas – Land Fill Gas	VHG		D
Pulverised Fuel (PF)	VHG	B	E

Table 1: I & A Hazard Level Assessment

Hazard Level	Pressure Isolation	Substance Isolation	Guide
A Average Hazard	N/A at West Moreton		
B Average Hazard	<ul style="list-style-type: none"> ▪ One isolation valve and a blanking plate or spade Or ▪ Two isolation valves with an atmospheric vent between Or ▪ The removal of a section of interconnecting pipework, isolation valves assumed where appropriate 	Plant must be purged and tested prior to access.	Two forms of segregation, with at least one being high reliability.
C/D Low Hazard/Extra Low Hazard	<ul style="list-style-type: none"> ▪ Blanking plate or spade for pipe/duct Or ▪ One isolation valve and proving of conditions after valve Or ▪ One isolation valve and one non-return valve Or ▪ Two isolation valves. 	Plant may be purged prior to isolation.	Normal isolation ensuring safe initial and continuous
E Negligible Hazard	<ul style="list-style-type: none"> ▪ Isolation valve ▪ Or ▪ One non-return valve proven to isolate adequately. 	Purge not normally required.	Isolation as required.

Table 2: I & A Hazard Level Isolation Guide

6. Roles and Responsibilities

It is the responsibility of every WMH staff member and WMH contractor performing isolation activities to follow this procedure.

Role	Responsibilities
Manager I&A	<ul style="list-style-type: none"> • nominates LOTO Administrator • applies and manages disciplinary process • reviews and responds to relevant or significant LOTO breaches.
Facility Maintenance Manager	<ul style="list-style-type: none"> • maintains site integrity of LOTO and isolation procedures and processes • monitors effectiveness of LOTO and isolation procedures and processes • maintains a secure key control process for all locks and keys.

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I&A OIC (commencing LOTO and isolation process)	<ul style="list-style-type: none"> prepares relevant LOTO and isolation documentation performs LOTO and isolation in accordance with I&A procedures and processes manages application and removal of LOTO process consults with affected wards/departments/facilities facilitates preparation of risk assessment and/or SWMS ensures identified control measures are in place confirms isolation adequacy and effectiveness manages the application and removal of personal locks and tags maintains lock box, equipment locks and keys, Plant Outage Schedule and ensures keys are in the Group Lock out box until all personal locks are removed and plant/equipment/service is deemed safe.
LOTO Administrator	<ul style="list-style-type: none"> communicates, implements and manages LOTO procedures and processes authorises personnel as competent in LOTO processes maintains the integrity of LOTO documentation and site-specific locks and records allocates responsibility for care and maintenance of locking equipment.
Senior Maintenance Supervisor	<ul style="list-style-type: none"> investigates breaches of LOTO and/or isolation procedures and processes promotes compliance with LOTO and isolation procedures and processes monitors training and competency requirements of OIC, and Building Engineering and Maintenance Services (BEMS) Work Party Members coordinates mandatory training for OIC and I&A Work Party Members.
Work Party (working on LOTO and isolated plant / equipment / service)	<ul style="list-style-type: none"> reviews risk assessment and/or SWMS and job specific procedures confirms lock attached to lock box completes work in accordance with implemented control measures and job specific procedures maintains communication with all persons involved job specific work.
Safety Observer (Electrical)	<p>Electrical Safety Reg. 2013 Schedule 9 Generally, for electrical work, means a person who-</p> <ul style="list-style-type: none"> is competent to implement control measures in an emergency; and is competent to rescue and resuscitate a worker who is carrying out the work, if necessary; and has been assessed in the previous 12 months as competent to rescue and resuscitate a person; or <p>for the operation of operating plant, means a person who-</p> <ul style="list-style-type: none"> observes the operating plant; and advises the operator of the operating plant if it is likely that the operating plant will come within an exclusion zone for the operating plant for an overhead electric line
All personnel	<ul style="list-style-type: none"> reports any incident, hazard or near miss through an Incident Report must not interfere with any personal or equipment locks and tags

7. Training and competency requirements

Establish a training plan to ensure that all relevant employees are trained in theory and practical components of LOTO activities.

