



شركة تنمية نفط عُمان
Petroleum Development Oman



HEALTH, SAFETY AND ENVIRONMENT GUIDELINE
Permit to Work System - Job Safety Plans

DOCUMENT ID - GU 273
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Important !

This document contains the reference Job Safety Plans (JSPs) as currently present in the Worksite Hazard Information Management System (WHIMS). It is aimed at users of the Permit to Work (PtW) System who do not have access to WHIMS on the PDO computer network.

This document should only be used as a guideline. Each JSP should be critically reviewed before a work permit is signed, and additional controls should be added when deemed necessary. This holds in particular for site specific information that is not present in this data base (for instance recovery and emergency response information like escape routes, muster stations, emergency telephone numbers, etc).





Contents

01.1	Welding (Gas) Oxy/Acetylene Cutting
01.2	Welding (Arc)
01.3	Grinding
02.1	Confined space entry
02.2	Well cellar entry
03.1 (E1.1)	Electrical work requiring an Electrical Safety Document
03.2 (E1.6)	Opening live electrical junction boxes
04.1	Handling Hazardous substances
04.2	Use of Radioactive sources
04.3	Contamination with NORM.
04.4	Pyrophoric Scale
05.1	Work that affects ESD and Fire & Gas system
05.2	Work that affects Process & Machinery Systems
06.1	Cutting Hydrocarbon or Haz fluid pipe systems
06.10	Beam Pump Maintenance Activities
06.11	Polyethylene Lining of Pipelines & Flowlines
06.2	Breaching hydrocarbon or hazardous fluid systems
06.3	Shotblasting
06.4	Power/Hand Tools
06.5	High Pressure Water Jetting
06.6	Painting (Hand/Spray) ⁴
06.7	Non Breaching maintenance.
06.9	Leak Clamping of Oil/Gas lines
07.1	Working at height
08.1	Scaffolding erection / dismantling
09.1	Lifting operations
10.1	Pressure testing plant & equipment
10.2	Systems & equipment commissioning (E&M)
10.3	Decommissioning
11.1	Use of temporary diesel engines
11.2	Use of non IS equipment.
11.3	Use of I S test/portable equipment
11.4	Use of cameras equipped with flash.
12.1	Excavation using hand or mechanised tools
12.2	Rebar cutting,bending & shuttering
12.3	Construction activities not fabrication
13.3	Well Services
13.5	Drilling water services in DWSOP No.P033
13.8	Seismic exploration
15.1	Levelling & grading
16	Faultfinding





Contents Continued

E1.10	Electrical Maintenance at power/sub stns. (own staff)
E1.11	Non routine electrical work in power/sub stns (own staff)
E1.12	Non elect. work in power/sub stns (Own staff)
E1.4	Third party visits to power/sub stations
E1.5	Live line washing on overhead lines
E1.7	Low voltage work requiring an electrical safety document.
E1.8	Non elect. work in switch. rooms/power.stns, ohd. lines
E1.9	Electrical switching controlled by ESOP's & ESRs
MA 1.1	Pipe & Steelwork Fabrication
MA 1.2	Building Construction





01.1 Title: **Welding (Gas) Oxy/Acetylene Cutting**

PERMIT NO:

Activity No. Activity Description

01.1 Welding (Gas)/ Oxy Acetylene cutting

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 11 Naked flame
- 12 Hot Welding Slag/Burning Spatter
- 31 Smoke
- 46 Tripping hazards
- 71 Pressurised hose failure
- 72 Pressurised gas cylinder failure

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Gas cylinders are to be secured in upright position in well-ventilated area and protected from direct heat. Bottle keys to be secured to Gas Regulators.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Respiratory protection type (specify type) to be worn
- Welder's gloves, goggles/visors and spatter proof clothing (where required) to be worn.

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check flashback arrestor and non - return valve are fitted correctly before opening gas supply and lighting the flame.
- Check pins and whipchecks are fitted across all crows foot connectors.
- Check that extraction/ventilation system is operational. Work to stop on failure of extraction system.
- Drip trays/savealls to be in place around equipment being worked on
- During the filling of storage tanks levels to be checked at regular intervals relative to the size of tank.
- Fire Watcher to be appointed.
- Fire and smoke detectors are to be inhibited in the work area.
- Fire blanket to be provided.
- Provide a portable fire extinguisher at the worksite.
- Provide containers for welding rods and used stubs.
- Remove all materials which may catch fire from the work area.
- Screens are to be provided to protect passing personnel.
- Tripping hazard to be mechanically removed or bridged and marked.

EXECUTION: The following must be observed during the work

- Check that all air intakes are protected from gas/fumes/air borne particles, etc.



- During work breaks, gas cylinder and hose valves to be closed and hoses depressurised. Gas cylinders to be returned to specified storage area when empty.
- Gas Test Certificate to be on site whenever work is underway.
- Gas cylinders are to be transported using the appropriate bottle cradles.
- Hoses are not to be kinked during work.
- Permit Holder/Firewatcher to check other side of wall/work area before starting or re-starting and during execution of work.
- When gas welding or cutting in a vessel, torches are to be removed when not in use.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: Signature: Date:

Name of Responsible Supervisor: Signature: Date:



01.2 Title: Welding (Arc)

PERMIT NO:

Activity No. Activity Description

01.2 Welding (Arc)

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 12 Hot Welding Slag/Burning Spatter
- 17 Electric arc
- 31 Smoke
- 46 Tripping hazards

Hazards due to Ignition Potential at Work Location:

- 11.2 Naked Flame (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Deluge system to be operational and the means of manual initiation known and understood by all members of the work party.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Respiratory protection type (specify type) to be worn
- Welder's gloves, goggles/visors and spatter proof clothing (where required) to be worn.

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check that a dedicated fire hose, pressurised to the nozzle is available.
- Check that extraction/ventilation system is operational. Work to stop on failure of extraction system.
- Depressure hoses when not in use or left unattended.
- Fire Watcher to be appointed.
- Fire and smoke detectors are to be inhibited in the work area.
- Fire blanket to be provided.
- Flammable / combustible material and passive fire protection coating is to be removed from work surface and surrounding area.
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Provide a portable fire extinguisher at the worksite.
- Screens are to be provided to protect passing personnel.
- Tripping hazard to be mechanically removed or bridged and marked.

EXECUTION: The following must be observed during the work

- Check that all air intakes are protected from gas/fumes/air borne particles, etc.
- Continuous gas monitoring to be undertaken.
- Gas Test Certificate to be on site whenever work is underway.
- Permit Holder/Firewatcher to check other side of wall/work area before starting or re-starting and during execution of work.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



01.3 Title: Grinding

PERMIT NO: []

Activity No. Activity Description

01.3 Grinding

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 15 Mechanical Sparks
33 Dust and Water Borne Particles
46 Tripping hazards
51 Projectiles
57 Noise
60 Vibration
71 Pressurised hose failure
76 Rotating machinery

Hazards due to Ignition Potential at Work Location:

15.2 Sparks (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Approved hearing protection to be worn.
- Impact Grade 1 eye protection (goggles) to be worn
- Respiratory protection type (specify type) to be worn

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PREPARATION: The following must be in place before work starts

- Arrangements for signaling emergency situations (such as shutting off control air) to be in place.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check pins and whipchecks are fitted across all crows foot connectors.
- Check safety guards are fitted to rotating shafts and discs.
- Check that extraction/ventilation system is operational. Work to stop on failure of extraction system.
- Drip trays/savealls to be in place around equipment being worked on
- Eye wash station to be established close to worksite.
- Flammable / combustible material and passive fire protection coating is to be removed from work surface and surrounding area.
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Provide a portable fire extinguisher at the worksite.
- Screens are to provided to protect passing personnel.
- Tripping hazard to be mechanically removed or bridged and marked.
- Use fixed length air hoses with certified tag.
- Use the correct disc for speed of machine and material to be ground.

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EXECUTION: The following must be observed during the work

- Air-powered caulking/cutting tools not to be pointed towards personnel or pressurised process equipment, even when switched off.
- Check that all air intakes are protected from gas/fumes/air borne particles, etc.
- Hoses are not to be kinked during work.
- If sense of touch deteriorates, stop work until it returns.
- Items to be cleaned/blasted in a designated area if possible.
- Machine to be in view when started.
- Surfaces containing asbestos must not be cleaned by blasting or mechanical de-scaling.
- Tools to be de-energised/de-pressurised when not in use and before carrying out any maintenance.
- Where necessary, workpiece and/or tool is to be kept cool with water.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



02.1 Title: **Confined space entry**

PERMIT NO:

Activity No. Activity Description

02.1 Confined Space Entry (except for Well Cellars and Cosasco pits).

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

48 Life threatening atmosphere

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Personnel to be recorded entering and leaving Confined Space.
- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Respiratory protection type (specify type) to be worn

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PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check that extraction/ventilation system is operational. Work to stop on failure of extraction system.
- Check that vessel entry stand-by man has made contact with Area Authority and agreed emergency procedures.
- Confined space entry certificate required.
- Gas bottles are NEVER to be taken into the vessel
- Nucleonic measuring devices are to have the lead shield locked in the safe position and a background count taken . If count is more than 7.5 micro Sieverts/hr. NO entry certificate is to be issued.
- Rescue plan to be discussed with the work party.
- Tests for oxygen and/or harmful gases/fumes are to be undertaken
- When electric welding in a vessel with conductive floor and walls, only low voltage welding is allowed. The welder is to be protected with an insulating mat or cradle to avoid body contact.

EXECUTION: The following must be observed during the work

- A minimum of two persons is required for this work.
- Continuous monitoring for oxygen content to be carried out.
- If forced ventilation fails, personnel must leave the confined space immediately.
- When gas welding or cutting in a vessel, torches are to be removed when not in use.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



02.2 Title: Well cellar entry

PERMIT NO:

Activity No.	Activity Description
02.2	Entry into Well Cellars and Cosasco Pits

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 45 Poisonous insects / reptiles
- 48 Life threatening atmosphere

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Personnel to be recorded entering and leaving Confined Space.
- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Respiratory protection type (specify type) to be worn

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check that extraction/ventilation system is operational. Work to stop on failure of extraction system.
- Check that vessel entry stand-by man has made contact with Area Authority and agreed emergency procedures.
- Confined space entry certificate required.
- Tests for oxygen and/or harmful gases/fumes are to be undertaken

EXECUTION: The following must be observed during the work

- A minimum of two persons is required for this work.
- Continuous monitoring for oxygen content to be carried out.
- If forced ventilation fails, personnel must leave the confined space immediately.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



03.1(E1.1) Title: HV electrical work requiring an ESD.

