


10. Appendix 1 WPCG Activity Matrix

This activity matrix should be used as guidance to support interpretation of the requirements of this procedure for specific tasks. It is not exhaustive of all possible tasks. If the requirements are not clear, WPCG should be consulted.

 ENERGY ISOLATION (refer to WPCG Member Company and local regulations for additional requirements relating to isolation of services)													
TASK	Contractor JSA / SWMS	Work Clearance	Minor Hot Work Minimum Controls Checklist	Minor Work @ Height Minimum Controls Checklist	Minor Ground Disturbance Minimum Controls Checklist	Work Permit	Senior Work Permit Officer	Hot Work Certificate	Work @ Height Certificate	Ground Disturbance Certificate	CSE Certificate	Isolation Plan	OTHER
Isolation of energy (e.g. mechanical, process, and electrical) carried out by an approved contractor. This includes blinding and de-blinding, electrical isolation, removal of rotating equipment.	✓	✓										✓	
Any cold work involving breaking containment of a flammable or combustible liquid storage system in situ where it has been confirmed the system is no longer under pressure. This includes breaking flanges on tanks and piping.	✓	✓										✓	
Breaking Containment where it cannot be confirmed that the equipment has been depressurised	✓	✓				✓						✓	
Opening storage or process plant/equipment where there is a risk of uncontrolled discharge of hazardous product or the work is not covered by a normal operating procedure	✓	✓				✓						✓	
Work on LPG storage tanks (above or below ground) which involves venting or flaring of gas	✓	✓				✓	✓					✓	
Lower risk work on LPG systems, such as maintenance, removal or replacement of LPG system parts which have isolation valves that eliminate the need for breaking containment, depressurising or venting of gas.	✓	✓										✓	
Isolation and removal of safety critical equipment if associated with equipment that will remain in service. Includes any work that requires the by-passing or over-riding of critical protective devices. Examples may include breaching the integrity of a tank bund wall, isolating a section of a fire water piping, removal of pressure/thermal relief valves, overriding alarms, isolating emergency shutdown components that render it inoperable, removing or covering tank vents, etc.	✓	✓				✓	✓					✓	Follow member company procedures for MOC & overriding safety critical controls, as applicable.
Work on high voltage (>1000V) electrical system covered by a High Voltage Electrical Permit under the supervision of a Specialist Contractor.	✓	✓				✓						✓	HV Forms (from specialist contractor)
Live Electrical Work, other than fault finding	✓	✓				✓							Work to be conducted in accordance with specific member company requirements for live electrical work
Other electrical work that is not hot work in a hazardous area, for example: <ul style="list-style-type: none"> - Work on or near energised electrical conductors less than 50 V AC or 120 V DC (Extra low voltage electrical system) - Work on isolated electrical equipment within safe approach distance of other energised components less than (<1000 V AC or <1500 V DC i.e. low voltage electrical system) - Fault finding 	✓	✓											Work to be conducted in accordance with specific member company requirements for fault finding



GROUND DISTURBANCE

(refer to WPCG Member Company and local regulations for additional requirements relating to Ground Disturbance)

TASK	Contractor JSA / SWMS	Work Clearance	Minor Hot Work Minimum Controls Checklist	Minor Work @ Height Minimum Controls Checklist	Minor Ground Disturbance Work Minimum Controls Checklist	Work Permit	Senior Work Permit Officer	Hot Work Certificate	Work @ Height Certificate	Ground Disturbance Certificate	CSE Certificate	Isolation Plan	OTHER
Excavations/Trenching to a depth <1.2m (other than drilling, boring or coring)	✓	✓			✓							*	
Excavations/Trenching ≥1.2m deep (other than drilling, boring or coring)	✓	✓				✓				✓		*	
All other ground disturbance conducted in full compliance with the requirements of the WPCG Minor Ground Disturbance Minimum Control Checklist. Examples include NDD, hand digging, drilling, coring, concrete cutting outside hazardous areas	✓	✓			✓							*	
All other ground disturbance that cannot or will not be conducted in compliance with the requirements of the WPCG Minor Ground Disturbance Minimum Control Checklist.	✓	✓				✓				✓		*	

***Note:** In order to safely perform the work and confirm isolations are completed, any services identified on the Ground Disturbance Certificate as requiring isolation prior to work commencing **may also require a separate isolation plan**, depending on the complexity of isolations required, in accordance with WPCG Member company requirements.