Role	Activity	Competency	Training
Work Party Member (I&A Employee)	<ul style="list-style-type: none"> General work party member duties Non-electrical worker No confined space entry 	<ul style="list-style-type: none"> Understand roles and responsibilities of LOTO and isolation procedures and processes 	<ul style="list-style-type: none"> LOTO Induction Site Induction

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		<ul style="list-style-type: none"> Review risk assessment or SWMS and confirm isolation 	
Work Party Member (External)	<ul style="list-style-type: none"> General work party member duties Non-electrical worker No confined space entry 	<ul style="list-style-type: none"> Understand roles and responsibilities of LOTO and isolation procedures and processes Review risk assessment or SWMS and confirm isolation 	<ul style="list-style-type: none"> LOTO Induction Site Induction

Role	Activity	Competency	Training
Work Party Member (Confined Spaces)	<ul style="list-style-type: none"> General work party member duties Non-electrical worker Confined space entry (work in a confined space) Standby person for confined space work 	<ul style="list-style-type: none"> Understand roles and responsibilities of LOTO and isolation procedures and processes Review risk assessment or SWMS and confirm isolation Confined space entry required for work Standby Person for confined space work 	<ul style="list-style-type: none"> LOTO Induction Site Induction Confined Space Awareness training
I&A OIC	<ul style="list-style-type: none"> LOTO and Isolation OIC duties No confined space No electrical work 	<ul style="list-style-type: none"> Facilitate risk assessment and/or SWMS Perform duties of OIC as defined in Core Functions and Responsibilities 	<ul style="list-style-type: none"> Trade qualification LOTO Induction Site Induction OIC Induction
I&A OIC (Confined Space)	<ul style="list-style-type: none"> Confined Space entry and management 	<ul style="list-style-type: none"> Manage work in a confined space Completed West Moreton Confined Space documents Responsible for developing emergency response plan with competent persons 	<ul style="list-style-type: none"> Trade qualification LOTO Induction Site Induction OIC Induction Confined Space Awareness training
I&A OIC (Electrical Work)	<ul style="list-style-type: none"> Performing electrical work Working in an authorised zone Perform live electrical work 	<ul style="list-style-type: none"> Electrical licence Perform Resuscitation and Low Voltage Rescue Test / Prove de-energised 	<ul style="list-style-type: none"> Recognised trade qualification Electrical licence CPR-LVR (12 months)

8. Definitions

Term	Definition
Air Handling Units	A device used to regulate and circulate air as part of a heating, ventilating, and air-conditioning (HVAC) system.
Boiler	An enclosed vessel in which water is heated and circulated, either as hot water, steam, or superheated steam. This steam is a form of energy that can be supplied to process.
Chiller	A machine that removes heat from a liquid via a vapour-compression or absorption refrigeration cycle.

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Compressed Air	Air kept under a pressure that is greater than atmospheric pressure.
Danger Tag	<p>Danger Tags indicate that the worker whose name appears on the tag is working on the item of plant, and that the item must not be operated as operation could result in an incident occurring (e.g. injury).</p> <p>Each worker that is working on any type of plant must complete and attach a personal Danger Tag to an appropriate type of isolation device. It is recognisable as a red and white tag with the wording 'Danger Do Not Operate'.</p> <p>Tags shall only be removed by the person who placed and signed the tag. Where more than one person or a group is working on the same isolated energy source, multiple tags shall be used on a suitable multiple lock out device.</p>
Electrical equipment	<p>Any apparatus, appliance, cable, conductor, fitting, insulator, material, meter or wire:</p> <ul style="list-style-type: none"> • used for controlling, generating, supplying, transforming or transmitting electricity at a voltage greater than extra low voltage • operated by electricity at a voltage greater than extra low voltage • that is, or that forms part of, a cathodic protection system
Energy Sources	An energy source is a form of energy e.g. electrical (mains, solar, generator, UPS or inverter), mechanical, fuel, chemical fluids under pressure, hydraulic, radiation, thermal (heat, steam), gravitational, pneumatic, and kinetic energy systems.
Energy-isolating device	<p>A device that physically prevents the transmission or release of energy, including the following:</p> <ul style="list-style-type: none"> • manually operated electrical circuit breaker; • disconnect switch; • manually operated switch by which the conductors of a circuit can be disconnected; • line valve; • block; or • any similar device used to block or isolate energy.
Group Lock out Box	Secure location for all Lock Box keys.
High Voltage	Any voltage exceeding that of Low Voltage.
Hydraulics	Systems involving water including chillers, cooling towers, plumbing, water treatment and water supply.
Isolation	<p>Isolation is the removal of the energy source from an item of plant to prevent the possibility of accidental or unplanned energisation of the whole, or a specific section of that plant, so that the plant does not move or start up.</p> <p>Isolation must also prevent the introduction of contaminants or conditions through equipment such as piping, ducts, vents, drains, conveyors, service pipes and fire protection equipment. Isolation of plant also ensures that entry to a restricted area is controlled while the specific task is being carried out.</p>
Isolation Point	A point at which an Isolation Lock and Tag can be applied to effect positive isolation or an energy source from equipment.
Live Work	Electrical work performed in circumstances in which some or all of the electrical equipment is energised.
Lock Box	Used for multiple isolation points and tracking the number of people working on an equipment/plant/service.
Lock Out-Tag Out (LOTO)	<p>An isolation procedure that ensures the safety of personnel and equipment by eliminating the unintended energisation or activation of equipment or movement of machinery during maintenance or installation work.</p> <p>LOTO utilises specific locks, lock out devices and tags in order to secure the isolation of devices used such as circuit breakers or valves, in the off/isolated position.</p>

