

PRO-4.5-0001-1-01 Permit to Work

Document Owner:	Janelle Shackley	HSE Manager – Midstream, Network Solutions & OMS
Approved By:	Janelle Shackley	HSE Manager – Midstream, Network Solutions & OMS
Prepared By:	Adrian Connolly	HSE Specialist - Control of Work and Contractor Management
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1. Purpose

Whenever bp conducts construction, maintenance, demolition, remediation and other similar work that are typical of our industry, there is the potential for harm to people and the environment and for damage to equipment. Therefore, an effective permit to work process provides a system of work that allows tasks to be completed safely and without unplanned loss of containment with the potential to cause environmental damage or to damage a plant or equipment.

A Permit to Work system is a key element of the bp Group Defined Practice for Control of Work and the bp Golden Rules of Safety. It is a formal documented system used to control certain types of non-routine work which are defined as being hazardous. This procedure sets out a required approach to safely control this work and to comply with the requirements of GDP 4.5-0001 Control of Work and OMS Group Essential 4.5.1.

2. Scope

This procedure applies to bp NZ, and to Air bp NZ.

This procedure **does NOT** apply to bp in Australia.

The requirement specified in this procedure applies equally to bp employees, contractors and visitors engaged in bp NZ and Air bp NZ.

Specific sites, areas and activities may have more detailed OMS requirements and where these exist the requirements will be specified in local procedures, safe work instructions, manuals, handbooks or specific standards.

3. Terms, Definitions and Abbreviations

Accredited Contractors	Are those approved by the bp Accredited Contractor System, ISN.	
Certificates	Certificates are documents that define the core preparations required for	
	work to proceed and do not, by themselves, authorise work to proceed.	
	Certificates can be used to manage focused tasks efficiently which are not	
	sufficiently managed by a typical permit or work clearance (e.g.	
	precautions for ground disturbance).	
Cold work	Work that does not introduce a source of ignition.	

Table 1 : Terms, Definitions and Abbreviations

Competent Person	An individual in a Control of Work role who can demonstrate that they		
	have professional or technical training, knowledge, actual experience,		
	qualifications and ability to enable them to:		
	 a) Perform duties at the level of responsibility allocated to them; 		
	b) Understand any potential hazards related to work (or		
	equipment) under consideration;		
	c) Recognise any technical defects or omissions in a task (or		
	equipment) and the adverse implications for health and		
	safety caused by the hazard(s) and / or omission(s); and		
	d) Be able to specify corrective action(s) to mitigate the		
	hazards.		
Confined Space	WorkSafe New Zealand accepts AS 2865 Confined spaces as the		
	current state of knowledge on confined space entry work. This standard		
	has the definition:		
	A confined space:		
	 Is an enclosed or partially enclosed space and 		
	 is not intended or designed primarily for human occupancy and 		
	 may present a risk from one or more of the following at any 		
	time:		
	 unsafe concentration of harmful airborne contaminants 		
	 unsafe concentration of flammable substances 		
	 unsafe levels of oxygen 		
	 substances that can cause engulfment. 		
CoW	Control of Work		
CSE	Confined Space Entry		
Energy systems	Systems which, by their nature, contain energy (e.g., hydraulic,		
	mechanical, electrical, potential, pneumatic).		
Hazardous Area	Area in which an explosive atmosphere is present or may be expected to		
	be present in quantities such as to require special precautions for		
	construction, instantion and use of equipment. Hazardous Areas are		
	For air bp Hazardous Areas in this procedure are defined as the Red		
	Zone If no Green / Red Zones have been approved for the site then the		
	Hazardous Area is defined as the entire Restricted Area.		
Hot Work	Work that involves either the use or the creation of a flame, spark or		
	energy discharge that could act as the ignition source for a fire or		
	explosion.		
	Typical examples of hot work include:		
	a) Welding, grinding and oxy cutting;		
	 a) Use of battery operated equipment and power tools; 		
	b) Abrasive blasting (i.e. sandblasting);		
	c) Power cutting / drilling;		
	d) Crane operations;		
	e) Use of excavators;		
	f) Use of generators and welding machines;		
	g) Use of mobile plant such as elevated work platforms		
Isolation	The process of isolating any energy system as per requirements of		
	PRO4.5-0001-1-02 Energy Isolation.		
Permit Issuer	The person who is trained and assessed as competent and formally		
	authorised to issue bp Work Permits.		

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JSA	Job Safety Analysis. A risk assessment of the works to be undertaken.		
	The bp JSA is the formal risk assessment of lower risk activities and		
	includes assessment of the works, the job site, the process, the		
	environment and any SIMOPS hazards.		
Permit Receiver	The person who receives the permit from the Permit Issuer.		
Permit Endorser	The person nominated by the Permit Issuer to endorse the permit at the		
	commencement of each work shift, as a minimum.		
Restricted Area	Is that area in which bp exercise control over movements and operations		
	such as the area within the boundary fence of Depots or service stations,		
	owned or leased by bp.		
Routine Work	Is work which:		
	does not vary in its execution and reoccurs within a prescribed		
	and repeated cycle; and		
	• conducted in areas in which the work is normally conducted; and		
	• there is an operating procedure; and		
	 conducted by personnel trained to perform the work in 		
	accordance with the procedure; and		
	 is conducted by personnel resident at the site 		
Safe Work Method Statements (SWMS)	The SWMS identifies the tasks to be undertaken in the work, the		
	associated hazards and identifies suitable control measures and the		
	responsible person(s) for their implementation. The SWMS is the formal		
	risk assessment of the works to be permitted.		
Simultaneous Operations (SIMOPS)	Separate tasks or works that take place at the same time with the		
	potential to impact each other.		
Site Representative	The Site Manager or delegate for staffed facilities. For unstaffed facilities		
	it maybe a Work Clearance Issuer or Permit Issuer, as applicable to the		
	type of work, who has been authorised by the facility operator for the		
	work.		
ТВА	Task Risk Assessment		
	The formal risk assessment of higher risk activities and includes		
	assessment of the works the job site the process the environment and		
	any SIMOPS hazards.		
ТВАТ	Task Risk Assessment Table		
	Details minimum risk assessment requirements for certain tasks		

4. Roles and Responsibilities

The roles and responsibilities associated with this procedure are listed in the following table.