Refer also to additional requirements for hot work, where applicable, as some forms of ground disturbance inside hazardous areas will require the WPCG Minimum Control Checklist for Minor Hot Work or a WPCG Work Permit and Hot Work Certificate depending on the work, equipment and controls in place.



CONFINED SPACE ENTRY

(refer to WPCG Member Company and local regulations for additional requirements relating to Confined Space Entry)

TASK	Contractor JSA / SWMS	Work Clearance	Minor Hot Work Minimum Controls Checklist	Minor Work @ Height Minimum Controls Checklist	Minor Ground Disturbance Work Minimum Controls Checklist	Work Permit	Senior Permit Officer	Hot Work Certificate	Work @ Height Certificate	Ground Disturbance Certificate	CSE Certificate	Isolation Plan	OTHER
Entry into a confined space (as defined by State regulations) except for storage tanks, LPG vessels or process vessels (above or below ground). Examples include storm water management systems, oil-water separators with open tops or lids/covers, tank or vessel turrets/chambers, or grease traps. Also includes entry with associated cold work.	✓	✓				✓					✓	*	
Entry into storage tanks, LPG vessels or process vessels including enclosed oil-water separators eg SPEL units (above or below ground). Also includes entry with associated cold work.	✓	✓				✓	✓				✓	*	
Entry into a confined space with associated hot work (as defined by State regulations).	✓	✓				✓		✓			✓	*	A Senior Permit Officer is required if the confined space is a storage tank, LPG vessel or process vessel (above or below ground).
Entry into a confined space with work at height	✓	✓				✓			✓		✓	*	A Senior Permit Officer is required if the confined space is a storage tank, LPG vessel or process vessel (above or below ground).
Entry into an excavation which is deemed a confined space	✓	✓				✓					✓	*	A Ground Disturbance Certificate may be required for the excavation.
Entry into underground aviation valve chambers	✓	✓				✓	✓				✓	*	A Work At Heights Certificate may be required.
Inert Entry	Not allowed without specific WPCG Member Company Authorisation												

***Note:** In order to safely perform the work and confirm isolations are completed, any services identified on the Confined Space Certificate as requiring isolation prior to work commencing **may also require a separate isolation plan**, depending on the complexity of isolations required, in accordance with WPCG Member company requirements.



LIFTING OPERATIONS

(refer to WPCG Member Company and local regulations for additional requirements relating to Lifting Operations)

TASK	Contractor JSA / SWMS	Work Clearance	Minor Hot Work Minimum Controls Checklist	Minor Work @ Height Minimum Controls Checklist	Minor Ground Disturbance Work Minimum Controls Checklist	Work Permit	Senior Permit Officer	Hot Work Certificate	Work @ Height Certificate	Ground Disturbance Certificate	CSE Certificate	Isolation Plan	OTHER
Lifting over, or in close proximity to above ground equipment / plant containing flammable or combustible fuels or over occupied buildings, and/or the lift carries potential for severe business impact based on the outcome of the lift due to the potential consequences of a failed lift (e.g. process safety event) or the value of the load.	✓	✓				✓	✓						Lift plan
Critical Lifts, including: <ul style="list-style-type: none"> • Approach/removal route is obstructed • The suspended weight of any lifting accessory or a combination of accessories is ≥ 80% of its working load limit or Safe Working Load (e.g. lifting a 4T load using a 5T shackle) • The load is 80% of the Net Capacity of the lifting appliance • Involves lifting personnel (i.e. in a “man cage” / work box) • The suspension point is not directly above the load centre of gravity (i.e. load is eccentric / unevenly distributed) or a high centre of gravity where the load has the potential to become unstable • The lifts require slings to be used at an angle of < 60° from horizontal. • Restricted head room or limited boom clearance (< 1m) • The existence of proximity hazards (i.e. public road, overhead power cables, or within 8m to or over HV cables.). Refer local regulations and Safe Work Australia guides for working in the vicinity of overhead electric lines. • The lift requires transportation with suspended load • The load is to be lifted, upended or rotated by two or more powered lifting devices or involves multi crane lifts • The load contains hazardous material • Involves jacking tank walls/roofs or any load that is not self-supporting • Lifting canopies, shop buildings and the removal or installation of tanks, also when load is a non-rigid object (e.g. above ground tank shell, or underground tank) • The lift involves an appliance or load over water • The lift requires a heavy lift crane to be built on site • The load will be lifted, cross hauled or restrained using two or more non-powered lifting appliance without 100% redundancy • The lift is conducted within a confined space. • All other lifting activities which carry a high residual risk or incorporates a task which would be considered high risk 	✓	✓				✓							Lift plan, and refer also to additional requirements for hot work and/or confined space entry, where applicable
Simple lifting operations , to which none of the above apply. For example: <ul style="list-style-type: none"> • The load is pre slung or very easily slung, with no external factors that complicate the operation • With use of forklift, non-slewing crane (e.g. Franna), vehicle loading crane (e.g. HIAB) • Personnel involved are competent and well-practiced in the lifting operation • The load has certified anchor points Includes lifting of monolith signs and small/simple lifts for general maintenance works, unless aspects of the lift meet the classification criteria above as a critical lift.	✓	✓											Refer also to additional requirements for hot work, where applicable.



