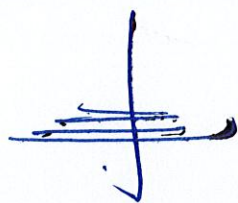


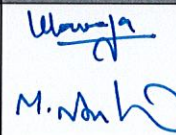
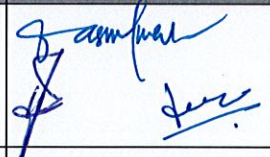

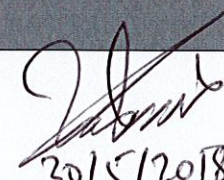
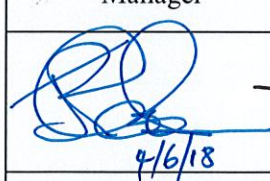

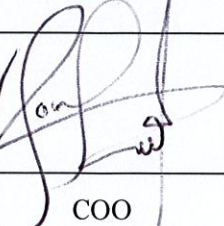


Petrochemical Shared Services (PSS) Procedure

PERMIT TO WORK PROCEDURE

Procedure Number: PR-PSS-114

Approved by	Name	Dr. Mohd Yousef Al Mulla	
	Position	MD & CEO	
	Date	21/7/2018	

Rev.	Date	Prepared by	Reviewed by		
01	24/5/2018	 M. Al-Nahdi			 30/5/2018
		Sr. HSSE/Safety Officer	 4/6/18		
			CHSSEO	D/CPGM	COO

 QAPCO شركة قطر البتركيماويات QATAR PETROCHEMICAL COMPANY	PERMIT TO WORK PROCEDURE	Procedure No.	PR-PSS-114
		Revision	01
		Date	24 May 2018

Revision / Modification History:

Rev #	Date	Section No.	Reason for revision / modification
0	15/07/2016		Procedure revised as per new template and new organizational changes. This Procedure will supersede PR-251-SF-01
1	24/05/2018	All	<ul style="list-style-type: none"> • Procedure revised to integrate QAPCO PTW system with QVC PTW after merging. • Add Permit to Work Exempted Areas/Locations to the PTW scope. • Updated the Definition and Abbreviation list as relevant. • Updated the reference list as relevant. • Modified Safety Responsibilities at the RASCI Summary. • Cold work permit is no more base work permit for all jobs, Cold Work Permit is issued only for cold work activities. • Deleted hot work permit exempted areas, all types of work permit exempted areas are listed in the scope part (point no. 2). • Changed the name of electrical isolation/cancellation certificate to be electrical isolation/de-isolation certificate. • Add “Fire & Gas system/function” to Security Bypass Certificate scope. • Assign the responsibility of final signature in all work permits and certificates to the Field Operator after completing all the required site checks and verifications. • Changed the role of Sr. Safety Agent from signing in critical Permits / Certificates to conduct site verifications and checks using the PTW Audit Form (Appendix:10.6), to verify the compliance with QAPCO PTW procedures/instructions. • Deleted the part related to QVC maintenance work inside QAPCO. • Add new Appendix for PTW Training Request & Approval Form. • Remove vehicle certificate. • Requirement of vehicle entry certificates are incorporate in hot work permit.

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1. OBJECTIVE

- This procedure lays the frame work for the permit to work system to be followed in QAPCO. It provides guidelines for performing any task in QAPCO following a safe system of work and establishes common practices in the different units within the facility.
- This procedure will ensure that every one who is involved in the work activity is aware of the potential and residual Risks that are associated with the task being performed and outlines the roles and responsibilities of the parties involved in executing a job.
- The permit to work procedure acts as a job authorization tool and also provides formal documentation for the agreement between the job authorizer and job performer

The purpose of the PTW procedure is to:

1. Control the day-to-day activities that occur within the QAPCO complex.
 2. Ensure a structured and documented interface occurs between the Equipment/Asset Owner and the Lead Executor prior to beginning the work.
 3. Create a safe work agreement between the Permit Issuer and all workers performing work.
 4. Provide the authorization to begin and/or continue work.
- The PTW procedure must work in conjunction with all other procedures, programs and standards such as, but not limited to:
 - Isolation and locks
 - Job Safety Analysis (JSA)
 - Personal Protective Equipment (PPE)

2. SCOPE

QAPCO PTW procedure describes the PTW system (How Permit work is identified, approved and controlled) and outlines the details necessary for all personnel involved in the PTW system to carry out their work safely and with proper regard for the environment.

The PTW procedure applies to **all work activities** that occur within the QAPCO complex where the Lead Executor is not the equipment/asset owner.

Permit to Work Exempted Areas/Locations

Following areas, as far as concerned for their own operations, are exempted from the scope of the Work Permit System:

- Maintenance workshops (Mechanical, Electrical, Automation, Cell, Plastic workshops)
- Contractor yard (Contractor work activities inside the designated area assigned to the contractor and work done by the contractor's own staff)
- Designated areas after consensus among the concerned department, maintenance and HSSE.