	-		
air bp Operations Manager ANZ	The air bp AsPac PU Operations Manager has the following		
	responsibilities with respect to air bp ANZ facilities and air bp ANZ		
	Issuing Authorities in this procedure:		
	a) Be accountable for the CoW process within air bp ANZ.		
	a) Ensure conformance with this procedure and compliance with regulations and documentation in CoW		
	b) Nominate air bp ANZ CoW Authority for approval by the		
	Global CoW Authority.		
	c) Ensure competency of all Authorities related to CoW is		
	assessed		
	d) Ensure CoW training is provided in air bp ANZ.		

Table 2 : Roles and Responsibilities

	e) Ensure CoW records of individuals are maintained.
	f) Ensure air bp ANZ CoW Authorities assess and certify the
	competence of permit to work Issuing Authorities.
	g) Certify all Issuing Authorities.
	h) Ensure accredited third party/contractors are used.
	i) Ensure CoW Process within air bp ANZ is reviewed
	annually.
	i) Ensure CoW Lessons Learned are passed to the
	CoW/Permit to Work Authorities and Site Managers
air bo ANZ CoW Authority	The Air by ANZ CoW Authority has the following responsibilities:
	a) Beceive delegated authorities from the Global air bp CoW
	Authority
	b) Ensure the necessary training for all staff in air bp ANZ
	including refresher training is carried out
	a) Ensure that national regulations are included in the
	training and applied (this can be delegated to the air by
	Country Co.W. Authority)
	d) Accurate accompation of all Country CoW Authoritics
	d) Assure the competency of all Country Cow Authonties,
	where applicable.
	e) Certify all issuing Authorities after ensuring that they
	nave undergone the correct training and have the right
	levels of competency.
	f) Ensure that a list of all Issuing Authorities is
	maintained, including authority levels.
	g) Maintain an air bp ANZ specific register for permit
	to work authorities with regular tracking and renewal.
	h) Ensure permit to work conformance and
	implementation is assessed annually.
Air bp Country CoW Authority NZ	The air bp Country CoW Authority NZ has the following responsibilities:
	a) Carry out the duties delegated by the air bp ANZ CoW
	Authority.
	b) Manage the necessary training for all staff in the country,
	including refresher training.
	c) Ensure that national regulations are included in the
	training and applied.
	d) Assure and certify all Issuing Authorities in country
	(where authorised), after ensuring that they have
	undergone training and have the right levels of
	competency.
	e) Carry out the duties delegated by the Airbp ANZ PU CoW
	Authority, including:
	I. Ensure that a list of all Issuing Authorities is maintained,
	including authority levels.
	II. Maintain a NZ specific register for permit to work
	authorities with regular tracking and renewal.
	III. Ensure permit to work conformance and
	implementation in NZ is assessed annually.
bp NZ HSE Specialist - Control of Work	The New Zealand Control of Work Assurance Officer is responsible for:
and Contractor Management	a) Authorisation of Work Permit Issuing Authorities for bp
	NZ MS&L facilities in accordance with this procedure.
	b) Intervene and escalate as appropriate when standards
	and / or procedural breaches are discovered in bp NZ
	MS&L facilities.

	-
	 c) Conducting review and routine analysis of permit to work verification program results in to achieve compliance and
	drive continuous improvement within bp NZ.
	d) Supporting nominated trainee Issuing Authorities in the
	training process through the following means:
	1. Co-ordination of the Permit Issuer training program in
	NZ; and
	Review of permits for quality and conformance to this procedure.
	e) Coaching mentoring guiding and verifying that lesuing
	Authorities are fully conversant and familiar with the
	requirements specified in this procedure
	f) Providing technical expertise to Issuing Authorities in
	regard to the successful application of Task Bisk
	Assessments (TRA):
Permit Issuer	The Permit Issuer is responsible for:
	a) Ensuring that they have the correct level of authority for
	authorising the work controlled by the permit (and their
	authority is current).
	b) Ensuring relevant risk assessments, JSAs and/or SWMS
	have been prepared and are adequate for the Work
	Permitted.
	c) Liaising with site operations to control Simultaneous
	Operations (SIMOPS), including impact of the work on
	the site operations or the impact of site operations on the
	work.
	d) Ensure that all Work Permits that are issued are prepared
	and executed in full compliance with this procedure;
	e) Detail the work to be undertaken and the tools or
	equipment to be used - in writing as well as verbally;
	f) Detail actions taken or to be taken to make safe and
	indicate hazards of the work;
	g) Specify monitoring requirements including frequency of
	Inspections and permit control measures (such as gas
	testing, veritying integrity of isolations, etc.);
	n) Ensure that all workforce members read and understand
	the work remit and acknowledge by signing the Work
	i) Maintain regular communication with the employees
	nerforming the work or delegate this to a permit
	endorser:
	i) Confirm that the work is monitored if the permit re-
	endorsing is delegated; and
	k) Ensure that the area and relevant equipment is made safe
	before handover to the Permit Receiver or delegate this
	to a permit endorser.
	I) For confined space entry, determining that the
	emergency response and rescue plan proposed by the
	Permit Receiver is adequate for the safe and timely
	extraction of personnel for credible scenarios identified.
	The Permit Issuer shall complete all documentation relevant to the Work
	Permit Set. The exception to this is the following documents which may
	also be completed by the Permit Receiver;