WORKING AT HEIGHT

(refer to WPCG Member Company and local regulations for additional requirements relating to Working at Height)

TASK	Contractor JSA / SWMS	Work Clearance	Minor Hot Work Minimum Controls Checklist	Minor Work @ Height Minimum Controls Checklist	Minor Ground Disturbance Work Minimum Controls Checklist	Work Permit	Senior Permit Officer	Hot Work Certificate	Work @ Height Certificate	Ground Disturbance Certificate	CSE Certificate	Isolation Plan	OTHER
Work in an EWP 11m or more above ground level.	✓	✓				✓			✓				Refer also to additional requirements for hot work, where applicable
Erection, modification and dismantling of scaffolding >4m or any suspended scaffold.	✓	✓				✓			✓				
Major work at height (≥ 2m in BP and Caltex, or ≥ 1.8m in VIVA) within 2m of an exposed edge	✓	✓				✓			✓				
Working from a workbox (man basket) attached to a lifting device such as a crane or forklift.	✓	✓				✓			✓				Refer also to additional requirements for hot work and lifting operations, where applicable
All other work at height conducted in full compliance with the requirements of the WPCG Minor Work at Height Minimum Control Checklist. Examples include: <ul style="list-style-type: none"> • Use of EWPs (cherry pickers, boom lifts, scissor lifts) <11m above the ground, • Basic scaffolding from ground level: erecting, dismantling or modifying up to 4m in height • Erecting, dismantling or modifying of portable staging (mobile scaffolding) up to 4m in height • Working from within a scaffold or portable staging (mobile scaffold) • Roof access for minor maintenance within 2m of an unprotected edge • Use of portable ladders 	✓	✓		✓									Refer also to additional requirements for hot work, where applicable
All other work at height that cannot or will not be conducted in compliance with the requirements of the WPCG Minor Working at Height Minimum Control Checklist.	✓	✓				✓			✓				Refer also to additional requirements for hot work, where applicable



HOT WORK

(refer to WPCG Member Company and local regulations for additional requirements relating to Hot Work)

TASK	Contractor JSA / SWMS	Work Clearance	Minor Hot Work Minimum Controls Checklist	Minor Work @ Height Minimum Controls Checklist	Minor Ground Disturbance Work Minimum Controls Checklist	Work Permit	Senior Permit Officer	Hot Work Certificate	Work @ Height Certificate	Ground Disturbance Certificate	CSE Certificate	Isolation Plan	OTHER
Use of equipment certified for use in the hazardous area that the work is to be undertaken	✓	✓											
Hot work outside hazardous areas and without the potential to impact on hazardous areas.	✓	✓											
Use of air driven tools or equipment, with air compressor located outside the hazardous area.	✓	✓											
Hot work in a hazardous area conducted in full compliance with the WPCG Minimum Controls Checklist. Examples include: • Use of diesel powered equipment or tools • Use of mains or battery powered equipment or tools that are not certified for hazardous areas • Use of diesel powered or electrically driven mobile plant	✓	✓	✓										Refer also to additional requirements for ground disturbance or work at height, where applicable
Opening certified enclosures of hazardous area rated equipment inside a hazardous area if the equipment will not be electrically isolated.	✓	✓				✓		✓					
Hot work that involves the use of matches or lighters, or creation of open flames and uncontrolled sparks in hazardous areas. This type of work includes use of blow torches, oxy acetylene, grinding, soldering, naked flames, welding or any similar activity that creates an uncontrolled ignition source.	✓	✓				✓		✓					
Petrol or LPG driven/powered equipment including mobile plant, generators, chainsaws, etc. in hazardous areas.	✓	✓				✓		✓					
High pressure water blasting on live equipment containing fuel (including LPG).	✓	✓				✓		✓					
All other water blasting (e.g. pressure cleaning concrete forecourt with water, or hydro-blasting of isolated and drained equipment)	✓	✓											Refer also to additional requirements for hot work, where applicable (e.g. for the use and location of plant or equipment)
Abrasive blasting (e.g. garnet or grit blasting) on structural steel, outside hazardous area.	✓	✓				✓							
Abrasive blasting (e.g. garnet or grit blasting) on live or non-isolated equipment in fuel service	✓	✓				✓	✓	✓					
All other abrasive blasting in hazardous areas	✓	✓				✓		✓					
Inter-tank transfers of fuel and bulk petroleum product transfers to or from road vehicles that are not covered by procedures including transfer of contaminated or cross over (shandy) products.	✓	✓				✓		✓					
Environmental Remediation Systems - Restarts after non-routine shut downs & commissioning of new systems. Note: Each project's safety plan will indicate what constitutes a routine shut down cause. All other shut down causes are deemed non-routine and will require a work permit prior to restarting.	✓	✓				✓		✓					
Environmental Remediation Systems - Restarts, operation and shut downs under routine operating conditions and in accordance with WPCG Minimum Controls Checklist. Note: Each project's safety plan will indicate what constitutes a routine shut down cause. All other shut down causes are deemed non-routine and will require a permit prior to restarting.	✓	✓	✓										
Use of vacuum trucks to remove materials containing combustible or flammable materials irrespective of hazardous area rating (including fuel spills, shandy contamination and fuel/water mixes)	✓	✓				✓		✓					Refer also WPCG Member company requirements
Hot tapping – includes hydrocarbon/chemical or toxic service and non-hazardous service	✓	✓				✓	✓	✓					Refer also WPCG Member company requirements
Any other hot work inside a hazardous area that cannot or will not be undertaken in compliance with WPCG Minor Hot Work Minimum Controls Checklist.	✓	✓				✓		✓					



