

**Safe Systems of Work.**

The scope of work undertaken by Pitkin & Ruddock Ltd is wide and varied, in many service situations the work tasks will not be known until the engineer attends site to carry out the work.

This situation makes it very difficult to create a specific ' Safe System of Work ' for every job as there can be an infinite amount of tasks in a variety of locations.

The ' Safe System of Work ' developed to cover the companies operations in these type of instances, is as follows;

For each job a ' Point of Work Safety Assessment ' is completed prior to the work being started, this assessment is in the form of a checklist covering a wide scope, including documentation, PPE requirements, work equipment, plant to be worked on, potential hazards and the relevant risk assessments that need to be applied.

Where the nature of a job means it continues past one work shift, a further 'Point of Work Risk Assessment' is completed at the start of each shift to ensure correct assessment is made on a regular basis.

Pitkin & Ruddock – Point of Work Risk Assessment.				Daily / Shift Use Form.	
P&R Job Number .....		Engineer/s .....		Date .....	
<b>Part 1. STOP - Before you start.</b>		Yes	No	N/A	<b>Part 3. ACT - Apply P&amp;R risk assessments (from HSE folder)</b>
Do you have the correct documentation for the job					PRHS RA01 - Use of Refrigerant Gases / Liquids
Are you at the correct item of plant / equipment					PRHS RA02 - Use of Ammonia Refrigerant
Do you have the correct PPE for the job					PRHS RA03 - Pressure Testing RAC Systems
Is your electrical equipment PAT tested and in a safe condition					PRHS RA04 - Electrical Testing RAC Systems
Are your steps / ladders / work platforms inspected and in date					PRHS RA05 - Storage / Use of Bottled Gases
If you have answered no to any of the above, take the required action to resolve. DO NOT PROCEED WITH THE WORK.					PRHS RA06 - Brazing / Silver Soldering / Hot Works
<b>Part 2. THINK – Assess the work scope, are these hazards present ?</b>					PRHS RA07 - Portable Scaffolding / Work Platforms
Slips, trips or falls from the same level	Asbestos				PRHS RA08 - Manual Handling / Mechanical Lifting
Falls from height	Dust and debris				PRHS RA09 - Use of Ladders / Steps
Falling / flying objects	Fumes and smoke				PRHS RA10 - Use of Electric Jigsaw
Chemicals / harmful substances	Noise				PRHS RA11 - Use of Electric Hand Grinder
Hot work / heat / fire / explosion	Vibration				PRHS RA12 - Use of Electric Drill
Asphyxiation / drowning	Electricity				PRHS RA13 - Arc Welding
Risk to plant / equipment	Radiation (including non-ionising)				PRHS RA14 - Working at Height / Working on Roofs
Contact with a stationary object	Contamination (loose, airborne)				PRHS RA15 - Use of Manually Operated Lifting Equipment
Object overturning / collapsing	Poor lighting				PRHS RA16 - Vehicle Safety in the Workplace
Manual handling	Temperature extremes				PRHS RA17 - Use of Electric Chop Saw
Stored energy / insecure load	Adverse weather				PRHS RA19 - Work in Confined Spaces
Vehicles	Moving Machinery / entanglement				PRHS RA20 - Use of Mobile Elevated Work Platforms
Risk to you from other workers / public	Refrigerants / pressurised systems				PRHS RA21 - Small Installation Works
Risk to others from your work / actions	Entry into confined spaces				PRHS RA22 - Use of Standard Cleaning Chemicals / Oils
Others (specify)					C.o.S.H.H Assessment / MSDS Available at Workplace
					<b>Part 4. REVIEW – Assess work carried out.</b>
					Are there any lessons to be learned for next time
					Has the work created any new hazards
Does the site operate a Permit to Work system, if so complete and comply with it.					If yes to either of the above advise you line manger and discuss
Competent Persons Signature.					

A set of generic risk assessments has been created, these cover the majority of tasks commonly undertaken by our engineering staff in field situations.

As part of each task based assessment a list of measures is listed to eliminate or control the risk, these will form the basis of the Safe System of Work for that individual task.

For any job, a number of risk assessments may be relevant and therefore measures to control risk for all the relevant assessments will be required.