	a) LOTO plan: and		
	b) Confined Space Entry Record.		
	The Permit Issuer shall not be the same person as the Permit Receiver.		
Permit Endorser	The endorser of a Permit is responsible for the following on the day they		
	endorse a permit:		
	a) To endorse a Work Permit you must be nominated by the		
	Permit Issuer on the Work Permit to perform this function		
	and be formally briefed by the Permit Issuer on the re-		
	endorsing and monitoring requirements of the specific		
	work Permit.		
	D) Liaising with site operations to control Sinutraneous Operations (SIMOPS), including impact of the work on		
	the site operations or the impact of site operations on the		
	work.		
	c) Confirming only the work described on the permit is to		
	be performed;		
	d) The site conditions have not changed;		
	e) The controls detailed on the permit have not been		
	compromised;		
	f) Monitoring the work in accordance with the monitoring		
	requirements detailed on the permit;		
	g) Ensuring that all workforce members read and		
	understand the Work Permit and acknowledge by signing		
	Form: and		
	h) Ensuring that the area and relevant equipment is made		
	safe before handover to the Permit Receiver.		
	The Permit Endorser shall not be the same person as the Permit Receiver.		
Permit Receiver	The Permit Receiver (PA) shall be competent in understanding the job		
	being performed and its intrinsic hazards and how to best control these.		
	The Permit Receiver is responsible for the provision of a JSA / SWMS and		
	is legally required to do so for all High Risk work in jurisdictions in		
	Australia operating under the model WHS regulations. The Permit		
	Receiver shall be physically present on the site during the works. The		
	Permit Receiver shall NOT be the same person as the Permit Issuer for a		
	The Permit Receiver is responsible for the following:		
	a) Ensure that the tools and equipment to be used are fit for		
	purpose and inspected and listed on the permit		
	b) Be aware of hazards that could exist and have the		
	necessary precautions put in place;		
	c) Receive the Work Permit document from the Permit		
	Issuer and indicate to the Permit Issuer if any of the		
	requirements are ambiguous or unclear;		
	d) Sign the Work Permit before work commences thereby		
	accepting any conditions or controls stipulated in the		
	work Permit and documents referenced on the Work		
	 Fermili, a) Conducting a Pre-start meeting with the work crown 		
	f) Ensure that all workforce members read and understand		
	the risk assessment and Work Permit and acknowledge		
	this by signing the Work Permit or Permit to Work		
	Acknowledgement Form;		

	g)	Ensure that skilled, qualified, trained and competent
		personnel perform the work, adhering to the conditions
		of the Work Permit;
	h)	Ensure that the job is performed in a safe manner within
		the conditions prescribed for the work on the permit or
		work clearance and be responsible for the work and for
		the people who work on the job; and
	i)	Make equipment and area safe prior to handover or
		return to service.
	j)	In Australia, the Permit Receiver m be a trained WPCG
		Work Clearance Issuer. If they are not a trained Work
		Clearance Issuer, then the Permit Receiver (Permit
		Receiver) must ensure that no work is completed unless
		the Permit Issuer is on site during the work.
Site Representative	The Site Rep	presentative shall be the Site Manager or delegate, or if the
	site is unma	nned it may be the Permit Issuer.
	The Site Rep	presentative is responsible for the overall safety of the site.
	The Site Rep	presentative shall be aware of all other work or planned site
	operations ti	hat may interact with the work (i.e. SIMOPs). Therefore, no
	work shall be	e undertaken before the Site Representative countersigns the
	work clearar	nce or Work Permit.
	The Site Rep	presentative may stop or deter work at any time.
lask Risk Assessment Facilitator	The facilitato	or of a bp Task Risk Assessment (TRA), required as per the
	IRA Table (I	RAT), is responsible for ensuring that:
	a)	The worksite is inspected as a part of conducting the task
	I=)	At least and marker an encounterting of the team of
	(d	At least one member of representative of the team of
		ceans performing the task participates in the task fisk
		The TPA team defines and records rick control and
	C)	mitigation actions as part of the task risk assessment
		process
	d)	The TBA considers the hierarchy of controls in the
	u,	following order:
		1 Elimination
		 Substitution;
		3. Engineering Controls;
		4. Isolation;
		5. Administrative Controls; and
		6. ersonal Protection Equipment (PPE).
	e)	TRA findings are:
		 Communicated in writing by recording on the approved bp TRA document; and
		2. Signed off by the TRA team members, provided that
		the TRA team is also satisfied that the task is safe to do.

5. Methodology

5.1. Training

Training is provided to ensure that the roles and responsibilities within the Permit to Work process are fully understood and a standard of competency is maintained.

5.1.1. Nomination to Attend Permit to Work Training

All persons seeking certification as an authorised Permit Issuer shall submit a nomination from their line manager or bp sponsor to the bp NZ CoW Authority or bp NZ HSE Specialist – Control of Work and Contractor Management. The decision to allow the applicant to attend the course is at the discretion of the bp NZ CoW Authority or bp NZ HSE Specialist – Control of Work and Contractor Management in consultation with the applicant's Line Manager or bp sponsor.

5.1.2. Permit Issuer Training – Theory, Practical and Buddy Program

The theoretical permit to work training for Permit Issuers shall be conducted by an approved training provider and is supplemented by a bp gap training for Permit Issuers working on bp NZ Retail sites.

On completion of the initial training, prior to accreditation as a Permit Issuer, the trainee shall undergo 'on the job' training. This consists of issuing permits under the guidance and coaching of an authorised Permit Issuer – referred as 'buddy' permits. The 'buddy' Permit Issuer is to countersign all documents as it is they who have the approved Permit Issuer.

Upon satisfaction of the business of the level of competence of the trainee in the field issuing permits under the buddy system, a review shall be completed of a minimum of two Work Permits by bp. Further Work Permits may be requested by bp. Upon competence being demonstrated, the trainee shall be provided by air bp Operations Manager ANZ or the bp NZ HSE Specialist – Control of Work and Contractor Management with confirmation of their authorisation as a Permit Issuer.