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This exemption does not apply if the activity requires special certificate such as the Confined Space Entry, Excavation and Lifting Work, then all requirements of Work Permit Procedure shall be followed.

This exemption does not revoke use of required PPE and necessary safety precautions and hazard assessment which has to be implemented by the area owners and the responsible executor as and when required.

All line managers are responsible to ensure that this procedure is complied with and followed to prevent injury to personnel, environmental pollution and loss to assets.

3. PROCEDURE SUMMARY

QAPCO handles large quantities of flammable, toxic and other hazardous materials, so the potential for serious accidents is clear. To prevent these accidents, it is vital that there are safe systems of work to be implemented and followed.

The issuance of a Permit does not, by itself, make a job safe. That can only be achieved by those preparing for the work and those carrying it out. The Permit to Work System forms a key part of the company HSE Management System, and demonstrates management commitments.

The PTW system ensures that authorized and properly trained people have thought about foreseeable risks and that these are avoided by using suitable precautions. Those carrying out the job shall think about and understand what they are doing and how their work may interface with that of others. They must also take the necessary precautions which they have been trained to take and for which they are responsible.

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4. ABBREVIATIONS / DEFINITIONS

#	Abbreviation / Key word	Definition summary
1	HSSE	Health, Safety, Security and Environment
2	PTW	Permit to work System
3	HSE-MS	HSE Management System
4	Work Permit	It is a written document issued for performing any intervention work on QAPCO assets. It authorizes the holder of the completed document to carry out a specific task at a specific location at a specific time and lists out the potential hazards and the appropriate precautions to be taken for performing the intervention safely.
5	Work/Task	Work is defined as any of the following: <ul style="list-style-type: none"> • Repairs or maintenance of equipment. • Inspection of equipment. • Installation or removal of equipment • Cleaning, painting, civil works.
6	QAPCO Areas	QAPCO complex has the following two main areas: <ol style="list-style-type: none"> 1- The area from the main Security gate (Gate-1) to Security Gate-2. 2- The area after Security Gate-2, Gate-3 and Vinyl Gate (G-2) is called the plant area and comprises of the restricted areas (inside the Plant Safety Gates) and non-restricted areas (between Security Gate-2, Gate-3 or Vinyl Gate (G-2) and Plant Safety Gates)
7	Job Information Form	A form used for information of Jobs/activities to be conducted during weekends, holidays and after the normal working hours.
8	Permit Requestor	The person who requests the issuance of Work Permit for specific task at specific time at specific location.
9	Permit Issuer / Issuing Authority	QAPCO authorized person appointed as Permit issuer and responsible for the asset/area under his control. He is responsible for issuing the work permit to the Lead Executor. He must be successfully trained in the Permit to work system of QAPCO.
10	Lead Executor	Is a person who is trained and qualified for QAPCO work permit system and responsible to ensure that all conditions of the permit, agreed to with the Permit Issuer, are being fulfilled at all times throughout the job. He can be a QAPCO staff or a contractor employee

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11	Job Site Inspection	The Job Site Inspection is a <u>hazard analysis</u> conducted by the Permit Issuer with the Lead Executor to ensure the equipment and area is prepared properly, prior to issuing a PTW. The job site inspection is the best opportunity to document hazards and required precautions on the PTW
12	The Work Crew	The Work Crew consists of all the workers performing the tasks associated with the job scope.
13	Plant Emergency	Is a situation that warrants the suspension of a work permit and is a condition that results in flammable or toxic gas release, fire or explosion
14	Job Readiness Audit	An audit to verify implementation of identified control measures.
15	LMRA (Last Minute Risk Assessment)	The Last Minute Risk Assessment (LMRA) is a brief, individual, mental hazard assessment of a task and the worker(s). It is conducted by the worker(s) before and during the work to identify any other hazards that are present due to site or equipment conditions.
16	TBT (Tool Box Talks)	The discussion held among all the parties involved in the job, related to the site and job hazards, PPE requirements, work procedures and emergency action plan. These talks are conducted at site prior to performing the job.
17	Hot Work	Any operation that can produce enough heat to cause a source of ignition or has the potential to do so, with sufficient energy to ignite flammable vapors, gases or dust. Operations typically include open flame, sparks, heat sources, running engines, grinding, gas cutting, brazing and soldering.
18	Fire Watch	The person who will continuously monitor the hot work job as defined by hot work permit for the complete duration of the job
19	Restricted Hot Work	A heat generating activity that does not produce an open flame or sparks to the surroundings
20	Open Flame Hot Work	This type of hot work produces open flame or sparks to the surrounding area.
21	Confined Space	It is a place which is substantially enclosed (though not always entirely), and where serious injury can occur from hazardous substances or conditions within the space or nearby (e.g. lack of oxygen).
22	Entry	Entry is defined to have occurred when any part of the entrants body breaks the plane of an opening into the confined space
23	Gas Testing	Testing the atmosphere of the confined space using a calibrated portable direct reading instrument by QAPCO

