

Isolation Standard

AGL-HSE-STD-007.3.4

The scope of this standard applies to all AGL employees responsible for isolating plant and equipment on AGL controlled sites.

The reference numbers given to minimum controls provide a direct linkage between this standard and the Risk and Control Matrix. The Isolation Methodology AGL-HSE-SDM-007.3.4 provides further explanation of how to achieve the minimum controls.

The underlined minimum controls below have been identified as being critical controls.

RCM Ref	Minimum Controls
Energy Isolation Process	
<u>7.3.4.1</u>	<u>Plant and equipment must be isolated, de-energised, restrained or dissipated to a safe level prior to the commencement of work.</u>
7.3.4.2	Energy isolation procedures must be documented and approved.
<u>7.3.4.3</u>	<u>In order to isolate plant a device must be used which effectively locks, tags and provides a physical control mechanism to secure the isolation (where practicable).</u>
Information, Instruction, Training, and Supervision	
<u>7.3.4.4</u>	<u>Information, instruction, training and supervision must be provided, recorded and retained to all AGL employees and contractors involved in or carrying out energy isolation procedures.</u>
Preparation for Isolation	
<u>7.3.4.5</u>	<p><u>Preparation for isolations must include:</u></p> <ul style="list-style-type: none"> <u>Ensuring the isolation covers the equipment being worked on and the nature of the work being performed;</u> <u>Checking the isolation type, isolation location and any label present on the isolator;</u> <u>Notifying all relevant personnel that an isolation is required and is about to commence;</u> <u>Obtaining permission before isolating;</u> <u>Confirming the plant operating status; and</u> <u>Shut plant down by the normal shut down method.</u>
Points of Isolation	
7.3.4.6	All energy sources must be identified prior to commencement of isolation procedures. This includes electrical, mechanical, hydraulic, pneumatic, chemical, radiation, and thermal energies, as well as various forms of potential (stored) energy, such as in springs, compressed gases, or suspended objects.

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7.3.4.7	Each person required to work on equipment that has been isolated must lock onto the isolation using their personal lock, tag and physical control mechanism.
7.3.4.8	On unexpected change of work, scope or conditions the full isolation must be revalidated.
Group Isolation	
7.3.4.9	Any isolation that involves multiple pieces of equipment, multiple locations and/or multiple processes must have a specific documented isolation procedure.
7.3.4.10	A group isolation procedure must include: <ul style="list-style-type: none"> • Obtaining the equipment and relevant isolation procedure and discussing requirements with the relevant persons; • Carrying out each step as established within the relevant isolation procedure or the relevant document; • Setting the group isolation board/box up so it is ready to attach personal locks; and • Persons working under the isolation attach their personal locks to the group isolation board/box.
Locking Systems	
7.3.4.11	The following must be applied to locking systems: <ul style="list-style-type: none"> • Only Business Unit approved safety lock padlocks may be used as isolation locks; • Never de-face or paint isolation locks; • Never attempt to bypass or operate an isolator with an isolation lock attached; • Where isolation keys or locks are lost or found it must be reported to your Leader; • Isolators must only be locked in the safe position; • Never attach a lock to another lock; and • Isolation locks must be only be used for isolation purposes.
7.3.4.12	Personal locks must: <ul style="list-style-type: none"> • Be used only for personal protection; • Have no duplicate keys; • Be an independent colour not used by other lock types; and • Be identified by label or tag with the individuals name and an AGL identifier number.
7.3.4.13	Persons required to use personal locks must: <ul style="list-style-type: none"> • Never attach or remove another person's lock; • Never depend on someone else's personal lock for their personal protection; • Never lend their personal lock to anyone; • Ensure on completion of work or when leaving the job site, their personal lock is removed from the isolation; and • Ensure where a keyed alike set is used for a personal lock one key only must be retained, all other keys must be destroyed.
7.3.4.14	Equipment locks must: <ul style="list-style-type: none"> • Only be attached or removed by an authorised person carrying out the isolation; • Be an independent colour not used by other lock types;

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	<ul style="list-style-type: none"> • Never be used for an individual persons protection; • Be used to secure isolators in the safe position; and • Ensure where a keyed alike set of locks is used for a group isolation, one key only must be retained for operational use and all spare keys must be locked in a secure location. Authorisation for enacting this process must be received from the Head of Function or delegate.
7.3.4.15	<p>Group locks must:</p> <ul style="list-style-type: none"> • Only be attached and removed from group isolations by authorised personnel; • Be an independent colour not used by other lock types; • Never be used for an individual person's protection; • Only be used for group isolations; • Not be keyed alike with other lock sets; and • Never be used to lock a group isolation in the de-activated state.
Tagging Systems	
7.3.4.16	<p>Personal Danger Tags must:</p> <ul style="list-style-type: none"> • Be durable and securely fixed to the isolation point; • Be dated and signed by the individual involved in carrying out the work; • Never be attached to another person's Personal Danger Tag; • Never depend on someone else's Personal Danger Tag for personal protection; and • Be removed from the isolation on completion of work or when leaving the job site.
7.3.4.17	<p>Out of service tags must:</p> <ul style="list-style-type: none"> • Be durable and securely attached; • Clearly state the nature of the defect or reason why the equipment is unsafe and therefore out of service; • Be attached in a prominent position on each isolation point or device; and • Only be removed by a competent person after fixing or rectifying the defect and making the equipment safe, or replacing it with a Personal Danger Tag in preparation to work on the equipment.
Plant and Equipment Isolation	
7.3.4.18	<p>Mechanical energy sources must be isolated or disconnected prior to performing any work activities.</p>
Restoring to Service	
7.3.4.19	<p>Prior to re-energisation all locks, tags and physical control mechanisms must be removed and plant or process restored to service.</p>
Removal of Absent Persons Isolation	
7.3.4.20	<p>All persons working on isolation equipment are required to remove their own personal locks, tags or physical control mechanisms on isolations prior to leaving the site.</p>

Version	Reviewed by	Approved by	Date approved	Next Review
3.0	HSE Systems Manager	Senior Manager, Safety Operations	09/05/2018	09/07/2020