5.1.3. Refresher Training

The Permit Issuer shall complete refresher training and have their Work Permits assessed with verbal and written feedback provided every three years for re-authorisation. Individuals who have maintained the required levels of competency are provided with recertification of their authorisation as a Permit Issuer for a further three years.

5.1.4. Confined Space Entry Permit Issuer Training

To become an accredited Confined Space Entry Permit Issuer the person shall:

- a) Be an authorised Work Permit Permit Issuer;
- b) Be certified as competent by the air bp Operations Manager ANZ or the bp NZ HSE Specialist - Control of Work and Contractor Management.
- have successfully completed Confined Space Entry training which includes as a minimum the following modules;
 - 1. Unit Standard 17599 Plan a confined space entry (this allows for unsupervised work as well as supervise and manage a group or team)
 - 2. Unit Standard 18426 Demonstrate knowledge of hazards associated with confined space
 - 3. Unit Standard 25510 Gas Testing

If the entry is to include the provision of breathing apparatus the Permit Issuer shall also have successfully completed *Unit Standard 25044 – Wear and operate compressed air breathing apparatus in the workplace.*

5.1.5. Expiry or Suspension of the Permit Issuer Accreditation

If a Permit Issuer does not issue a Work Permit set for an extended period or the currency of their competence to do so is of concern to the business or the air bp Operations Manager ANZ or the bp NZ HSE Specialist - Control of Work and Contractor Management, then their accreditation may be suspended. Confirmation of this shall be provided by the air bp Operations Manager ANZ or the bp NZ HSE Specialist - Control of Work and Contractor Management.

At the discretion of the air bp Operations Manager ANZ or the bp NZ HSE Specialist - Control of Work and Contractor Management, expired or suspended Issuing Authorities may be subject to attend a Permit Issuer training session.

5.1.6. Permit Endorser

To be listed on a Work Permit as an endorser the person shall be a current authorised Permit Issuer in accordance with this procedure or a person that the Permit Issuer deems to be a competent and responsible person to endorse the permit. As a minimum, a permit endorser shall have the following competencies:

- a) Understand the responsibilities of the Permit Issuer, Permit Receiver, Site Representative, and Endorser;
- b) Be competent in the identification of site hazards, process hazards, and SIMOPs that may impact on the task;
- c) Understand the requirements for documenting the endorsement on the Work Permit set; and
- d) For Confined Space Entry Permits, shall have completed the training prescribed in 5.1.4 c

Note: If the Endorser is issuing a Gas Test Certificate associated with the permit, refer to additional requirements to perform gas testing.

The Permit Endorser shall be formally briefed by the Permit Issuer on the endorsing and monitoring requirements of the Work Permit.

5.1.7. Gas Testing Training

To conduct gas testing associated with a Gas Test Certificate the person shall be an authorised Permit Issuer or shall have completed the following and be competent in the use for the gas detector: *Unit Standard 25510 – Gas Testing*

5.2. Planning and Scheduling



Figure 1: The 8 Step Permit Process

The person responsible for planning the work shall allow time for the following actions for the safe execution of the work:

- a) Define the scope of work;
- b) Identification of personnel and equipment required.
- c) Identification of dependent and linked work
- d) Identification of SIMOPS and their compatibility with the work
- e) Review associated procedures / Risk Assessments / JSA / SWMS;
- f) Define any Regulatory requirements;
- g) Inspection of the work site
- h) Conduct a risk assessment of the task

- i) Implementation of control measures including isolations
- j) Arrange resources for the work
- k) Coordinate and prioritise work to reduce conflict between tasks
- The return to normal operations including testing and commissioning activities (as applicable); and
- m) Appropriate stakeholders have been notified of the activity and/or the impact of the activity

Subject Matter Experts (SMEs) may be included in the planning stages, as required by the technical complexity of the task(s).

5.3. Permit Receiver's Safe Work Method Statement (SWMS) or Job Safety Analysis (JSA)

All tasks shall be risk assessed. For all work, the Permit Receiver should document what the intended outcome of the work is and the means by which it will be safely achieved. This is commonly known as the SWMS, or in some companies and regions it may be referred to as a JSA.

The documents shall:

- a) List the work being done
- b) State the health and safety hazards and risks arising from the work to be carried out
- c) Describe how the risks will be controlled
- d) Describe how the risk control measures will be implemented, monitored and reviewed
- e) Take into consideration factors that may affect the way in which the work is carried out; and,
- f) Be readily accessible and easy to read.

For work being conducted under a permit the Permit Receiver should provide a SWMS /JSA to the Permit Issuer before issuing a Work Permit and prior to conducting a bp TRA (if required for the task as per the bp TRAT).

The JSA/SWMS should cover task, process, and site hazards; and address SIMOPs and Human Factors. If there are gaps, such as specific site hazards are not considered, this shall be updated at the work site prior to work or a bp risk assessment is conducted, facilitated by the Permit Issuer for the permit. This may be a bp TRA.

5.4. bp Task Risk Assessment (TRA)

Before issue of a Work Permit, a risk assessment of the task shall be completed and shall include consideration of operations activities, monitoring requirements and emergency response. The bp TRA Table (TRAT) provides minimum requirements for bp Risk Assessments. This risk assessment shall, as a minimum, include the Permit Issuer and Permit Receiver. A HITRA Competent Person or a Permit Issuer shall facilitate a bp TRA conducted for work within the scope of the Control of Work process. All bp TRA's shall use the risk matrix in Figure 2.

The consequence impact table from GG3.1 Hazard Identification and Task Risk Assessment shall be used to determine the worst credible consequence impact in order to rate the risk in the TRA Risk Matrix using the probability of the event occurring at this impact level with the controls in place. The bp TRA shall be signed off by the Permit Issuer, the Permit Receiver and any other risk assessment team members. It shall have the signature of the facilitator (if different to the Permit Issuer) and be signed as approved by the person authorised to do so in accordance with the level of risk (as per, Annex A - TRA Approval Table for the business).