PERMIT NO:

Activity No. Activity Description

03.1 Work requiring an electrical safety document as specified in the Electrical Safety Rules (ESR's).

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 22 Low voltage (LV)
- 23 Stored electrical charge
- 24 High voltage (HV)
- 79 Static discharge to electronic equipment
- 88 Loss of emergency power/lighting

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Rubber gloves rated for the appropriate electrical voltage to be available and used when required

PREPARATION: The following must be in place before work starts

- Alternative means of providing emergency power or lighting to be arranged.
- Alternative power supplies have been provided where necessary.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check all non-certified electrical equipment is tagged and certified for use.
- Check equipment is isolated and earthed in accordance with Electrical Safety Rules.
- Insulated hook to be provided at worksite.
- Provide an insulating mat for persons to stand on when working on live terminals.
- Residual current earth leakage devices to be in place.

EXECUTION: The following must be observed during the work

- Alternative control facilities to be in place on affected equipment.
- Equipment to be proved discharged and electrically dead before any work may proceed.
- For cable spiking refer to Electrical Safety Procedures.
- Only insulated tools to be used.
- Wear an Anti static wrist strap when working on electronic systems or components.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



03.2(E1.6) Title: Opening live electrical junction boxes

PERMIT NO:

Activity No. Activity Description

03.2 The Opening of live electrical junction boxes by Electrical Authorised Persons (Hot work).

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 21 Extra Low Voltage (ELV)
- 22 Low voltage (LV)
- 23 Stored electrical charge

Hazards due to Ignition Potential at Work Location:

- 15.2 Sparks (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Only one loop/zone to be taken out of action at a time. Where this is not possible, alternative arrangements to be provided.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Rubber gloves rated for the appropriate electrical voltage to be available and used when required

PREPARATION: The following must be in place before work starts

- Alternative means of providing emergency power or lighting to be arranged.
- Alternative power supplies have been provided where necessary.
- Check all non-certified electrical equipment is tagged and certified for use.
- Check equipment is isolated and earthed in accordance with Electrical Safety Rules.
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Insulated hook to be provided at worksite.
- Provide a portable fire extinguisher at the worksite.
- Provide an insulating mat for persons to stand on when working on live terminals.
- Residual current earth leakage devices to be in place.

EXECUTION: The following must be observed during the work

- Equipment to be proved discharged and electrically dead before any work may proceed.
- Only insulated tools to be used.
- Wear an Anti static wrist strap when working on electronic systems or components.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



04.1 Title: Handling Hazardous substances

PERMIT NO:

Activity No. Activity Description

04.1 Handling of substances hazardous to health e.g. toxic chemicals or asbestos.

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 29 Hazardous substances
30 Toxic gas/fumes
38 Asbestos
39 Mineral fibre
47 Slipping hazards

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- System to be isolated and Isolation Certificate kept with Permit.

Empty box for initial

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Appropriate PPE, from chemical datasheets/Chemtags to be worn.
- Respiratory protection type (specify type) to be worn

Two empty boxes for initials

PREPARATION: The following must be in place before work starts

- Appropriate "habitat" to be erected before undertaking this work.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Before draining down vessels to ensure the system can handle the expected volumes. Ensure there are no concealed overflow mechanisms from the drains to surrounding area.
- Check that extraction/ventilation system is operational. Work to stop on failure of extraction system.
- Check that self-rescue sets or BA are available for all members of work party.
- Decontamination/disposal area is to be set up.
- Drip trays/savealls to be in place around equipment being worked on
- Eye wash station to be established close to worksite.
- Neutralisation spill kit appropriate to substance to be available at worksite.
- Sealable containers are to be used for disposal of solid residue.
- Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard.
- Supply of absorbent granules to be provided on site to prevent the spread of any spillage.
- Tests for oxygen and/or harmful gases/fumes are to be undertaken
- The precautions from the chemical datasheets are to be listed on the Job Safety Plan.

Multiple empty boxes for initials corresponding to each list item

EXECUTION: The following must be observed during the work

- A minimum of two persons is required for this work.
- Check that all air intakes are protected from gas/fumes/air borne particles, etc.

Two empty boxes for initials



- Contaminated equipment and waste to be handled and disposed of in accordance with relevant HSE guidelines.
- Continuous monitoring for toxic gas to be carried out during execution of work.
- Mix substances in well ventilated areas.
- Paint/oil drums to be decanted in a contained area, e.g. bund/ save all/ drip tray
- Power tools not to be used (saws, drills etc.). Material is to be kept damp.
- Surfaces containing asbestos must not be cleaned by blasting or mechanical de-scaling.
- The work is to be done in a manner which minimises the release of fibres into the atmosphere. Where possible remove sections of fibre unbroken.
- Waste to be handled and disposed of in accordance with chemical data sheet.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: Signature: Date:

Name of Responsible Supervisor: Signature: Date:



04.2 Title: Use of Radioactive sources

PERMIT NO:

Activity No. Activity Description
04.2 Working with Radioactive Sources

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:
34 Radioactive source

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Appropriate PPE, from chemical datasheets/Chemtags to be worn.
- Radiation dose monitors/film badges to be worn by work party.

Two empty rectangular boxes for initials.

PREPARATION: The following must be in place before work starts

- All sources to be kept in a sealed source store when not in use.
- Approved equipment operating procedures to be available at worksite.
- Barriers and signs are to be erected at a defined position of 7.5 micro Sieverts per hour.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check that UV and IR detectors are inhibited in the appropriate area.
- Clear non-essential personnel from the work area.
- Immediately prior to work starting, areas subject to control must be thoroughly searched to ensure that no unauthorised persons are present
- Inhibit nucleonic process monitoring equipment is inhibited at the worksite.
- Provide suitable radiation monitor.
- The precautions from the chemical datasheets are to be listed on the Job Safety Plan.

Ten empty rectangular boxes for initials.

EXECUTION: The following must be observed during the work

- Do not touch source directly. Do not place any part of the body between source and receiver.
- Emergency action for the source being used is to be in accordance with the procedures given in the Contractors Operations Manual.
- Ensure personnel in surrounding area are warned before the activity starts.
- If an alarm sounds the radioactive source is to be replaced in safe container, container locked and Emergency Response Team informed that radioactive source is stowed and barriers can be disregarded.
- Immediately before exposing the source, an audible warning shall be given using air horns.
- Radioactive source log book to be completed.

Six empty rectangular boxes for initials.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



04.3 Title: Contamination with NORM.

PERMIT NO: []

Activity No. Activity Description

04.3 Working on equipment and vessels contaminated with Naturally Occuring Radioactive Material (NORM).

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:
35 Naturally Occuring Radioactive Material (NORM)

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Appropriate PPE, from chemical datasheets/Chemtags to be worn.
- Respiratory protection type (specify type) to be worn

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PREPARATION: The following must be in place before work starts

- Appropriate "habitat" to be erected before undertaking this work.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check that personnel with cuts and abrasions have had them suitably dressed and protected before starting work.
- Decontamination/disposal area is to be set up.
- The precautions from the chemical datasheets are to be listed on the Job Safety Plan.

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EXECUTION: The following must be observed during the work

- Contaminated equipment and scale/waste to be handled and disposed of in accordance with the relevant HSE guidelines.
- Daily contamination checks to be carried out on worksite and personnel. Personnel are also to be checked before meal breaks.
- Ensure personnel in surrounding area are warned before the activity starts.
- First entry into the vessel shall be made by the Radiation Protection Supervisor (RPS), and radioactivity to be monitored.
- NORM is to be disposed of in accordance with HSE guidelines.

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4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



04.4 Title: **Pyrophoric Scale**

PERMIT NO:

Activity No. Activity Description

04.4 Working with Pyrophoric Scale (except for scale encountered during pigging operations).

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

20 Pyrophoric Scale

Hazards due to Ignition Potential at Work Location:

11.2 Naked Flame (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Deluge system to be operational and the means of manual initiation known and understood by all members of the work party.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Appropriate PPE, from chemical datasheets/Chemtags to be worn.
- Impact Grade 1 eye protection (goggles) to be worn

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check that a dedicated fire hose, pressurised to the nozzle is available.
- Check that personnel with cuts and abrasions have had them suitably dressed and protected before starting work.
- Decontamination/disposal area is to be set up.
- Depressure hoses when not in use or left unattended.
- Disposal of pyrophoric waste shall be in marked consignments and in accordance with the appropriate HSE procedures.
- Eye wash station to be established close to worksite.
- Fire and smoke detectors are to be inhibited in the work area.
- Flammable / combustible material and passive fire protection coating is to be removed from work surface and surrounding area.
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Provide emergency shower close to worksite, with water protected from heating by sun.
- The precautions from the chemical datasheets are to be listed on the Job Safety Plan.
- When pyrophoric iron oxide/sulphide occurs, it can take various forms, e.g. loose scales, fine coatings, etc. Inspection of scale required before work commences.