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		authorized person to detect the concentration of oxygen, flammable or toxic gases.
24	Hazardous Atmosphere	<p>An atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury, or acute illness from one or more of the following causes:</p> <p>(1) Flammable gas above 0% LEL (2) Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent; (3) Airborne combustible dust at a concentration that meets or exceeds its LFL; (4) toxic gases are present above their threshold limit value (TLV); (5) Any other atmospheric condition that is immediately dangerous to life or health.</p>
25	Oxygen Deficient Atmosphere	An atmosphere containing less than 19.5% oxygen on a volume basis
26	Confined Space Entry (CSE) Watch	The person stationed at the entry point of a confined space. He is responsible for maintaining communication with the entrants and also track and monitor the entry and exit of the entrants using the confined space entry log sheet
27	Threshold Limit Value (Time Weighted Average)	It is the maximum concentration averaged over a period of eight hours of the air borne contaminant to which an individual can be exposed repeatedly day after day for his working life time without any adverse health effects
28	Excavation	Any digging away of soil or ground to expose, verify, remove, repair or modify or construct facilities.
29	Radiography	An activity performed using any ionizing radiation source to verify the integrity of a welding joint.
30	Certification	It is an approved and legally compliant method of inspecting and providing written evidence that a piece of equipment has been examined and meets required standards
31	Job Safety Analysis	One of the risk assessment tools to ensure all hazards associated with a job are proactively identified before starting it and suitable controls are identified to mitigate the risk to as low as reasonably practicable (ALARP).

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32	Classified Area	An area (3-dimensional region or space) in which an explosive gas atmosphere is or may be expected to be present, in quantities such as to require special precautions for the maintenance, construction, installation and use of equipment
33	PPE (Personal Protective Equipment)	PPE is equipment that will protect the user against health or safety risks at work. It can include items such as safety helmets, gloves, eye protection, high-visibility clothing, safety footwear and safety harnesses. It also includes respiratory protective equipment (RPE)
34	Stored Energy	Energy stored in equipment by virtue of its nature or operations, and which is likely to have potential to activate movement in, OR energization of, the equipment or system.
35	Management	People (a person or group of people) with authority and responsibility for the conduct and control of an organization.
36	Line Management	All the managers of the plant: chief, director, manager and Head of.
37	CHSSEO	Chief HSSE Officer
38	MGM	Manufacturing Group Manager
39	D/CPGM	Deputy /Corporate Planning Group Manager
40	TGM	Technical Group Manager
41	COO	Chief Operations Officer

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5. DOCUMENT REFERENCES

#	Document ID	Document name	Summary of dependency or use
1	M-250-HSE-01	QAPCO's IMS (integrated Management system.	Overall frame of work safety systems
2	IN-250-HSE -07	Instruction for Cold work permit	Details about CWP
	IN-250-HSE -08	Instruction for Hot work Permit	Detail about hot work permit
3	IN-250-HSE -09	Instruction for Confined space entry Certificate	Detail about confine space Certificate
4	IN-250-HSE -10	Instruction for Excavation	Detail about Excavation Certificate
5	IN-250-HSE -11	Instruction for Electrical isolation & De-Isolation Certificates	Electrical isolation and de-isolation details
6	IN-250-HSE -12	Instruction for Radiography Certificate	Certificate requirements and application
7	IN-250-HSE -16	Safe Working at Height	Work at height guidelines and requirements
8	IN-250-HSE -13	Instruction for Lifting work Certificate	Lifting activity operations requirements
10	IN-250-HSE-15	Instruction for Security bypass Authorization	Plant and Firefighting equipment disabling requirements and protocols
11	PR-QSS-110	Incident Reporting & investigation	Reporting of Violation and observations
12	PR-QSS-111	Appropriated Reaction Policy	Violations treatment
13	PR-251-SFF-38	Job Safety Analysis	Risk analysis of the work