All personnel shall sign the Permit to Work Acknowledgement form or other pre-start document which references the risk assessment to demonstrate this has been read and understood by all parties. If the task is conducted by one person, then the signing of the permit by the Permit Receiver meets this requirement as the permit shall specify that all work shall be completed in accordance with the risk assessment.

		Probability				
		1 2 3 4 5				
	Impact Level	Remote possibility - A similar event has not yet occurred in our industry	Similar event has occurred somewhere in our industry and within the BP group	Likely to occur once or twice in lifetime of the facility	Event likely to occur several times in the lifetime of the facility	Common occurrence (at least annually) at the facility
	D	н	νн	VН	νн	νн
Consequence	E	L	м	н	νн	νн
	F	L	м	н	н	νн
	G	L	L	м	н	н
	н	L	L	м	м	н

The risk assessment shall be available at the work site during work.

Definitions for Risk Level Score

L = Low Risk M = Medium Risk H = High Risk VH = Very High Risk & Not Allowed

Figure 2: TRA Risk Matrix

5.5. Work Permits and Work Clearances

5.5.1. When Work Permits and Clearances are not required

Work Permits and Work Clearances are not required for routine tasks. Note that the requirements for a risk assessment remains for all work. For routine operations this typically informs the generation of a work instruction for the task.

Work required to be completed for bp outside restricted areas on equipment which has been in service with hydrocarbon products shall be subject to an appropriate safe system of work. It is the responsibility of the person engaging the third party to conduct the work for bp to assure that this system is appropriate to manage the risk. Equipment sent to third parties, which has been in service with hydrocarbon products, should be issued with documentation of the equipment status.

5.5.2. Principal Contractors

If the Principal Contractor for Construction Work is not bp and the construction site is not within bp's operational control, then construction work may be completed by the Principal Contractor without being subject to bp Permit to Work Processes if fuel is not stored on site in equipment for site operation. This includes:

- a) bp Confined Space Entry Permits;
- b) bp Hot Work Permits;
- c) bp Cold Work Permits;
- d) bp NZ Work Clearance Checklist;
- e) bp TRA (including bp TRAT);
- f) bp Ground Disturbance Certificates and Checklists;
- g) bp Gas Test Certificates
- h) Forms associated with the issue of the above (e.g. bp LOTO Form, Permit to Work Acknowledgement)

These construction projects follow bp project management processes to provide assurance to bp that the work will be safely executed. Construction Projects controlled by a Principal Contractor may be subject to specific regulatory requirements including Work Health and Safety Management Plans; general construction induction training for all workers; and that a person who commissions a construction project and engages a principal contractor for the project gives the principal contractor any information the person has in relation to hazards and risks at or in the vicinity of the workplace where the construction work is to be carried out.

A principal contractor with management or control of a workplace shall:

- a) Manage risks associated with the construction work
- b) Secure the workplace so unauthorised persons cannot enter
- c) Comply with all safe work method statement requirements for high risk construction work.
- d) Comply with all other regulatory requirements.

5.5.3. Work Clearance

The bp NZ Work Clearance Checklist may be used in New Zealand by trained and competent persons, to authorise lower risk work in accordance with the TRAT. This may include:

- a) Cold Work that does not require a Work Permit under the bp TRAT;
- b) Hot Work outside the hazardous area;

A Work Clearance shall not be used to authorise:

- c) Entry to, or work in, a confined space. This shall be subject to a Confined Space Entry Permit.
- d) Asbestos removal, including by a licensed asbestos removalist. This shall be subject to a hot or cold Work Permit, as applicable to the work method and location.

5.5.4. Minimum Controls Checklists

Some work may be performed with authorisation by the bp NZ Work Clearance Checklist if supported by the use of Minimum Controls Checklists, in accordance with the TRAT. Workers may only use the Minimum Controls if trained in its use.

These checklists provide minimum requirements for performing such work. If the requirements cannot or will not be met for the task then a Work Permit is required for the work (bp Cold Work Permit, or bp Hot Work Permit as applicable).

5.5.5. Cold Work Permits

A Cold Work Permit is required for all non-routine work where:

The work does not introduce or create a source of ignition; and either

- The work is being performed without the use of a bp NZ Work Clearance Checklist; or
- · Is required by the bp TRAT due to the level of risk inherent with the type of task;
- The TRAT allows the work to be completed with authorisation of a Work Clearance Checklists if supported by a Minimum Control Checklist but the work cannot or will not be performed in accordance with the requirements of the Minimum Control Checklist.

A Cold Work Permit is valid for the period noted on the Permit document.

5.5.6. Hot Work Permits

A Hot Work Permit is required for:

- a) All non-routine hot work inside hazardous areas listed on the TRAT as requiring a Hot Work Permit;
- b) All non-routine hot work inside hazardous areas that the TRAT allows to be completed with authorisation of a Work Clearance Checklists if supported by a Minimum Control Checklist but the work cannot or will not be performed in accordance with the requirements of the Minimum Control Checklist;
- c) All non-routine hot work on equipment that has been in hydrocarbon service and appropriate precautions have not been undertaken to eliminate all contact with potentially flammable vapour (e.g. depressurisation, drained, isolated, purged);
- d) Hot Work outside the hazardous area performed without the use of a bp NZ Work Clearance Checklist;

All Hot Work Permits for Hot Work in hazardous areas shall be accompanied by a valid Gas Test Certificate. Continuous gas testing is required for all hot work activity that creates an uncontrolled ignition source inside hazardous areas. This type of work includes burning, welding, grinding, air arcing, soldering, open flame, stress relieving, preheating or any similar type of activity.