EXECUTION: The following must be observed during the work

- Continuous gas monitoring to be undertaken.
- Daily contamination checks to be carried out on worksite and personnel. Personnel are also to be checked before meal breaks.
- Scale to be thoroughly wetted before work starts and kept wet during work.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



05.1 Title: Work that affects ESD and Fire & Gas system

PERMIT NO: []

Activity No. Activity Description

05.1 Work that affects ESD & Fire & Gas systems

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 21 Extra Low Voltage (ELV)
22 Low voltage (LV)
78 Failure of small bore pipework
79 Static discharge to electronic equipment
81 Reduction of Fire & Gas detection facilities
83 Loss of blowdown or relief systems
94 Loss of drains & vents

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Check that any temporary equipment required for the work does not effect the operation of fire, gas and smoke detectors. []
- Confirm that remaining blowdown/relief capacity can accommodate the process inventory. If remaining capacity is not adequate contact Responsible Supervisor. []
- Only one loop/zone to be taken out of action at a time. Where this is not possible, alternative arrangements to be provided. []
- System to be isolated and Isolation Certificate kept with Permit. []

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Rubber gloves rated for the appropriate electrical voltage to be available and used when required []

PREPARATION: The following must be in place before work starts

- Alternative drain paths to be provided where possible. []
- Alternative means of providing emergency power or lighting to be arranged. []
- Alternative power supplies have been provided where necessary. []
- Before draining down vessels to ensure the system can handle the expected volumes. Ensure there are no concealed overflow mechanisms from the drains to surrounding area. []
- Check all drawings before work starts for additional hazards due to common headers on drain/vent systems. []
- Check all non-certified electrical equipment is tagged and certified for use. []
- Check equipment is isolated and earthed in accordance with Electrical Safety Rules. []
- Drip trays/savealls to be in place around equipment being worked on []
- Instruments and sensing lines not capable of withstanding full test pressure are removed and blanked. []
- Insulated hook to be provided at worksite. []
- Provide an insulating mat for persons to stand on when working on live terminals. []
- Relief valve discharge paths to be directed so that they do not endanger plant and personnel if the relief valve lifts. []
- Residual current earth leakage devices to be in place. []



EXECUTION: The following must be observed during the work

- Alternative control facilities to be in place on affected equipment.
- Equipment to be proved discharged and electrically dead before any work may proceed.
- Lifting operations are not allowed over unprotected high pressure pipework.
- Only insulated tools to be used.
- Process equipment is not to be used for hand/foot holds or for supporting lifting gear or scaffolding.
- Retaining fasteners should not be removed until flanges etc. have been broken and pipework equipment proved free of residual pressure.
- The assembly of compression fittings only to be undertaken by competent persons. Careful checks to be made to avoid mis-match of fittings due to metrication or different makers' parts on the same fittings.
- Wear an Anti static wrist strap when working on electronic systems or components.
- Whilst working on or near mechanical equipment, electrical switchgear, instruments and small bore pipework, care must be taken to avoid accidental damage. Any incident which causes damage must be reported to the control room.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



05.2 Title: **Work that affects Process & Machinery Systems**

PERMIT NO:

Activity No. Activity Description

05.2 Work tha affects the availability of Process & Machinery Control systems

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 21 Extra Low Voltage (ELV)
- 22 Low voltage (LV)
- 78 Failure of small bore pipework
- 79 Static discharge to electronic equipment

Hazards due to Ignition Potential at Work Location:

- 15.2 Sparks (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Only one loop/zone to be taken out of action at a time. Where this is not possible, alternative arrangements to be provided.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Rubber gloves rated for the appropriate electrical voltage to be available and used when required

PREPARATION: The following must be in place before work starts

- Alternative means of providing emergency power or lighting to be arranged.
- Alternative power supplies have been provided where necessary.
- Check all non-certified electrical equipment is tagged and certified for use.
- Check equipment is isolated and earthed in accordance with Electrical Safety Rules.
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Instruments and sensing lines not capable of withstanding full test pressure are removed and blanked.
- Insulated hook to be provided at worksite.
- Provide a portable fire extinguisher at the worksite.
- Provide an insulating mat for persons to stand on when working on live terminals.
- Residual current earth leakage devices to be in place.

EXECUTION: The following must be observed during the work

- Alternative control facilities to be in place on affected equipment.
- Equipment to be proved discharged and electrically dead before any work may proceed.
- Lifting operations are not allowed over unprotected high pressure pipework.
- Only insulated tools to be used.
- Process equipment is not to be used for hand/foot holds or for supporting lifting gear or scaffolding.
- Retaining fasteners should not be removed until flanges etc. have been broken and pipework equipment proved free of residual pressure.
- The assembly of compression fittings only to be undertaken by competent persons. Careful checks to be made to avoid



- mis-match of fittings due to metrication or different makers' parts on the same fittings.
- Wear an Anti static wrist strap when working on electronic systems or components.
- Whilst working on or near mechanical equipment, electrical switchgear, instruments and small bore pipework, care must be taken to avoid accidental damage. Any incident which causes damage must be reported to the control room.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: Signature: Date:

Name of Responsible Supervisor: Signature: Date:



06.1 Title: **Cutting Hydrocarbon or Haz fluid pipe systems**

PERMIT NO:

Activity No. Activity Description

06.1 Work that involves cutting pipe on systems containing hydrocarbons or hazardous fluids.

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 28 Hydrocarbon release
- 77 Stored mechanical energy
- 78 Failure of small bore pipework
- 83 Loss of blowdown or relief systems
- 94 Loss of drains & vents

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Confirm that remaining blowdown/relief capacity can accommodate the process inventory. If remaining capacity is not adequate contact Responsible Supervisor.
- Ensure that hydrocarbon bleeds and vents discharge to areas where they will not be a hazard. Vents and bleeds to be shut after checks for pressure build-up are complete.
- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Alternative drain paths to be provided where possible.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Before draining down vessels to ensure the system can handle the expected volumes. Ensure there are no concealed overflow mechanisms from the drains to surrounding area.
- Check all drawings before work starts for additional hazards due to common headers on drain/vent systems.
- Drip trays/savealls to be in place around equipment being worked on
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Instruments and sensing lines not capable of withstanding full test pressure are removed and blanked.
- Isolate systems and prove de-pressurised before starting work.
- Relief valve discharge paths to be directed so that they do not endanger plant and personnel if the relief valve lifts.
- Sealable containers are to be used for disposal of solid residue.
- Supply of absorbent granules to be provided on site to prevent the spread of any spillage.

EXECUTION: The following must be observed during the work

- Approved spring compressor to be available and used to control release of spring pressure.
- Lifting operations are not allowed over unprotected high pressure pipework.



- Process equipment is not to be used for hand/foot holds or for supporting lifting gear or scaffolding.
- Retaining fasteners should not be removed until flanges etc. have been broken and pipework equipment proved free of residual pressure.
- System to be depressurised before repairing leaks except for approved tightening during Nitrogen/Helium leak testing.
- The assembly of compression fittings only to be undertaken by competent persons. Careful checks to be made to avoid mis-match of fittings due to metrication or different makers' parts on the same fittings.
- Whilst working on or near mechanical equipment, electrical switchgear, instruments and small bore pipework, care must be taken to avoid accidental damage. Any incident which causes damage must be reported to the control room.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: Signature: Date:

Name of Responsible Supervisor: Signature: Date:



06.2 Title: Breaching hydrocarbon or haz.fluid systems

PERMIT NO: []

Activity No. Activity Description

06.2 Work that involves unbolting flanges on systems containing hydrocarbons or hazardous fluids

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 28 Hydrocarbon release
47 Slipping hazards
77 Stored mechanical energy
78 Failure of small bore pipework

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Ensure that hydrocarbon bleeds and vents discharge to areas where they will not be a hazard. Vents and bleeds to be shut after checks for pressure build-up are complete. []
System to be isolated and Isolation Certificate kept with Permit. []

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible. []
Before draining down vessels to ensure the system can handle the expected volumes. Ensure there are no concealed overflow mechanisms from the drains to surrounding area. []
Drip trays/savealls to be in place around equipment being worked on []
Gas testing is to be carried out immediately before start of Hot Work for each shift. []
Instruments and sensing lines not capable of withstanding full test pressure are removed and blanked. []
Isolate systems and prove de-pressurised before starting work. []
Sealable containers are to be used for disposal of solid residue. []
Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard. []
Supply of absorbent granules to be provided on site to prevent the spread of any spillage. []

EXECUTION: The following must be observed during the work

- Approved spring compressor to be available and used to control release of spring pressure. []
Lifting operations are not allowed over unprotected high pressure pipework. []
Process equipment is not to be used for hand/foot holds or for supporting lifting gear or scaffolding. []
Retaining fasteners should not be removed until flanges etc. have been broken and pipework equipment proved free of residual pressure. []
System to be depressurised before repairing leaks except for approved tightening during Nitrogen/Helium leak testing. []
The assembly of compression fittings only to be undertaken by competent persons. Careful checks to be made to avoid []



- mis-match of fittings due to metrication or different makers' parts on the same fittings.
- Whilst working on or near mechanical equipment, electrical switchgear, instruments and small bore pipework, care must be taken to avoid accidental damage. Any incident which causes damage must be reported to the control room.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: Signature: Date:

Name of Responsible Supervisor: Signature: Date:



06.3 Title: Shotblasting

PERMIT NO:

Activity No. Activity Description

06.3 Shot blasting

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 33 Dust and Water Borne Particles
- 46 Tripping hazards
- 47 Slipping hazards
- 49 High pressure jet
- 57 Noise
- 71 Pressurised hose failure

Hazards due to Ignition Potential at Work Location:

- 15.2 Sparks (IPA)

Additional Hazards:

- 28 Hydrocarbon release
- 36 Flammable materials

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Ensure that hydrocarbon bleeds and vents discharge to areas where they will not be a hazard. Vents and bleeds to be shut after checks for pressure build-up are complete.
- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Approved hearing protection to be worn.
- Impact Grade 1 eye protection (goggles) to be worn
- Respiratory protection type (specify type) to be worn
- The following personal protective equipment is to be worn by the Work Party:
- air-fed blasting helmet;
- blaster suit;
- safety boots with upper foot protection; and
- gauntlet type gloves.

PREPARATION: The following must be in place before work starts

- Air compressor must be stopped before being left unattended if not tied into Shutdown System.
- Anyone struck by a high pressure jet on the skin must seek medical attention even if no apparent wound is visible.
- Arrangements for signaling emergency situations (such as shutting off control air) to be in place.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Before draining down vessels to ensure the system can handle the expected volumes. Ensure there are no concealed overflow mechanisms from the drains to surrounding area.
- Check pins and whipchecks are fitted across all crows foot connectors.
- Check that adjacent equipment is protected from accidental damage.
- Check that extraction/ventilation system is operational. Work to stop on failure of extraction system.
- Drip trays/savealls to be in place around equipment being worked on
- During the filling of storage tanks levels to be checked at regular intervals relative to the size of tank.
- Eye wash station to be established close to worksite.
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- HP Pump must be stopped before being left unattended.
- Isolate systems and prove de-pressurised before starting work.



- Protect exposed threads.
- Provide a portable fire extinguisher at the worksite.
- Screens are to be provided to protect passing personnel.
- Sealable containers are to be used for disposal of solid residue.
- Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard.
- Supply of absorbent granules to be provided on site to prevent the spread of any spillage.
- Tripping hazard to be mechanically removed or bridged and marked.