OTHER WORK

(refer to WPCG Member Company and local regulations for additional requirements)

TASK	Contractor JSA / SWMS	Work Clearance	Minor Hot Work Minimum Controls Checklist	Minor Work @ Height Minimum Controls Checklist	Minor Ground Disturbance Work Minimum Controls Checklist	Work Permit	Senior Permit Officer	Hot Work Certificate	Work @ Height Certificate	Ground Disturbance Certificate	CSE Certificate	Isolation Plan	OTHER
Meter proving and calibration in retail sites	✓	✓											
Meter proving and calibration at fuel Depots gantries	✓	✓				✓							
Removal of gaskets manufactured from asbestos containing material, performed in accordance with WPCG member company procedures	✓	✓											
The physical disturbance, removal or demolition, by certified Asbestos Contractors, of structures or materials that may contain Asbestos. This includes: <ul style="list-style-type: none"> Any work involving bonded asbestos (e.g. asbestos cement sheeting), removal and disposal in compliance with approved contractor procedures, or by a certified asbestos contractor. Any work involving friable Asbestos removal and disposal by an approved and certified asbestos contractor. 	✓	✓				✓							
General maintenance and construction cold work or hot work outside hazardous areas and not listed in another category that is not conducted in accordance with a WPCG member company procedure for the site. Examples include: <ul style="list-style-type: none"> Regular servicing of fire extinguishers, testing of emergency shutdown switches and fire pumps conducted Minor plumbing repairs without interruption of water supply to fire systems Installing/replacing signage at ground level with hand tools only. Visual inspections performed Gardening using hand tools Painting by hand brush Simple demolition of small/simple structures such as sheds with hand tools 	✓	✓											
Complex demolition such as: <ul style="list-style-type: none"> Demolition of large/complex structures such as canopies, houses, workshops and buildings. The use of controlled collapse techniques, shearing and breaking. Removal of load bearing walls or structures. 	✓	✓				✓							
Use of ionizing radiation (e.g. radio graphing welds)	✓	✓				✓							
Work on structures containing leaded paint where the work does disturb the paint	✓	✓				✓							
Work on structures containing leaded paint where the work does NOT disturb the paint	✓	✓											
Pressure / leak / hydro testing of hydrocarbon service equipment (EIT) in line with manufacturer requirements and applicable company standards/procedures	✓	✓											Refer also to additional requirements for hot work or work at height, where applicable.
Pressure / leak / hydro testing of pipelines and pressure vessels above the Maximum Allowable Operating Pressure (MAOP)	✓	✓				✓							Refer also to additional requirements for hot work or work at height, where applicable.
Work in the Excluded areas as defined in the WPCG Permit to Work Procedure. This includes work under the management and control of a Principal Contractor if the requirements of Section 5.1 are met.	✓												

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