5.5.7. Confined Space Entry Permits

A Confined Space Entry Permit is required for entry to any confined space. The requirements of PRO-4.5-0001-1-04 Confined Space Entry shall be complied with for all confined space entry.

The Confined Space Entry Permit is to cover the safety of the confined space environment only. If work is to be conducted within the confined space the Confined Space Entry Permit shall be accompanied by a Cold Work or Hot Work Permit.

All Confined Space Entry Permits shall be accompanied by a valid Gas Test Certificate and LOTO Plan.

Before a Confined Space Entry Permit is issued, the Permit Issuer shall ensure that a risk assessment has been conducted in accordance with the requirements of the bp TRAT, and a reliable Emergency Response Plan is in place and included in the permit set.

Atmospheric testing requirements for Confined Space Entry shall be in accordance with Table 3, and limits as per Table 4

A Confined Space Entry permit is valid for a maximum of one shift of the Permit Receiver. After this period the permit must be revalidated by endorsement as specified on the permit. The person

conducting the permit endorsement shall have completed the appropriate training as described in this procedure.

Confined space entry into a bulk tank or vessel shall have an isolation drawing prepared showing all connections and isolation techniques applied.

5.5.8. Issue of Work Permits

The Permit Issuer shall make the site manager or delegate aware of work to be done so they have agreement and opportunity to contribute to permit content/controls.

The Permit Issuer shall be physically present on the site to issue the permit, (i.e. remote issuing of permits is not allowed). Self-issuing of Work Permits is also not allowed. The Permit Issuer shall not work under a permit they have issued. The only exception to this is if the Permit Issuer is acting in a role dedicated to safety such as a standby / observer for a confined space, a fire watch, or spotter. They cannot enter a confined space other than to conduct the gas testing performed as part of the permit issuance or endorsement process

All Work Permits shall be clear and legible and all sections shall be completed.

All Work Permits and associated documentation for the work shall:

- a) Specify the Permit Receiver
- b) Define the scope of work, including the equipment to be worked on, location and duration.
- c) Identify the tools and equipment to be used
- d) Identify potential hazards (through associated hazard identification and risk assessment).
- e) Reference task risk assessments.
- f) Identify isolation of energy sources required to conduct the work.
- g) Define control measures to eliminate or mitigate risks.
- h) Link the work to other associated Work Permits or simultaneous operations.
- i) Record isolations that are common to more than one permit.
- j) Determine controls that prevent isolations that are common to more than one permit from being removed before all permits have been signed off.
- k) Specifies who will be performing the work.
- I) Records that the risks and control measures associated with the task(s) have been communicated to the employees performing the work.
- m) Be authorised by the Permit Issuer.
- n) Specify the frequency of monitoring required.
- o) Designate endorsement by a responsible person on the permit.
- p) Records the completion of the work.

The Work Permit only authorises work that is defined in the task description.

Where the Permit Issuer or Site Representative is not satisfied that conditions of the permit can be met, they shall not issue the permit.

The Permit Receiver shall be responsible for supervision of the works during completion and should not leave site during the work. Any requirement from the risk assessment for additional monitoring by the Permit Issuer (or delegated endorser) or Site Representative then this shall be documented on the permit.

A worksite inspection shall be performed, which:

- a) Confirms the work site, work scope, and work method.
- b) Confirms hazards have been adequately identified.
- c) Confirms that the control(s) and mitigation(s) measures recorded in the permit documentation or the procedure that needs to be in place before start of work are in place.
- d) Confirms that conditions have not materially changed so as to necessitate different or additional control measures.

The Permit Issuer shall sign the permit to indicate that the Permit Receiver is authorised to perform the work specified and it is safe for the Permit Receiver, their work crew, and for the site for this to proceed. The Permit Receiver shall read the Work Permit and sign the permit to indicate that the contents are understood, they are responsible for performing the tasks as documented and the job will be carried out in accordance with the permit.

If additional persons are not present when the permit is issued by the Permit Issuer it is the responsibility of the Permit Receiver to ensure that prior to working under the permit that any additional personnel understand the permit conditions, associated documents including risk assessments, and sign the Permit to Work Acknowledgement Form.

If the person performing the role of the Permit Receiver is to change, either leave site or for other reason, handover shall be documented including authorisation from the Permit Issuer.

If a single person is engaged to complete the work, the Permit to Work Acknowledgement Form is not required as the signing of the receipt of the permit serves this purpose.

If deemed sufficient by the Permit Issuer, one permit may cover any number of workers irrespective of trade employed on the job specified.

5.6. Site Meeting prior to Start of Work

Prior to commencement of the site works, a meeting shall be conducted on site between the Site Representative / Permit Issuer and the Permit Receiver and other involved persons to discuss and agree upon Health, Safety and Environmental matters that are foreseeable for the duration of the works confirming that all matters are adequately covered in the risk assessment for the task or the Work Permit.

If the Permit Receiver is responsible for additional personnel carrying out the work, the Permit Receiver shall conduct a pre-start / toolbox meeting with all those involved in the work and outline the tasks covered by the permit, the hazards involved, the control measures and mitigations including emergency procedures. All personnel shall sign the Permit to Work Acknowledgement form or other pre-start document which references the Permit or Work Clearance to demonstrate this has been read and understood by all parties.

5.7. Energy Isolation

All isolations of energy systems required to conduct the task safely are conducted and recorded in accordance with PRO-4.5-0001-1-02 Energy Isolation.

If the work is not complete the equipment shall remain locked out / tagged out until the equipment has been tested and is safe to return to service.

5.8. Gas Test Certificates

A Gas Test Certificate shall be completed for all:

- a) Hot Work Permits; and
- b) Confined Space Entry Permits.

A Gas Test Certificate or other monitoring for airborne contaminants may also be required for other works if deemed to be required by the associated risk assessment for the task. Table 3 below documents what the minimum parameters are that shall be tested when issuing a Gas Test Certificate.