EXECUTION: The following must be observed during the work

- Check that all air intakes are protected from gas/fumes/air borne particles, etc.
- Flammable substances not to be used within 1 metre of hot surfaces.
- Guns or nozzles are not to be removed whilst pump is operating.
- Hoses are not to be kinked during work.
- Items to be cleaned/blasted in a designated area if possible.
- Jet not to be pointed at anyone- even if switched off. No-one to walk in front of nozzle.
- Surfaces containing asbestos must not be cleaned by blasting or mechanical de-scaling.
- System to be depressurised before repairing leaks except for approved tightening during Nitrogen/Helium leak testing.
- Thickness and condition of workpiece to be checked to ensure it will not be damaged by the work.
- Tools to be de-energised/de-pressurised when not in use and before carrying out any maintenance.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: _____ Signature: _____ Date: _____

Name of Responsible Supervisor: _____ Signature: _____ Date: _____



06.4 Title: Power/Hand Tools

PERMIT NO:

Activity No. Activity Description

06.4 Power / Hand tools that may create a spark between surface and tool.

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 15 Mechanical Sparks
33 Dust and Water Borne Particles
46 Tripping hazards
57 Noise
60 Vibration
71 Pressurised hose failure
76 Rotating machinery

Hazards due to Ignition Potential at Work Location:

- 15.2 Sparks (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Approved hearing protection to be worn.
- Impact Grade 1 eye protection (goggles) to be worn
- Respiratory protection type (specify type) to be worn

Three empty rectangular boxes for initials.

PREPARATION: The following must be in place before work starts

- Arrangements for signaling emergency situations (such as shutting off control air) to be in place.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check pins and whipchecks are fitted across all crows foot connectors.
- Check safety guards are fitted to rotating shafts and discs.
- Check that extraction/ventilation system is operational. Work to stop on failure of extraction system.
- Drip trays/savealls to be in place around equipment being worked on
- Eye wash station to be established close to worksite.
- Flammable / combustible material and passive fire protection coating is to be removed from work surface and surrounding area.
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Provide a portable fire extinguisher at the worksite.
- Screens are to provided to protect passing personnel.
- Tripping hazard to be mechanically removed or bridged and marked.
- Use only copper/beryllium or phosphor bronze needles in hazardous areas.

Twelve empty rectangular boxes for initials.

EXECUTION: The following must be observed during the work



- Check that all air intakes are protected from gas/fumes/air borne particles, etc.
- Hoses are not to be kinked during work.
- If sense of touch deteriorates, stop work until it returns.
- Items to be cleaned/blasted in a designated area if possible.
- Machine to be in view when started.
- Surfaces containing asbestos must not be cleaned by blasting or mechanical de-scaling.
- Tools to be de-energised/de-pressurised when not in use and before carrying out any maintenance.
- Where necessary, workpiece and/or tool is to be kept cool with water.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: Signature: Date:

Name of Responsible Supervisor: Signature: Date:



06.5 Title: High Pressure Water Jetting

PERMIT NO: []

Activity No.	Activity Description
06.5	High pressure (HP) water jetting.

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 33 Dust and Water Borne Particles
- 46 Tripping hazards
- 47 Slipping hazards
- 49 High pressure jet
- 57 Noise
- 71 Pressurised hose failure

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Approved hearing protection to be worn. []
- Impact Grade 1 eye protection (goggles) to be worn []
- Respiratory protection type (specify type) to be worn []
- Rubber gloves and boots with upper foot protection, face shields and suitable coveralls to be worn by work party. []

PREPARATION: The following must be in place before work starts

- Anyone struck by a high pressure jet on the skin must seek medical attention even if no apparent wound is visible. []
- Arrangements for signaling emergency situations (such as shutting off control air) to be in place. []
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible. []
- Before draining down vessels to ensure the system can handle the expected volumes. Ensure there are no concealed overflow mechanisms from the drains to surrounding area. []
- Check pins and whipchecks are fitted across all crows foot connectors. []
- Check that adjacent equipment is protected from accidental damage. []
- Check that extraction/ventilation system is operational. Work to stop on failure of extraction system. []
- Check that the fail safe valve has been checked and is working. []
- Check that the length of the metal nozzle is greater than the diameter of the pipe to be cleaned. []
- Check the electrical conductivity of hoses, equipment and lances, to ensure that they are electrically bonded to earth. Test the earth with suitable test equipment before job starts. []
- Drip trays/savealls to be in place around equipment being worked on []
- Eye wash station to be established close to worksite. []
- Gas testing is to be carried out immediately before start of Hot Work for each shift. []
- HP Pump must be stopped before being left unattended. []
- Protect exposed threads. []
- Provide a portable fire extinguisher at the worksite. []
- Screens are to be provided to protect passing personnel. []
- Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard. []
- Tripping hazard to be mechanically removed or bridged and marked. []



EXECUTION: The following must be observed during the work

- Check that all air intakes are protected from gas/fumes/air borne particles, etc.
- Ensure personnel in surrounding area are warned before the activity starts.
- Guns or nozzles are not to be removed whilst pump is operating.
- Hoses are not to be kinked during work.
- Items to be cleaned/blasted in a designated area if possible.
- Jet not to be pointed at anyone- even if switched off. No-one to walk in front of nozzle.
- Surfaces containing asbestos must not be cleaned by blasting or mechanical de-scaling.
- Thickness and condition of workpiece to be checked to ensure it will not be damaged by the work.
- Tools to be de-energised/de-pressurised when not in use and before carrying out any maintenance.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



06.6 Title: **Painting (Hand/Spray)**

PERMIT NO:

Activity No. Activity Description

06.6 Paint (hand and spray)

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 29 Hazardous substances
- 36 Flammable materials
- 46 Tripping hazards
- 49 High pressure jet
- 71 Pressurised hose failure

Hazards due to Ignition Potential at Work Location:

- 11.2 Naked Flame (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Deluge system to be operational and the means of manual initiation known and understood by all members of the work party.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Appropriate PPE, from chemical datasheets/Chemtags to be worn.
- Respiratory protection type (specify type) to be worn

PREPARATION: The following must be in place before work starts

- Anyone struck by a high pressure jet on the skin must seek medical attention even if no apparent wound is visible.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Before draining down vessels to ensure the system can handle the expected volumes. Ensure there are no concealed overflow mechanisms from the drains to surrounding area.
- Check pins and whipchecks are fitted across all crows foot connectors.
- Check that a dedicated fire hose, pressurised to the nozzle is available.
- Check that adjacent equipment is protected from accidental damage.
- Check the electrical conductivity of hoses, equipment and lances, to ensure that they are electrically bonded to earth. Test the earth with suitable test equipment before job starts.
- Depressure hoses when not in use or left unattended.
- Drip trays/savealls to be in place around equipment being worked on
- During the filling of storage tanks levels to be checked at regular intervals relative to the size of tank.
- Eye wash station to be established close to worksite.
- Fire and smoke detectors are to be inhibited in the work area.
- Flammable / combustible material and passive fire protection coating is to be removed from work surface and surrounding area.
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- HP Pump must be stopped before being left unattended.
- Neutralisation spill kit appropriate to substance to be available at worksite.
- Only quantities of substances required for immediate use to be kept on site.
- Protect exposed threads.
- Provide a portable fire extinguisher at the worksite.
- Sealable containers are to be used for disposal of solid residue.
- Supply of absorbent granules to be provided on site to prevent the spread of any spillage.



- The precautions from the chemical datasheets are to be listed on the Job Safety Plan.
- Tripping hazard to be mechanically removed or bridged and marked.

EXECUTION: The following must be observed during the work

- Continuous gas monitoring to be undertaken.
- Flammable substances not to be used within 1 metre of hot surfaces.
- Guns or nozzles are not to be removed whilst pump is operating.
- Hoses are not to be kinked during work.
- Items to be cleaned/blasted in a designated area if possible.
- Jet not to be pointed at anyone- even if switched off. No-one to walk in front of nozzle.
- Mix substances in well ventilated areas.
- No paint spraying within one metre of air intake and ventilation systems.
- Paint/oil drums to be decanted in a contained area, e.g. bund/ save all/ drip tray
- Thickness and condition of workpiece to be checked to ensure it will not be damaged by the work.
- Tools to be de-energised/de-pressurised when not in use and before carrying out any maintenance.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



06.7 Title: Non Breaching maintenance.

PERMIT NO: []

Activity No. Activity Description

06.7 Engineering and routine maintenance work which does not involve unbolting flanges or cutting into systems which have contained hydrocarbons or hazardous fluids.

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 46 Tripping hazards
47 Slipping hazards
50 Sharp/abrasive object
54 Heavy or awkward object

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check that sharp edges have been removed where practicable or padding protection fitted.
- Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard.
- Tripping hazard to be mechanically removed or bridged and marked.

[]
[]
[]
[]

EXECUTION: The following must be observed during the work

- Lifting operations are not allowed over unprotected high pressure pipework.

[]

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: Signature: Date:

Name of Responsible Supervisor: Signature: Date:



06.9 Title: Leak Clamping of Oil/Gas lines

PERMIT NO:

Activity No.	Activity Description
06.9	Leak clamping of oil/gas flowlines

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:
28 Hydrocarbon release

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Ensure that hydrocarbon bleeds and vents discharge to areas where they will not be a hazard. Vents and bleeds to be shut after checks for pressure build-up are complete.
- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Before draining down vessels to ensure the system can handle the expected volumes. Ensure there are no concealed overflow mechanisms from the drains to surrounding area.
- Drip trays/savealls to be in place around equipment being worked on
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Isolate systems and prove de-pressurised before starting work.
- Sealable containers are to be used for disposal of solid residue.
- Supply of absorbent granules to be provided on site to prevent the spread of any spillage.

EXECUTION: The following must be observed during the work

- System to be depressurised before repairing leaks except for approved tightening during Nitrogen/Helium leak testing.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



06.10 Title: Beam Pump Maintenance Activities

PERMIT NO:

Activity No. Activity Description

06.10 Beam pump maintenance activities

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 28 Hydrocarbon release
- 46 Tripping hazards
- 47 Slipping hazards

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Ensure that hydrocarbon bleeds and vents discharge to areas where they will not be a hazard. Vents and bleeds to be shut after checks for pressure build-up are complete.
- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Before draining down vessels to ensure the system can handle the expected volumes. Ensure there are no concealed overflow mechanisms from the drains to surrounding area.
- Drip trays/savealls to be in place around equipment being worked on
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Isolate systems and prove de-pressurised before starting work.
- Sealable containers are to be used for disposal of solid residue.
- Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard.
- Supply of absorbent granules to be provided on site to prevent the spread of any spillage.
- Tripping hazard to be mechanically removed or bridged and marked.