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Out-of-Service Tag	<p>Plant that is deemed to be unsafe to operate can be taken out-of-service by the placement of an Out-of-Service Tag.</p> <p>Out-of-Service Tags are placed on plant to indicate it may be unsafe to use or operate, as it is not operating correctly or is not ready to be operated and use of that plant may cause an incident. It is recognisable as a yellow and black tag, with the wording 'Caution Out of Service'.</p> <p>Out-of-Service plant must not be operated until all faults have been rectified and an authorised person has removed the tag.</p>
Plant	Plant includes any machinery, equipment, appliance, container, implement and tool, any component of any of those things, and anything fitted or connected to any of those things.
Permit to Work (PTW)	A Permit to Work is a formal documented authority used to ensure controls have been implemented to provide a safe workplace and safe systems of work.
Stored Energy	Batteries, springs, flywheels, accumulators, capacitors, inductors, suspended weights or loads, large volumes under gravitational force, fluids under pressure (water, effluent, air or hydraulic oil).

9. Non-Compliance

Disciplinary Action

Removal of Personal Danger tags and/or Personal Isolation locks, or the unauthorised removal of Isolation Locks and/or Caution/Out of Service tags and/or failure to follow correct isolation procedures has the potential to cause serious injury or death as well as serious equipment or environmental damage.

Individuals found to have removed another person's Personal Danger Tag or Personal Isolation Lock, or Equipment Isolation Lock and/or Caution/Out of Service tag, without authorisation as defined in this procedure, may be subject to disciplinary action as per the WMH Code of Conduct.

Failure to adhere to this procedure, may also result in penalties being applied under the *Work Health and Safety Act 2011*.

10. Monitoring and Evaluation

What will be monitored	<ul style="list-style-type: none"> Compliance with this procedure by WMH staff, contractors and consultants engaged by WMH. To ensure all authorised persons are aware of their responsibilities when performing LOTO and/or isolation processes.
How (method)	<ul style="list-style-type: none"> Audit of LOTO, isolation processes and documentation. Ensure that all staff/contractors likely to come into contact with equipment containing forms of energy that may require lock out-tag out, are fully trained and inducted into how to use of this procedure, including the use of "Permits to Work" and "SWMS" Ensure all managers and supervisors understand through training and induction the Lock out-Tag out process.
Frequency	Annually.
Responsible officer	An authorised Infrastructure and Assets person who has been deemed competent in Lock out Tag out (LOTO) processes.

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Reporting to

The Infrastructure and Assets Chief Engineer as well as the I&A Facility Maintenance Manager