Permit Type	Minimum Parameters Tested
Hot Work Permit	LEL and O_2
Confined Space Permit	LEL, CO, H_2S and O_2

Table 3 : Atmospheric Testing Requirements

5.8.1. Issue of Gas Test Certificates

A bp Permit Issuer authorised to issue Gas Test Certificates shall issue the initial Gas Test Certificate associated with a bp Work Permit.

The gas detector shall be:

a) Within the calibration date;

b) "Bump tested" or "challenged" prior to each use;

A Gas Test Certificate shall only be issued once equipment and the work area has been gas tested in accordance with Table 3 above and found to not have elevated LEL readings, have oxygen within the safe range and if applicable not contain toxic levels of contaminants as specified in Table 4.

Hot work is prohibited if Oxygen levels are enriched above 23.5%.

5.8.2. Validity of Gas Test Certificates

A Gas Test Certificate is valid for one shift or a maximum of 12 hours. The work area or equipment shall be re-tested at least once per shift and the certificate endorsed accordingly. If a more frequent re-testing schedule has been determined by risk assessment for the task, the Permit Issuer shall note this on the Permits and Gas Test Certificate.

If conditions change, work is stopped or the area vacated beyond normal shut down periods, or if emergencies arise which affect the permit conditions, Gas Test Certificate (and any associated Work Permits) become invalid until the work area or equipment is retested and the Gas Test Certificate is endorsed. If an emergency has occurred, emergency response and incident notification processes for the site shall also be followed prior to recommencing work. Permits requiring a Gas Test Certificate are not valid and cannot be endorsed until a re-test has been performed and the Gas Test Certificate has been endorsed.

In the case of an expired Gas Test Certificate, the Permit Receiver shall stop work and alert the Permit Issuer.

		Atmo Gas	sphere Limits	Conditions of Entry
Oxygen %	Flammable Gas % LEL	Toxic Contaminants (ppm)		
		H₂S	со	
Above 23.5				Confined space entry is prohibited. Immediate evacuation from a confined space is required. No Hot Work
23.5 ↓ 19.5	0	Below 10	Below 30	Safe for people to enter and carry out hot or cold work without respiratory protection (unless specified as a risk control measure for other identified hazards introduced by the work). Continuous monitoring of the Confined Space atmosphere is required.
23.5 ↓ 19.5	0 ↓ 5	10 ↓ 100	30 ↓ 300	Entry only with approved form of Respiratory Protective Equipment for the level of contamination Continuous monitoring of the Confined Space atmosphere is required .
23.5 ↓ 19.5	5 ↓ 10	10 ↓ 100	30 ↓ 300	No initial entry if LEL is 5% or above. Existing entry maintained with approved form of Respiratory Protective Equipment for the level of contamination Continuous monitoring of the Confined Space atmosphere is required. No Hot Work if LEL is 5% or above.
Below 19.5	Above 10	Above 100	Above 300	Confined space entry is prohibited. Immediate evacuation from a confined space is required. No Hot Work if LEL is 10% or above.

Table 4: Confined Space and Hot Work Atmospheric Gas Limits

Note: if the confined space entry is to be conducted for work undertaken over longer than 8 hours shifts, all limits for toxic contaminants shall be halved in Table 4.

5.9. Ground Disturbance Certificates

A Ground Disturbance Certificate is required for:

- a) All excavations and trenching (other than coring or boring) to a depth of 1.2m or more.
- b) All ground disturbances defined on the TRAT as requiring a Ground Disturbance Certificate.
- c) All ground disturbances that the TRAT allows the work to be completed with authorisation of a Work Clearance Checklists if supported by a Minimum Control Checklist but the work cannot or will not be performed in accordance with the requirements of the Minimum Control Checklist.

A Ground Disturbance Certificate shall be issued by a person authorised by the air bp Operations Manager ANZ or the bp NZ HSE Specialist - Control of Work and Contractor Management to issue Ground Disturbance Certificates.

5.10. Displaying the Permit or Work Clearance

The Permit Receiver shall ensure that the original copy of all Permits or Work Clearances, including the Permit to Work Acknowledgement Form and associated documents (e.g. risk assessments, Permit Receiver JSA/ SWMS and Gas Test Certificate as applicable) are readily available during the course of the work. These shall be available at the work site for duration of work, or at the entrance to a confined space for the duration of entry.

5.11. Monitoring

All ongoing work requiring a permit shall be regularly monitored and managed by a responsible person. Work Permits should note the frequency of monitoring as determined in the risk assessment. The frequency of monitoring should consider:

- a) Complexity of the task;
- b) Competency of the persons undertaking the task; and
- c) The level of residual risk as defined by the risk assessment for the task.

The Permit Issuer may delegate the monitoring of the work place to a competent person. The Permit Endorser shall be formally briefed by the Permit Issuer on the endorsing and monitoring requirements of the Work Permit.

The person assigned to monitor the work place shall have the competency to recognise when site conditions no longer comply with the Work Permit. They shall stop the work and request a reassessment if any of the following occur:

- a) Unsafe practices are observed;
- b) Unsafe conditions are observed; or
- c) Conditions have arisen that necessitate revision to the permit.

The Permit Issuer for the permit shall (directly or by delegation to the permit endorser):

- a) Maintain regular communication with the employees performing the work.
- b) Confirm that the work is monitored in accordance with the monitoring requirements.

5.12. Work Interruptions

The worksite should be inspected and confirmed as being in a safe condition when work is interrupted. Interruptions may include breaks (e.g., work, meal, smoke) and shift changes. If it is determined from the risk assessment that specific interruptions are to be subject to endorsement then this shall be specified on the Work Permit. Otherwise, it is the responsibility of the Permit Receiver to ensure this inspection is completed.