EXECUTION: The following must be observed during the work

- System to be depressurised before repairing leaks except for approved tightening during Nitrogen/Helium leak testing.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



06.11 Title: **Polethene Lining of Pipelines & Flowlines**

PERMIT NO:

Activity No.	Activity Description
06.11	Polethene Lining of Pipelines and Flowlines

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 15.1 Sparks (HC)
- 28 Hydrocarbon release
- 59 Trapping hazard
- 75 Lifting equipment failure

Hazards due to Ignition Potential at Work Location:

- 15.2 Sparks (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Ensure that hydrocarbon bleeds and vents discharge to areas where they will not be a hazard. Vents and bleeds to be shut after checks for pressure build-up are complete.
- Lifting equipment, including webbing slings, to be certified and marked with safe working load and current colour code.
- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Before draining down vessels to ensure the system can handle the expected volumes. Ensure there are no concealed overflow mechanisms from the drains to surrounding area.
- Carry out visual checks of lifting area for obstructions and interference, before lifting.
- Drip trays/savealls to be in place around equipment being worked on
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Isolate systems and prove de-pressurised before starting work.
- Provide a portable fire extinguisher at the worksite.
- Sealable containers are to be used for disposal of solid residue.
- Supply of absorbent granules to be provided on site to prevent the spread of any spillage.

EXECUTION: The following must be observed during the work

- Check that slings are spaced in accordance with Lifting Manual.
- Continuous gas monitoring to be undertaken.
- Guidance lines are to be attached to heavy objects suspended from cranes.
- Process equipment is not to be used for hand/foot holds or for supporting lifting gear or scaffolding.
- System to be depressurised before repairing leaks except for approved tightening during Nitrogen/Helium leak testing.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



07.1 Title: Working at height.

PERMIT NO:

Activity No. Activity Description

07.1 Working with foot level at a height greater than 2 metres, (e.g. mobile work platforms,) except on approved walkways and scaffolds.

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 55 Working at height
- 62 Severe/adverse weather
- 63 Falling objects
- 65 Overhead power lines

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Isolate transmitting aerials and keep Isolation Certificate with the permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Fall arrest equipment must be worn and used by all persons working from ladders or work places from which they might fall more than two metres.
- Safety harness attached to a safe anchor point to be worn.
- Safety harness with fall arrestor attached to a safe anchor point is to be worn.

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Beware of objects falling from above the worksite. Take care not to drop objects when working at height.

EXECUTION: The following must be observed during the work

- A minimum of two persons is required for this work.
- Ensure personnel in surrounding area are warned before the activity starts.
- Ladders (when used) to be secured.
- Lifting to stop if the load cannot be seen clearly.
- Mobile cranes and mobile access towers, to be lowered and secured in transit position when moving.
- Only essential work at height to be carried out in darkness. All hazards to be assessed before starting work.
- Process equipment is not to be used for hand/foot holds or for supporting lifting gear or scaffolding.
- Tools and equipment to be secured to avoid their being dropped.
- When work on overhead cables is in progress, no passage underneath the cables is allowed except via approved routes protected by netting slung under the cables.
- Work at height in exposed areas is to stop when mean wind speed exceeds 30 kts.
- Work at height to stop if there is a possibility of a lightning strike or sand storm.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



08.1 Title: Scaffolding erection / dismantling.

PERMIT NO:

Activity No. Activity Description

08.1 Erection or dismantling of scaffolding in hydrocarbon production facilities close to pressurised plant and equipment or overhead power lines.

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 54 Heavy or awkward object
- 55 Working at height
- 62 Severe/adverse weather

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Area Authority is to agree the positioning of scaffolding when it needs to be adjacent to process systems.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Fall arrest equipment must be worn and used by all persons working from ladders or work places from which they might fall more than two metres.
- Safety harness attached to a safe anchor point to be worn.
- Safety harness with fall arrestor attached to a safe anchor point is to be worn.

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Beware of objects falling from above the worksite. Take care not to drop objects when working at height.

EXECUTION: The following must be observed during the work

- A minimum of two persons is required for this work.
- Ladders (when used) to be secured.
- Lifting operations are not allowed over unprotected high pressure pipework.
- Lifting to stop if the load cannot be seen clearly.
- Only essential work at height to be carried out in darkness. All hazards to be assessed before starting work.
- Process equipment is not to be used for hand/foot holds or for supporting lifting gear or scaffolding.
- Tools and equipment to be secured to avoid their being dropped.
- When erecting or dismantling scaffolding, all equipment must be lowered or carried to ground level and not thrown.
- Work at height in exposed areas is to stop when mean wind speed exceeds 30 kts.
- Work at height to stop if there is a possibility of a lightning strike or sand storm.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



09.1 Title: Lifting operations.

PERMIT NO:

Activity No. Activity Description

09.1 Operations where heavy machinery e.g. cranes/crane loads, mechanical excavators, trucks etc. could pass over, or come into contact with, pressurised hydrocarbon systems or power lines.

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 46 Tripping hazards
- 53 Inertia of large object
- 59 Trapping hazard
- 65 Overhead power lines
- 75 Lifting equipment failure

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Lifting equipment, including webbing slings, to be certified and marked with safe working load and current colour code.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Carry out visual checks of lifting area for obstructions and interference, before lifting.
- Tripping hazard to be mechanically removed or bridged and marked.

EXECUTION: The following must be observed during the work

- Check that slings are spaced in accordance with Lifting Manual.
- Guidance lines are to be attached to heavy objects suspended from cranes.
- If communication between signal men and lifting operator is not clear (due to noise or obstruction), an additional signalman must be appointed to relay information.
- Mobile cranes and mobile access towers, to be lowered and secured in transit position when moving.
- Process equipment is not to be used for hand/foot holds or for supporting lifting gear or scaffolding.
- When work on overhead cables is in progress, no passage underneath the cables is allowed except via approved routes protected by netting slung under the cables.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



10.1 Title: Pressure testing plant & equipment

PERMIT NO:

Activity No.	Activity Description
10.1	Hydrostatic pressure testing

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 46 Tripping hazards
- 71 Pressurised hose failure
- 73 Pressurised vessel or system failure
- 77 Stored mechanical energy
- 78 Failure of small bore pipework
- 94 Loss of drains & vents

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Air to be vented from high points during filling.
- Check structural supports for vessels and pipework are not overstressed when filled for hydrotest.
- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- When emptying system after test the possibility of drawing a vacuum and its effects are to be taken into account.

PREPARATION: The following must be in place before work starts

- Alternative drain paths to be provided where possible.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check all drawings before work starts for additional hazards due to common headers on drain/vent systems.
- Check blanks, spades and temporary fittings are rated to full test pressure.
- Check pins and whipchecks are fitted across all crows foot connectors.
- Check that two recently calibrated test gauges are fitted, one close to supply source and one close to a relief valve.
- Ensure that either one of the gauges is visible to the operator controlling the process.
- Drip trays/savealls to be in place around equipment being worked on
- If water from the Fire Main is to be used to fill the system, obtain Area Authority approval.
- Instruments and sensing lines not capable of withstanding full test pressure are removed and blanked.
- Relief valve discharge paths to be directed so that they do not endanger plant and personnel if the relief valve lifts.
- There must a relief valve set below the maximum design pressure of the system.
- Tripping hazard to be mechanically removed or bridged and marked.

EXECUTION: The following must be observed during the work

- Approved spring compressor to be available and used to control release of spring pressure.



- Do not approach equipment being tested until reasonable time has elapsed and no leaks are visible.
- Ensure personnel in surrounding area are warned before the activity starts.
- Hoses are not to be kinked during work.
- If there is an alarm, the system under test is not to be depressured unless this is stated on the Permit or instructed by Area Authority.
- Lifting operations are not allowed over unprotected high pressure pipework.
- No overhead work or lifting operations allowed over the area whilst test in progress.
- Process equipment is not to be used for hand/foot holds or for supporting lifting gear or scaffolding.
- Rate of build-up of pressure and pause periods to be stated in test procedure. Test pressure not to be held any longer than necessary.
- Retaining fasteners should not be removed until flanges etc. have been broken and pipework equipment proved free of residual pressure.
- System is not to be shock loaded. Tightening, slackening or hammering of any item under pressure is prohibited.
- System to be depressurised before repairing leaks except for approved tightening during Nitrogen/Helium leak testing.
- The assembly of compression fittings only to be undertaken by competent persons. Careful checks to be made to avoid mis-match of fittings due to metrication or different makers' parts on the same fittings.
- When testing with hydrocarbons purge air out of vessel using water or inert gas (nitrogen) during commissioning / recommissioning phase.
- Whilst working on or near mechanical equipment, electrical switchgear, instruments and small bore pipework, care must be taken to avoid accidental damage. Any incident which causes damage must be reported to the control room.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: Signature: Date:

Name of Responsible Supervisor: Signature: Date:



10.2 Title: **Systems & equipment commissioning (E&M)**

PERMIT NO:

Activity No. Activity Description

10.2 Systems and equipment commissioning (Mechanical or Electrical).

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 21 Extra Low Voltage (ELV)
- 22 Low voltage (LV)
- 57 Noise
- 76 Rotating machinery
- 77 Stored mechanical energy
- 78 Failure of small bore pipework

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Only one loop/zone to be taken out of action at a time. Where this is not possible, alternative arrangements to be provided.
- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Approved hearing protection to be worn.
- Rubber gloves rated for the appropriate electrical voltage to be available and used when required

PREPARATION: The following must be in place before work starts

- Alternative means of providing emergency power or lighting to be arranged.
- Alternative power supplies have been provided where necessary.
- Arrangements for signaling emergency situations (such as shutting off control air) to be in place.
- Check all non-certified electrical equipment is tagged and certified for use.
- Check equipment is isolated and earthed in accordance with Electrical Safety Rules.
- Check safety guards are fitted to rotating shafts and discs.
- Instruments and sensing lines not capable of withstanding full test pressure are removed and blanked.
- Insulated hook to be provided at worksite.
- Provide an insulating mat for persons to stand on when working on live terminals.
- Residual current earth leakage devices to be in place.

EXECUTION: The following must be observed during the work

- Approved spring compressor to be available and used to control release of spring pressure.
- Equipment to be proved discharged and electrically dead before any work may proceed.
- Lifting operations are not allowed over unprotected high pressure pipework.
- Machine to be in view when started.