As the task develops the work scope may change and it may be necessary to reconsider the ' Point of Work Safety Assessment ' if this is the case and make any necessary adjustments to the method of work adopted.

In the event that the P&R engineer attending a site considers that the above system is insufficient to cover the work task in hand, he / she should not proceed with any work but advise their line manager or the technical sales engineer who is responsible for the work so the method of work can, if required, be fully re-considered.

At no time should the developed ' Safe System of Work ' be ignored on the request of a customer or third party. If a site specific system is to be used this should be used along side our own safe system of work.

**Please remember that safety is a primary objective of the organisation. Accidents are unwelcome statistics that cost large sums of money and ruin peoples lives.**

**Equipment Inspection / Testing.**

To ensure that our work equipment is maintained in a safe operating condition the following inspection and testing will take place.

**Portable Electrical Equipment;**

Visual inspection before each use.  
PAT 6 monthly with test labels applied to equipment and test results recorded.

**Fixed Electrical Equipment;**

Visual inspection before each use.  
PAT carried out to suit type and use with test labels applied to equipment and test results recorded.

**Ladders, Steps & Access Platforms;**

Visual inspection before each use.  
Formal inspection 3 monthly with inspection labels applied to equipment and inspection results recorded (see example).



**Oxy / Acet Equipment (Portapaks) ;**

Visual inspection before each use.  
Formal inspection annually with inspection results recorded.

**Nitrogen Manifolds;**

Visual inspection before each use.  
Ensure suitability for application (maximum pressure).

**Refrigerant Manifolds / Lines;**

Visual inspection before each use.  
Ensure suitability for application (maximum pressure).

The Point of Work Safety / Risk Assessment documents refers to the test / inspection status of equipment to be used and any equipment not within the correct test date should not be used and retested / inspected as soon as practically possible.

***The action of visual inspection before use is the most important criteria and should be carried out to the correct level each and every time by the operator to help ensure their safety and the safety of others.***

### **Isolation of Equipment.**

Wherever possible by the task being undertaken, equipment / systems that are being worked on should be safely isolated.

Isolation of services such as electrical supplies, cooling water supply, air supply or refrigerant circuits may be required to allow operatives to work in a safe manner.

As different types of plant, individual site situations and service / repair tasks lead to a very large number of possibilities in terms of repair / isolation requirements a single set procedure is not able to be created and applied to every activity.

However the following guidelines should be adopted wherever practical and implemented by the competent person responsible for the task/s being undertaken.

In conjunction with the Pitkin & Ruddock 'Point of Work Safety Assessment' determine if the site-specific operating practices have Isolation procedures in place, these may be included in any Permit to Work system. If this is the case these procedures must be adopted in addition to our own.

Where no site-specific procedures exist for isolations the following guidelines should be adopted;

- Using the 'Point of Work Safety Assessment' determine if isolation of equipment is required to enable safe working on equipment.
- Consider which services require isolation and determine the isolation / lock off method to be used to allow safe working to be carried out.
- Consider the safety and operational implications of the isolation process, this may include trapping of liquids in pipe systems, or disabling of alarm systems.
- Consider if any other equipment or service will be affected by the proposed isolation process, if so advise customer of requirement and agree action plan to minimise the impact of the isolation process.
- Ensure all those to be affected by the isolation/s are aware of the process and timescale involved. This includes customer representatives and all P&R persons working on the equipment.
- Wherever possible 'lock off' supplies with approved system of padlocking (two or more padlocks may be required with different key holders) and apply signage identifying circuit isolation, reason for isolation and contact / location details of operatives in control of the isolation process. If valves are to be used for isolation these should be physically locked off where possible and relevant signs also applied locally and at all affected points.
- When isolations are to be released, a fully detailed check of all downstream circuits should be carried out by the competent person to ensure the system is safe to be made live again before locking / isolation is removed.
- At all times during works, the customer should be kept informed of the operational condition of the system and any isolations that are in place.
- Where electrical panels or circuits are to be isolated, a Steel Hasp 'Lockout' device (see below) should be used to allow for up to 6 separate padlocks to be used for the lockout process if required.



It is also accepted that some work will need to be carried out in 'live' situations to allow for fault finding / function testing, if this is the case operatives and others around them need to be made aware of the additional hazards of this type of activity and the associated measures required to undertake the work.