If conditions or control measures are observed to have changed, work shall not restart until the situation has been assessed; and conditions and control measures have returned to those required by the Work Permit. If the conditions and control measures of the initial Work Permit cannot be met, the original risk assessment shall be revisited and, if appropriate, either a new Work Permit is issued or the Work Permit is updated by the Permit Issuer and re-issued with the revised conditions.

5.13. Endorsement of a Permit

For work extending over more than one work shift of the Permit Receiver, the Work Permit shall be endorsed prior to commencement of the following work shift or a new permit written by a Permit Issuer. The endorsement of a permit is an acknowledgment that the safe work conditions originally set on the Work Permit have not changed and the work may recommence. Endorsement shall be made by the Permit Issuer or person nominated and recorded on the permit who shall meet the competency requirements for an endorser detailed in this procedure.

5.14. Work Permit Completion and Close Out

When the work is completed, the equipment and the site are in a safe condition, then the permit shall be closed out and the original permit signed by the Permit Receiver as complete.

The Site Representative or Permit Issuer (or nominated endorser) should inspect the work site to ensure that the work has been completed and the equipment and site left in a safe condition before signing the permit closure.

If the work described on the Work Permit is not completed at the expiry time listed, the Permit Receiver is responsible for indicating the status of the work to the Permit Issuer (or delegated Endorser) and Site Representative, leaving the site in a safe condition, and applying for a new permit or extension of the permit validity by the Permit Issuer.

If an extension of the expiration time and date of the permit is required, e.g. due to a delay to works, then the Permit Issuer may authorise a new expiration date and time. This shall be initialised by both the Permit Issuer and Permit Receiver of the permit.

5.14.1. Returning to Service

Equipment that has been removed from service for maintenance shall on completion of maintenance be tested in service to confirm the integrity of the system. If this is not possible at the time the maintenance is completed, then maintenance shall be deemed incomplete and the equipment shall remain locked out / tagged out until testing in service can be undertaken.

5.15. Amendment of Permits

Only the Permit Issuer who issued the Work Permit may amend the Work Permit. This must be documented on the permit, with initialisation and date / time of all changes by the Permit Issuer.

The Permit Issuer may amend the permit remotely as this is NOT issuance of the Work Permit. **Note:** the Permit must be still initially issued and subsequently endorsed at the work site.

Prior to re-commencement of work, the Work Permit must be endorsed after any amendment to the Permit.

6. Verification

The key process steps outlined in this procedure are included in a Self-Verification Programme.

7. Associated Documents

7.1. Documents

bp Permit to Work templates are issued by the air bp ANZ Operations Manager or the bp NZ HSE Specialist - Control of Work and Contractor Management for their respective businesses. The following associated documents:

- Have been referenced in this procedure.
- Should be considered in understanding and applying the instructions provided in this procedure.

 Table 5: Required References

Document Name	Document No	Document Location
Control of Work GDP	GDP 4.5-0001	OMS Library

7.2. Records

7.2.1. Retention of Permits

The Permit Issuer shall retain copies of permits and all other associated documents within the Work Permit set for at least 3 years and make these available for audit as required, including when being recertified as a Permit Issuer.

A copy of the Work Permit set is to be retained on site during the work period.

8. External References

This procedure was prepared with reference to relevant legislation/regulations including but not limited to, relevant Acts, Regulations, Codes, Safe Work Instruments, and Standards.

9. Version Summary

The table below provides a summary of version history of this procedure.

Version	Prepared by	Description of Change	Date	MoC
1	Adrian Connolly	Update to STP01-02 Permit to Work for migration to OMS Procedure, closure of actions and implement continuous improvement opportunities.	14 Nov 2014	
2	Adrian Connolly	Updates to document format and layout for readability. Minor spelling and grammar corrections. Minor changes to wording of clauses to improve clarity of requirements. Do not need to be the same IA completing Gas Test Certificate as the permit. Further clarification on Principal Contractors. Removal of references to NZOSL, Bitumen and Terminals as now out of scope. Merger of Depots, Commercial and Retail TRA Approval Table into single bp Australia table. Removal of TRAT from Appendix 1. This will be a separate document. Addition of bp 5x5 HITRA Risk Matrix required for bp TRA's. Clarified Cold Work Permit requirement.	24 May 2016	
3	Adrian Connolly	Update for the inclusion of WPCG Minimum Control Checklist requirements	12 Sep 2017	11374
4	Adrian Connolly	Changes to remove bp Australia from scope, retaining this for bp NZ MS&L and air bp ANZ operations	20 Aug 2018	11449
5	Adrian Connolly	Minor correction to table in Annex A	13 Nov 2018	11449
6	Adrian Connolly	Update to correct HITRA 5x5 matrix and two air bp job titles within the TRA Approval Table.	06 Aug 2019	11600
7	Adrian Connolly	Update to remove references to Australia and it's requirements as this document now only applies to NZ. Align Ground Disturbance requirements with work as done, inclusion of Minimum Controls Checklists to enable transition to this initiative.	13/10/2022	11822

Table 6: Document Version Summary

Annex A - TRA Approval Tables

bp New Zealand Retail

Residual risk level	Minimum level of approval	Comments
VH – Very High	Not allowed	
	bp Senior Manager Network	
H – High	Solutions & Facilities	
	Management AsPac	
M – Medium	Permit Issuer	
	Permit Issuer	
L – Low	Permit Receiver	bp Employee or Contractor using bp NZ Work Clearance form

air bp New Zealand

Residual risk level	Minimum level of approval	Comments
VH – Very High	Not allowed	
H – High	air bp ANZ Operations Manager Airbp ANZ HSSE and Technical Manager	
M – Medium	Major Airports Manager (Aus.), GA Ops Manager (Aus.), Operations Manager (NZ), Airbp PtW TA (Aus.) Airbp PtW TA (NZ)	
	Site Manager	Authorised Site Manager or AR using Approved Work Clearance form
L – Low	Permit Issuer	
	Permit Receiver	bp employee or Contractor using Approved Work Clearance form

End of Document