- Only insulated tools to be used.
- Process equipment is not to be used for hand/foot holds or for supporting lifting gear or scaffolding.
- Retaining fasteners should not be removed until flanges etc. have been broken and pipework equipment proved free of residual pressure.
- The assembly of compression fittings only to be undertaken by competent persons. Careful checks to be made to avoid mis-match of fittings due to metrication or different makers' parts on the same fittings.
- Tools to be de-energised/de-pressurised when not in use and before carrying out any maintenance.
- Wear an Anti static wrist strap when working on electronic systems or components.
- When testing with hydrocarbons purge air out of vessel using water or inert gas (nitrogen) during commissioning / recommissioning phase.
- Whilst working on or near mechanical equipment, electrical switchgear, instruments and small bore pipework, care must be taken to avoid accidental damage. Any incident which causes damage must be reported to the control room.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: Signature: Date:

Name of Responsible Supervisor: Signature: Date:



10.3 Title: Decommissioning

PERMIT NO:

Activity No.	Activity Description
10.3	Decommissioning (Mechanical or Electrical)

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 21 Extra Low Voltage (ELV)
- 22 Low voltage (LV)
- 23 Stored electrical charge
- 28 Hydrocarbon release
- 77 Stored mechanical energy
- 78 Failure of small bore pipework

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Ensure that hydrocarbon bleeds and vents discharge to areas where they will not be a hazard. Vents and bleeds to be shut after checks for pressure build-up are complete.
- Only one loop/zone to be taken out of action at a time. Where this is not possible, alternative arrangements to be provided.
- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Rubber gloves rated for the appropriate electrical voltage to be available and used when required

PREPARATION: The following must be in place before work starts

- Alternative means of providing emergency power or lighting to be arranged.
- Alternative power supplies have been provided where necessary.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Before draining down vessels to ensure the system can handle the expected volumes. Ensure there are no concealed overflow mechanisms from the drains to surrounding area.
- Check all non-certified electrical equipment is tagged and certified for use.
- Check equipment is isolated and earthed in accordance with Electrical Safety Rules.
- Drip trays/savealls to be in place around equipment being worked on
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Instruments and sensing lines not capable of withstanding full test pressure are removed and blanked.
- Insulated hook to be provided at worksite.
- Isolate systems and prove de-pressurised before starting work.
- Provide an insulating mat for persons to stand on when working on live terminals.
- Residual current earth leakage devices to be in place.
- Sealable containers are to be used for disposal of solid residue.
- Supply of absorbent granules to be provided on site to prevent the spread of any spillage.



EXECUTION: The following must be observed during the work

- Approved spring compressor to be available and used to control release of spring pressure.
- Equipment to be proved discharged and electrically dead before any work may proceed.
- Lifting operations are not allowed over unprotected high pressure pipework.
- Only insulated tools to be used.
- Process equipment is not to be used for hand/foot holds or for supporting lifting gear or scaffolding.
- Retaining fasteners should not be removed until flanges etc. have been broken and pipework equipment proved free of residual pressure.
- System to be depressurised before repairing leaks except for approved tightening during Nitrogen/Helium leak testing.
- The assembly of compression fittings only to be undertaken by competent persons. Careful checks to be made to avoid mis-match of fittings due to metrication or different makers' parts on the same fittings.
- Wear an Anti static wrist strap when working on electronic systems or components.
- Whilst working on or near mechanical equipment, electrical switchgear, instruments and small bore pipework, care must be taken to avoid accidental damage. Any incident which causes damage must be reported to the control room.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: Signature: Date:

Name of Responsible Supervisor: Signature: Date:



11.1 Title: Use of temporary diesel engines.

PERMIT NO:

Activity No. Activity Description

11.1 Operation of protected portable diesel engines which are not tied into the fire and gas system

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 36 Flammable materials
57 Noise
76 Rotating machinery

Hazards due to Ignition Potential at Work Location:

- 15.2 Sparks (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Approved hearing protection to be worn.

Empty box for PPE confirmation

PREPARATION: The following must be in place before work starts

- Arrangements for signaling emergency situations...
Check safety guards...
Drip trays/savealls...
Gas testing...
Machine to be located...
Provide a portable fire extinguisher...
The following documents to be available...
The following rules are to be observed when siting a diesel engine...

Vertical column of empty boxes for preparation checklist

EXECUTION: The following must be observed during the work

- Flammable substances not to be used within 1 metre of hot surfaces.
Machine to be in view when started.
Tools to be de-energised/de-pressurised when not in use...

Vertical column of empty boxes for execution checklist



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



11.2 Title: Use of non IS equipment.

PERMIT NO: []

Activity No. Activity Description
11.2 Use of non-Intrinsically Safe equipment.

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 46 Tripping hazards
47 Slipping hazards

Hazards due to Ignition Potential at Work Location:

- 15.2 Sparks (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Provide a portable fire extinguisher at the worksite.
- Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard.
- Tripping hazard to be mechanically removed or bridged and marked.

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EXECUTION: The following must be observed during the work

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: Signature: Date:

Name of Responsible Supervisor: Signature: Date:



11.3 Title: Use of I S test/portable equipment

PERMIT NO:

Activity No. Activity Description

11.3 Use of Intrinsically Safe test/portable equipment.

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 46 Tripping hazards
- 47 Slipping hazards
- 57 Noise

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Approved hearing protection to be worn.

PREPARATION: The following must be in place before work starts

- Arrangements for signaling emergency situations (such as shutting off control air) to be in place.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard.
- Tripping hazard to be mechanically removed or bridged and marked.

EXECUTION: The following must be observed during the work

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: _____ Signature: _____ Date: _____

Name of Responsible Supervisor: _____ Signature: _____ Date: _____



11.4 Title: Use of cameras equipped with flash.

PERMIT NO:

Activity No.	Activity Description
11.4	Use of cameras equipped with flash.

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Any requirement to use flash to be clearly stated in the Permit Work Description; the Area Authority to be made aware and appropriate detector heads isolated.

EXECUTION: The following must be observed during the work

- Do not install or remove batteries in hazardous areas.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: _____ Signature: _____ Date: _____

Name of Responsible Supervisor: _____ Signature: _____ Date: _____



12.1 Title: Excavation using hand or mechanised tools

PERMIT NO: []

Activity No. Activity Description

12.1 Excavation using hand tools or mechanised equipment to a depth greater than 300mm (Han excavation to 300mm depth required before mechanised equipment is used in areas where pipes or cables may be present)

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 52 Unguarded Opening
64 Excavation collapse
89 Buried Services

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- A Permit to Work is required for all mechanised excavation work. For excavations in excess of 0.3m deep, or in the vicinity of pipework, cabling or foundations, an Excavation Certificate is required. []
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible. []
- Beaded or blunt edged tools are to be used when working near electrical cables. []
- Check that an Excavation Certificate has been raised and completed. []
- Check that the opening is fitted with guard rails and toeboards. []
- Identify location of underground services before excavation. If practicable, electrical cables to be de-energised and piping systems isolated and de-pressurised. []
- Personnel working close to unguarded openings are to wear a safety harness. []

EXECUTION: The following must be observed during the work

- Excavation side supports are only to be erected, modified or dismantled under the direct supervision of fully experienced and competent personnel. []
- The toe of the earth pile is to be at least 1.5 times excavation depth from the edge of the hole. []
- Whenever it is not reasonably practicable to erect rigid barriers and chain type barriers are used a sentry, with no other duties, shall be posted at each temporary chain barrier to warn personnel of the hazard. []



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



12.2 Title: Rebar cutting,bending & shuttering

PERMIT NO:

Activity No. Activity Description

12.2 Rebar cutting, bending, and installing shuttering (form work) and concrete pouring.

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 50 Sharp/abrasive object
- 52 Unguarded Opening
- 64 Excavation collapse

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Bending/cutting machines to be fitted with two STOP switches one operators side, one opposite side.
- Check that an Excavation Certificate has been raised and completed.
- Check that sharp edges have been removed where practicable or padding protection fitted.
- Check that the opening is fitted with guard rails and toeboards.
- Personnel working close to unguarded openings are to wear a safety harness.

EXECUTION: The following must be observed during the work

- Excavation side supports are only to be erected, modified or dismantled under the direct supervision of fully experienced and competent personnel.
- Shuttering / (form work) to be inspected by Supervisor before pouring concrete.
- The toe of the earth pile is to be at least 1.5 times excavation depth from the edge of the hole.
- Whenever it is not reasonably practicable to erect rigid barriers and chain type barriers are used a sentry, with no other duties, shall be posted at each temporary chain barrier to warn personnel of the hazard.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



12.3 Title: Construction activities not fabrication

PERMIT NO: []

Activity No. Activity Description

12.3 Engineering construction activities not involving welding burning or grinding

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 47 Slipping hazards
50 Sharp/abrasive object

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check that sharp edges have been removed where practicable or padding protection fitted.
- Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard.

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[]
[]

EXECUTION: The following must be observed during the work

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: Signature: Date:

Name of Responsible Supervisor: Signature: Date:



13.3 Title: Well Services

PERMIT NO:

Activity No. Activity Description

13.3 Well Services operations at locations where other groups are also working or where well site custodianship has not been transferred to the Well Services department

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 28 Hydrocarbon release
- 29 Hazardous substances
- 30 Toxic gas/fumes
- 35 Naturally Occuring Radioactive Material (NORM)

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Ensure that hydrocarbon bleeds and vents discharge to areas where they will not be a hazard. Vents and bleeds to be shut after checks for pressure build-up are complete.
- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Appropriate PPE, from chemical datasheets/Chemtags to be worn.
- Respiratory protection type (specify type) to be worn

PREPARATION: The following must be in place before work starts

- Appropriate "habitat" to be erected before undertaking this work.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Before draining down vessels to ensure the system can handle the expected volumes. Ensure there are no concealed overflow mechanisms from the drains to surrounding area.
- Check that extraction/ventilation system is operational. Work to stop on failure of extraction system.
- Check that personnel with cuts and abrasions have had them suitably dressed and protected before starting work.
- Check that self-rescue sets or BA are available for all members of work party.
- Decontamination/disposal area is to be set up.
- Drip trays/savealls to be in place around equipment being worked on
- Eye wash station to be established close to worksite.
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Isolate systems and prove de-pressurised before starting work.
- Neutralisation spill kit appropriate to substance to be available at worksite.
- Sealable containers are to be used for disposal of solid residue.
- Supply of absorbent granules to be provided on site to prevent the spread of any spillage.
- Tests for oxygen and/or harmful gases/fumes are to be undertaken
- The precautions from the chemical datasheets are to be listed on the Job Safety Plan.