11. Compliance Requirements and Obligations

Legislation and other compliance requirements	<ul style="list-style-type: none"> • Work Health and Safety Act 2011 • Work Health and Safety Regulation 2011 • Electrical Safety Act 2002 • Electrical Safety Regulation 2013 • Electrical Safety Code of Practice 2013 – Managing electrical risks in the workplace • Building Act 1975 • Work Health and Safety (Codes of Practice)
Australian and NSQHS Standards	<ul style="list-style-type: none"> • AS 4343: 2014 Pressure Equipment – Hazard levels • AS/NZS 4836 Safe working on or near low-voltage electrical installations and equipment • AS/NZS 3000:2007 Australian Wiring Rules • AS4024.1603-2006 (R2014) Safety of machinery Design of controls, interlocks and guards - Prevention of unexpected Start Up • AS/NZS 4024.1201 – 2014 Safety of Machinery general principles for design – • Risk Assessment and risk reduction • National Construction Code 2019 <div data-bbox="352 1167 790 1249" style="background-color: #0056b3; color: white; padding: 5px; display: inline-block;">  1. Clinical Governance </div>
Dept. of Health Implementation Standards	<ul style="list-style-type: none"> • QH-IMP-401-2 - Work health and safety governance, consultation and capability standard 2018 • QH-IMP-401-3 - Work health and safety risk management standard 2018 • QH-IMP-401-4 - Work health and safety monitoring, evaluation and performance review standard 2018 • QH-IMP-401-5 - Workplace rehabilitation standard 2017 • QH-IMP-401-6 – Work health and safety accountabilities standard 2018
West Moreton policies, procedures, workplace instructions, forms:	<ul style="list-style-type: none"> • Incident Report • Plant Outage Schedule • Record Management Guidelines • Request to Perform Work • Safe Work Method Statement • WMHHS2014120 Work Health and Safety Policy • WMHHS2016097 Permit to Work Procedure • WMHHS2016092 Confined Space Procedure • WMHHS2016091 Working at Heights Procedure • Policy, Procedure and Workplace Instruction Implementation Staff Sign-Off Sheet

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12. Development, Revision and Approval History

ID & Version No.	Approval Date	Effective Date	Review Date	Document Custodian/Author	Endorsing Committee	Approval Authority
WMHHS2016090v1	02/11/2016		02/11/2019	Chief Engineer Infrastructure and Assets		CFO
WMHHS2016090v2	17/06/2019		17/06/2022	Manager WSW / Sen. WHS Advisor		Position: ED People and Culture Signature:
Summary of changes						
<input checked="" type="checkbox"/> Scheduled review, substantial changes; additionally, developed following external WHS audit non-conformances. Oct 2019 - Minor mid-cycle review – Section 5.2.1 and Appendix 1 added.						

13. Key Words

Infrastructure, assets, plant, equipment, maintenance, Lock out, Tag out, isolation, LOTO, electrical, live work, gases, hydraulics, mechanical, Fire Systems, Permit to Work, SWMS,

14. Appendices

[Appendix.1 Out of Service / Do Not Operate Tags for faulty, broken or malfunctioning equipment](#)

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Appendix 1

Out of Service / Do Not Operate Tags for faulty, broken or malfunctioning equipment.

In case of a malfunction, breakage or the detection of a fault in any equipment: e.g. electrical, biomedical, hydraulic, gas powered, etc; an Out of Service / Do Not Operate tag must be attached to the equipment.

✓	Always turn off and disconnect the equipment from any energy sources, such as electricity, gas etc. This ensures the equipment can't be operated.
✓	Attach an Out of Service / Do not operate tag to the equipment in a prominent location and in such a way to prevent the operation of the equipment if you believe the equipment is unsafe or unserviceable. For example: <ul style="list-style-type: none"> • For electrical equipment - place the tag within 300mm of the electrical plug. • For gas cylinders – place the tag over or as close as possible to there you would attach the regulator. • For non-electrical biomedical equipment e.g. gas regulator and flowmeter – place the tag over or as close as possible to where you would attach to the gas source.
✓	Include in permanent marker or pen on the tag; your name, your department and the date and time the tag was placed.
✓	Immediately inform your supervisor / manager regarding the faulty equipment.
✓	Place faulty or damaged equipment in a safe place, where it cannot be used.
✓	Log a faulty equipment job with either Infrastructure and Assets (I & A) or Biomedical Technical Services (BTS) (whichever agency is appropriate) for repair and attach the job request to the equipment as well as the out of service tag. <ul style="list-style-type: none"> • I & A jobs are logged through a maintenance request in S4Hanna • BTS jobs are logged through BTS Online
✓	Report the incident in RiskMan if the faulty, broken or malfunctioning equipment caused harm (an injury or incident) or had the potential to cause harm (near miss / hazard).
✓	The Out of Service / Do Not Operate tag will be removed by the technician following the repair of the equipment and before it is placed back into service.

A yellow and black Out of Service / Do Not Operate tag indicates that equipment is unsafe to operate.

These tags (see image at right) are available in all Wards in WMH Hospitals, and also from Infrastructure and Assets (I & A).