EXECUTION: The following must be observed during the work

- A minimum of two persons is required for this work.
- Check that all air intakes are protected from gas/fumes/air borne particles, etc.
- Contaminated equipment and scale/waste to be handled and disposed of in accordance with the relevant HSE guidelines.
- Continuous monitoring for toxic gas to be carried out during execution of work.
- Daily contamination checks to be carried out on worksite and personnel. Personnel are also to be checked before meal breaks.
- Mix substances in well ventilated areas.
- NORM is to be disposed of in accordance with HSE guidelines.
- Paint/oil drums to be decanted in a contained area, e.g. bund/ save all/ drip tray
- System to be depressurised before repairing leaks except for approved tightening during Nitrogen/Helium leak testing.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



13.5 Title: Drilling water services in DWSOP No.P033

PERMIT NO: []

Activity No. Activity Description

13.5 Drilling water services activities listed in procedure DWSOP No. P033

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 28 Hydrocarbon release
- 46 Tripping hazards
- 47 Slipping hazards

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Ensure that hydrocarbon bleeds and vents discharge to areas where they will not be a hazard. Vents and bleeds to be shut after checks for pressure build-up are complete. []
- System to be isolated and Isolation Certificate kept with Permit. []

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible. []
- Before draining down vessels to ensure the system can handle the expected volumes. Ensure there are no concealed overflow mechanisms from the drains to surrounding area. []
- Drip trays/savealls to be in place around equipment being worked on []
- Gas testing is to be carried out immediately before start of Hot Work for each shift. []
- Isolate systems and prove de-pressurised before starting work. []
- Sealable containers are to be used for disposal of solid residue. []
- Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard. []
- Supply of absorbent granules to be provided on site to prevent the spread of any spillage. []
- Tripping hazard to be mechanically removed or bridged and marked. []

EXECUTION: The following must be observed during the work

- System to be depressurised before repairing leaks except for approved tightening during Nitrogen/Helium leak testing. []



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



13.8 Title: Seismic exploration

PERMIT NO: []

Activity No.	Activity Description
13.8	Seismic exploration activities.

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 15 Mechanical Sparks
- 90 Vehicle generated dust
- 91 Interior Driving

Hazards due to Ignition Potential at Work Location:

- 15.2 Sparks (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Adhere to night time driving policy. []
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible. []
- Check around and underneath vehicle to ensure no other person/persons are present before moving vehicle. []
- Flammable / combustible material and passive fire protection coating is to be removed from work surface and surrounding area. []
- Gas testing is to be carried out immediately before start of Hot Work for each shift. []
- Observe Journey Management System requirements. []
- Provide a portable fire extinguisher at the worksite. []
- Pull off road or push vehicle off road if breakdown occurs []

EXECUTION: The following must be observed during the work

- Do not overtake vehicles through dust clouds. []
- Keys to be removed from ignition when vehicle is unattended. []
- Obey speed limits. []
- Use headlights when driving through dust clouds. []
- Vehicles to be driven with dipped headlights and high intensity rear lights ON. []



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



15.1 Title: Levelling & grading

PERMIT NO:

Activity No.	Activity Description
15.1	Levelling and grading using machinery

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 51 Projectiles
- 90 Vehicle generated dust
- 91 Interior Driving

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Impact Grade 1 eye protection (goggles) to be worn

PREPARATION: The following must be in place before work starts

- Adhere to night time driving poilcy.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check around and underneath vehicle to ensure no other person/persons are present before moving vehicle.
- Observe Journey Management System requirements.
- Pull off road or push vehicle off road if breakdown occurs
- Screens are to provided to protect passing personnel.

EXECUTION: The following must be observed during the work

- Air-powered caulking/cutting tools not to be pointed towards personnel or pressurised process equipment, even when switched off.
- Do not overtake vehicles through dust clouds.
- Keys to be removed from ignition when vehicle is unattended.
- Obey speed limits.
- Use headlights when driving through dust clouds.
- Vehicles to be driven with dipped headlights and high intensity rear lights ON.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



16

Title: Faultfinding

PERMIT NO:

Activity No. Activity Description

16 Minor fault finding work. This may include the controlled isolation and de-isolation of valves, the removal of instruments for calibration, blowing through of pneumatic relays or other routine minor activities.

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 46 Tripping hazards
- 47 Slipping hazards
- 78 Failure of small bore pipework

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Instruments and sensing lines not capable of withstanding full test pressure are removed and blanked.
- Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard.
- Tripping hazard to be mechanically removed or bridged and marked.

EXECUTION: The following must be observed during the work

- Lifting operations are not allowed over unprotected high pressure pipework.
- Process equipment is not to be used for hand/foot holds or for supporting lifting gear or scaffolding.
- Retaining fasteners should not be removed until flanges etc. have been broken and pipework equipment proved free of residual pressure.
- The assembly of compression fittings only to be undertaken by competent persons. Careful checks to be made to avoid mis-match of fittings due to metrication or different makers' parts on the same fittings.
- Whilst working on or near mechanical equipment, electrical switchgear, instruments and small bore pipework, care must be taken to avoid accidental damage. Any incident which causes damage must be reported to the control room.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



03.1(E1.1) Title: HV electrical work requiring an ESD.

PERMIT NO:

Activity No. Activity Description

03.1 Work requiring an electrical safety document as specified in the Electrical Safety Rules (ESR's).

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 22 Low voltage (LV)
- 23 Stored electrical charge
- 24 High voltage (HV)
- 79 Static discharge to electronic equipment
- 88 Loss of emergency power/lighting

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Rubber gloves rated for the appropriate electrical voltage to be available and used when required

PREPARATION: The following must be in place before work starts

- Alternative means of providing emergency power or lighting to be arranged.
- Alternative power supplies have been provided where necessary.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check all non-certified electrical equipment is tagged and certified for use.
- Check equipment is isolated and earthed in accordance with Electrical Safety Rules.
- Insulated hook to be provided at worksite.
- Provide an insulating mat for persons to stand on when working on live terminals.
- Residual current earth leakage devices to be in place.

EXECUTION: The following must be observed during the work

- Alternative control facilities to be in place on affected equipment.
- Equipment to be proved discharged and electrically dead before any work may proceed.
- For cable spiking refer to Electrical Safety Procedures.
- Only insulated tools to be used.
- Wear an Anti static wrist strap when working on electronic systems or components.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



E1.4 Title: Third party visits to power/sub stations

PERMIT NO:

Activity No. Activity Description

E1.04 Third party periodic visits to electrical substations and power stations

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 21 Extra Low Voltage (ELV)
- 22 Low voltage (LV)
- 23 Stored electrical charge

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Only one loop/zone to be taken out of action at a time. Where this is not possible, alternative arrangements to be provided.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Rubber gloves rated for the appropriate electrical voltage to be available and used when required

PREPARATION: The following must be in place before work starts

- Alternative means of providing emergency power or lighting to be arranged.
- Alternative power supplies have been provided where necessary.
- Check all non-certified electrical equipment is tagged and certified for use.
- Check equipment is isolated and earthed in accordance with Electrical Safety Rules.
- Insulated hook to be provided at worksite.
- Provide an insulating mat for persons to stand on when working on live terminals.
- Residual current earth leakage devices to be in place.

EXECUTION: The following must be observed during the work

- Equipment to be proved discharged and electrically dead before any work may proceed.
- Only insulated tools to be used.
- Wear an Anti static wrist strap when working on electronic systems or components.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



E1.5 Title: Live line washing on overhead lines

PERMIT NO:

Activity No. Activity Description

E1.05 Live Line washing on overhead lines to process field facilities with or without auto closers

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

24 High voltage (HV)

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Rubber gloves rated for the appropriate electrical voltage to be available and used when required

PREPARATION: The following must be in place before work starts

- Alternative means of providing emergency power or lighting to be arranged.
- Alternative power supplies have been provided where necessary.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Insulated hook to be provided at worksite.
- Provide an insulating mat for persons to stand on when working on live terminals.

EXECUTION: The following must be observed during the work

- Equipment to be proved discharged and electrically dead before any work may proceed.
- For cable spiking refer to Electrical Safety Procedures.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: _____ Signature: _____ Date: _____

Name of Responsible Supervisor: _____ Signature: _____ Date: _____



03.2(E1.6) Title: Opening live electrical junction boxes

PERMIT NO:

Activity No. Activity Description

03.2 The Opening of live electrical junction boxes by Electrical Authorised Persons (Hot work).

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 21 Extra Low Voltage (ELV)
22 Low voltage (LV)
23 Stored electrical charge

Hazards due to Ignition Potential at Work Location:

- 15.2 Sparks (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Only one loop/zone to be taken out of action at a time. Where this is not possible, alternative arrangements to be provided.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Rubber gloves rated for the appropriate electrical voltage to be available and used when required

PREPARATION: The following must be in place before work starts

- Alternative means of providing emergency power or lighting to be arranged.
Alternative power supplies have been provided where necessary.
Check all non-certified electrical equipment is tagged and certified for use.
Check equipment is isolated and earthed in accordance with Electrical Safety Rules.
Gas testing is to be carried out immediately before start of Hot Work for each shift.
Insulated hook to be provided at worksite.
Provide a portable fire extinguisher at the worksite.
Provide an insulating mat for persons to stand on when working on live terminals.
Residual current earth leakage devices to be in place.

EXECUTION: The following must be observed during the work

- Equipment to be proved discharged and electrically dead before any work may proceed.
Only insulated tools to be used.
Wear an Anti static wrist strap when working on electronic systems or components.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



E1.7 Title: Low voltage work requiring an elect.safety doc.

PERMIT NO:

Activity No. Activity Description

E1.07 Low Voltage (LV) electrical work requiring an electrical safety document as specified in the ESRs

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 22 Low voltage (LV)
- 23 Stored electrical charge

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Rubber gloves rated for the appropriate electrical voltage to be available and used when required

PREPARATION: The following must be in place before work starts

- Alternative means of providing emergency power or lighting to be arranged.
- Alternative power supplies have been provided where necessary.
- Check all non-certified electrical equipment is tagged and certified for use.
- Check equipment is isolated and earthed in accordance with Electrical Safety Rules.
- Insulated hook to be provided at worksite.
- Provide an insulating mat for persons to stand on when working on live terminals.
- Residual current earth leakage devices to be in place.

EXECUTION: The following must be observed during the work

- Equipment to be proved discharged and electrically dead before any work may proceed.
- Only insulated tools to be used.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



E1.8

Title: Non elect. work in sw. rooms/pwr.stns, ohd. lines

PERMIT NO:

Activity No. Activity Description

E1.08 Non electrical work carried out within electrical switching / power stations or adjacent overhead lines

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 46 Tripping hazards
- 47 Slipping hazards

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Limitation of access (LOA) to be issued by SAEP.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard.
- Tripping hazard to be mechanically removed or bridged and marked.

EXECUTION: The following must be observed during the work

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: _____ Signature: _____ Date: _____

Name of Responsible Supervisor: _____ Signature: _____ Date: _____



E1.9 Title: Electrical switching controlled by ESOP's & ESRs

PERMIT NO:

Activity No. Activity Description

E1.09 Electrical Switching controlled by ESOP's and ESRs

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 22 Low voltage (LV)
- 23 Stored electrical charge
- 24 High voltage (HV)

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- System to be isolated and Isolation Certificate kept with Permit.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Rubber gloves rated for the appropriate electrical voltage to be available and used when required

PREPARATION: The following must be in place before work starts

- Alternative means of providing emergency power or lighting to be arranged.
- Alternative power supplies have been provided where necessary.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Check all non-certified electrical equipment is tagged and certified for use.
- Check equipment is isolated and earthed in accordance with Electrical Safety Rules.
- Insulated hook to be provided at worksite.
- Provide an insulating mat for persons to stand on when working on live terminals.
- Residual current earth leakage devices to be in place.

EXECUTION: The following must be observed during the work

- Equipment to be proved discharged and electrically dead before any work may proceed.
- For cable spiking refer to Electrical Safety Procedures.
- Only insulated tools to be used.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



E1.10 Title: Elect. Maint.at pwr/sub stns. (own staff)

PERMIT NO:

Activity No. Activity Description

E1.10 Electrical Maintenance Activities at unmanned substations and power statios as per ESRs and ESOP's carried out by Power Stations own contractor staff

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 21 Extra Low Voltage (ELV)
- 22 Low voltage (LV)
- 23 Stored electrical charge

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Only one loop/zone to be taken out of action at a time. Where this is not possible, alternative arrangements to be provided.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Rubber gloves rated for the appropriate electrical voltage to be available and used when required

PREPARATION: The following must be in place before work starts

- Alternative means of providing emergency power or lighting to be arranged.
- Alternative power supplies have been provided where necessary.
- Check all non-certified electrical equipment is tagged and certified for use.
- Check equipment is isolated and earthed in accordance with Electrical Safety Rules.
- Insulated hook to be provided at worksite.
- Provide an insulating mat for persons to stand on when working on live terminals.
- Residual current earth leakage devices to be in place.

EXECUTION: The following must be observed during the work

- Equipment to be proved discharged and electrically dead before any work may proceed.
- Only insulated tools to be used.
- Wear an Anti static wrist strap when working on electronic systems or components.



4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



E1.11 Title: Non routine elect. wrk in pwr/sub stns (own staff)

PERMIT NO:

Activity No. Activity Description

E1.12 Non electrical work carried out in power stations an substations carried out by Power Systems Operations own contractor staff

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 46 Tripping hazards
- 47 Slipping hazards

Hazards due to Ignition Potential at Work Location:

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard.
- Tripping hazard to be mechanically removed or bridged and marked.

EXECUTION: The following must be observed during the work

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**



E1.12 Title: Non elect. wrk in pwr/sub stns (Own staff)

PERMIT NO:

Activity No. Activity Description

E1.12 Non electrical work carried out in power stations an substations carried out by Power Systems Operations own contractor staff

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 46 Tripping hazards
47 Slipping hazards

Hazards due to Ignition Potential at Work Location:

- 15.2 Sparks (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Provide a portable fire extinguisher at the worksite.
- Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard.
- Tripping hazard to be mechanically removed or bridged and marked.

Five empty rectangular boxes for checklist completion.

EXECUTION: The following must be observed during the work

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: Signature: Date:

Name of Responsible Supervisor: Signature: Date:



MA 1.1 Title: Pipe & Steelwork Fabrication

PERMIT NO: []

Activity No.	Activity Description
01.1	Welding (Gas),/ Oxy Acetylene cutting
01.2	Welding (Arc)
01.3	Grinding

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 11 Naked flame
- 12 Hot Welding Slag/Burning Spatter
- 15 Mechanical Sparks
- 17 Electric arc
- 31 Smoke
- 33 Dust and Water Borne Particles
- 46 Tripping hazards
- 51 Projectiles
- 57 Noise
- 60 Vibration
- 71 Pressurised hose failure
- 72 Pressurised gas cylinder failure
- 76 Rotating machinery

Hazards due to Ignition Potential at Work Location:

- 11.2 Naked Flame (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Deluge system to be operational and the means of manual initiation known and understood by all members of the work party. []
- Gas cylinders are to be secured in upright position in well-ventilated area and protected from direct heat. Bottle keys to be secured to Gas Regulators. []

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

- Approved hearing protection to be worn. []
- Impact Grade 1 eye protection (goggles) to be worn []
- Respiratory protection type (specify type) to be worn []
- Welder's gloves, goggles/visors and spatter proof clothing (where required) to be worn. []

PREPARATION: The following must be in place before work starts

- Arrangements for signaling emergency situations (such as shutting off control air) to be in place. []
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible. []
- Check flashback arrestor and non - return valve are fitted correctly before opening gas supply and lighting the flame. []
- Check pins and whipchecks are fitted across all crows foot connectors. []
- Check safety guards are fitted to rotating shafts and discs. []
- Check that a dedicated fire hose, pressurised to the nozzle is available. []
- Check that extraction/ventilation system is operational. Work to stop on failure of extraction system. []
- Depressure hoses when not in use or left unattended. []
- Drip trays/savealls to be in place around equipment being worked on []



- During the filling of storage tanks levels to be checked at regular intervals relative to the size of tank.
- Eye wash station to be established close to worksite.
- Fire Watcher to be appointed.
- Fire and smoke detectors are to be inhibited in the work area.
- Fire blanket to be provided.
- Flammable / combustible material and passive fire protection coating is to be removed from work surface and surrounding area.
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Provide a portable fire extinguisher at the worksite.
- Provide containers for welding rods and used stubs.
- Remove all materials which may catch fire from the work area.
- Screens are to be provided to protect passing personnel.
- Tripping hazard to be mechanically removed or bridged and marked.
- Use fixed length air hoses with certified tag.
- Use the correct disc for speed of machine and material to be ground.

EXECUTION: The following must be observed during the work

- Air-powered caulking/cutting tools not to be pointed towards personnel or pressurised process equipment, even when switched off.
- Check that all air intakes are protected from gas/fumes/air borne particles, etc.
- Continuous gas monitoring to be undertaken.
- During work breaks, gas cylinder and hose valves to be closed and hoses depressurised. Gas cylinders to be returned to specified storage area when empty.
- Gas Test Certificate to be on site whenever work is underway.
- Gas cylinders are to be transported using the appropriate bottle cradles.
- Hoses are not to be kinked during work.
- If sense of touch deteriorates, stop work until it returns.
- Items to be cleaned/blasted in a designated area if possible.
- Machine to be in view when started.
- Permit Holder/Firewatcher to check other side of wall/work area before starting or re-starting and during execution of work.
- Surfaces containing asbestos must not be cleaned by blasting or mechanical de-scaling.
- Tools to be de-energised/de-pressurised when not in use and before carrying out any maintenance.
- When gas welding or cutting in a vessel, torches are to be removed when not in use.
- Where necessary, workpiece and/or tool is to be kept cool with water.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: _____ Signature: _____ Date: _____

Name of Responsible Supervisor: _____ Signature: _____ Date: _____



MA1.2 Title: Building Construction

PERMIT NO:

Activity No. Activity Description

- 09.1 Operations where heavy machinery e.g. cranes/crane loads, mechanical excavators, trucks etc. could pass over, or come into contact with, pressurised hydrocarbon systems or power lines.
11.2 Use of non-Intrinsically Safe equipment.
12.1 Excavation using hand tools or mechanised equipment to a depth greater than 300mm (Han excavation to 300mm depth required before mechanised equipment is used in areas where pipes or cables may be present)

1. HAZARD ASSESSMENT

HAZARDS IDENTIFIED: The following Hazards may be encountered during the work:

Activity Hazards and Work Environment Hazards:

- 46 Tripping hazards
47 Slipping hazards
52 Unguarded Opening
53 Inertia of large object
59 Trapping hazard
64 Excavation collapse
65 Overhead power lines
75 Lifting equipment failure
89 Buried Services

Hazards due to Ignition Potential at Work Location:

- 15.2 Sparks (IPA)

Additional Hazards:

2. ACTIONS BY AREA AUTHORITY

Initial when complete

- Lifting equipment, including webbing slings, to be certified and marked with safe working load and current colour code.

3. ACTIONS BY HOLDER

Initial when complete/available

PERSONAL PROTECTIVE EQUIPMENT:

PREPARATION: The following must be in place before work starts

- A Permit to Work is required for all mechanised excavation work. For excavations in excess of 0.3m deep, or in the vicinity of pipework, cabling or foundations, an Excavation Certificate is required.
- Barriers and signs are to be erected. Barriers are to be removed as soon as possible.
- Beaded or blunt edged tools are to be used when working near electrical cables.
- Carry out visual checks of lifting area for obstructions and interference, before lifting.
- Check that an Excavation Certificate has been raised and completed.
- Check that the opening is fitted with guard rails and toeboards.
- Gas testing is to be carried out immediately before start of Hot Work for each shift.
- Identify location of underground services before excavation. If practicable, electrical cables to be de-energised and piping systems isolated and de-pressurised.
- Personnel working close to unguarded openings are to wear a safety harness.
- Provide a portable fire extinguisher at the worksite.
- Spills and accumulations of fluids/shot to be cleared up periodically and not allowed to become a slipping hazard.
- Tripping hazard to be mechanically removed or bridged and marked.



EXECUTION: The following must be observed during the work

- Check that slings are spaced in accordance with Lifting Manual.
- Excavation side supports are only to be erected, modified or dismantled under the direct supervision of fully experienced and competent personnel.
- Guidance lines are to be attached to heavy objects suspended from cranes.
- If communication between signal men and lifting operator is not clear (due to noise or obstruction), an additional signaller must be appointed to relay information.
- Mobile cranes and mobile access towers, to be lowered and secured in transit position when moving.
- Process equipment is not to be used for hand/foot holds or for supporting lifting gear or scaffolding.
- The toe of the earth pile is to be at least 1.5 times excavation depth from the edge of the hole.
- When work on overhead cables is in progress, no passage underneath the cables is allowed except via approved routes protected by netting slung under the cables.
- Whenever it is not reasonably practicable to erect rigid barriers and chain type barriers are used a sentry, with no other duties, shall be posted at each temporary chain barrier to warn personnel of the hazard.

4. JOB SAFETY PLAN CONTENT AGREED

Name of Permit Applicant: **Signature:** **Date:**

Name of Responsible Supervisor: **Signature:** **Date:**