6. IT SYSTEM REQUIREMENTS

#	IT system module name	Summary of IT system module use
1	MS Office	Data Recording and supported documents

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7. RASCI SUMMARY

#	Procedure chapter	Area Owner Manager	CMO	Task Executor Manger	Permit Issuing Authority (Asset owner	Area Owner (Section Head)	Task Executor Planner/ Engineer	Executing Supervisor	Lead Executor/ Contractor	Safety Rep.	HSE Division
8.1	Type of Permits	I	I	I	R	I	I	I	C	C	C
8.2	Asset Preparation for work	R	A	C	R	R	C	S	-	C	C
8.3	Task Risk Analysis	R	A	A	R	R	R	S	C	S	C
8.4	Control Measures and PPEs requirements	C	S	A	R	R	R	R	R	S	C
8.5	Acceptance and issuing of Permits	A	C	R	R	R	R	R	S	C	C
8.6	End of work & closing of Permit	R	S	A	R	R	R	R	R	C	-
8.7	Cancellation of all isolation	A	S	S	R	R	C	C	C	C	-
8.8	Permit suspension & Invalidity	A	S	R	R	R	I	R	R	C	C
8.9	Permit extension OR Revalidation	S	I	A	R	S	R	R	R	C	C
8.10	Training & competency	A	C	A	I	R	R	R	I	C	C
8.11	Monitoring and Auditing	R	A	R	S	R	S	S	S	R	C
8.12	Other Requirements <i>(Zero Energy, LMRA & TBT)</i>	A	C	A	R	R	C	R	R	C	C

- R** Responsible (the class of people who are ultimately responsible for getting the work done)
- A** Accountable (the position that is accountable to oversee that the work gets done)
- S** Support (the person who supports by providing information and suggest any deviations from the Procedure)
- C** Consulted (the person who can advise when needed)
- I** informed (concerned persons who are required to be informed or communicate to)

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Summary of Accountabilities and Responsibilities:

1. Permit Issuer

Qualified Permit Issuer: the Permit Issuer must be a QAPCO direct hire successfully trained in PTW and meeting the minimum training requirements identified in the Section 8.10 (Training & competency) of this procedure. For critical activities such as ‘open flame hot work’, confined space work, excavation work a JSA shall be prepared & ‘a higher level of authority such as Head of Section shall approve the ‘Permit to Work’. (Refer to Appendix 10.3)

A Permit Issuer shall verify that the Responsible Executor is certified for QAPCO PTW before issuing a permit to him

A. Area of Responsibility: The Permit Issuer is the equipment/area owner and shall be responsible of area nominated by concerned manager, If the Permit Issuer is to be replaced with another new Permit Issuer, then the permits shall be revalidated by the new permit issuer after understanding the conditions of the PTW including hazards and associated mitigations from the original Permit Issuer.

B. Equipment Preparation: The Permit Issuer is responsible at all times for the preparation and condition of the equipment.

2. Task Execution Supervisor/Planner/ Engineer:

A Qapco employee shall fully plan and arrange resources to execute the task and is responsible for:

- The review and ensure that the information provided in permits is correct and ensure that the executor is competent to perform the task safely.
- Inspect the work site with Permit issuer when required to ensure the proposed hazard /precautions are adequately identified.
- Ensure that the updated /required documents are attached & available which is marked up to identify other potential conflicts if any.
- Prepare & check Method Statement and JSA are complete for work being undertaken
- Obtain the authorization from other entity if required.

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3. **Section Head: (Operation/Issuance Authority)**

Section Head or his delegate is responsible for the management of all activities in his area of responsibilities. He should be responsible for:

- The overall accountability of all works undertaken within his area of control
- Ensure that there is no conflicting activities in the area that may introduce the additional hazards and
- To ensure that hazards are identified for conflicting and non- routine activities and control measures are adequate to minimize the risk.

4. **Field Operator:**

QAPCO employee is responsible for his assigned operating area who will sign the permit to allow the executor to perform the job at site. He is responsible to:

- Validate the PTW and identify the equipment to performer.
- Perform and / or check any isolations that are required prior to works being carried out
- Ensure that all safety & emergency equipment are available
- Ensure Zero Energy & LMRA completed.
- Perform initial gas test if required.
- Perform frequent audits and safety checks and ensure that PTW system is complied with

5. **Contractor Safety Officer:**

Contractor employee should be having the complete knowledge of QAPCO PTW system. His duty in signing permit/certificate will be same as the Field Operator, but **he will sign only when the task is outside the Plant areas**, he shall be trained and QAPCO certified safety officer, he is responsible to:

- Validate the permits / certificates: ensure and verify that the equipment is ready for task execution and sign on certain permits.
- Perform- recheck the atmosphere testing if required and record
- Ensure that required safety equipment is available & functional
- Ensure Zero Energy & LMRA is implemented.
- Identify the unsafe observation and help/ advise to correct it.
- Guide the workers for safe execution.
- Perform frequent safety checks and ensure PTW system is complied with.

6. **Sr. Safety Agent:**

He will advise the Operation Team for safety related issues, he will conduct site verifications and checks to verify the compliance with QAPCO PTW procedures/instructions, especially whenever special high risk activities such as open flame hot work, confined space entry, crane lifting and deep excavation are performed.

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7. **Lead Executor**

- a) **Qualification:** The Lead Executor can be a QAPCO or approved contractor employee trained in QAPCO PTW process and meeting the minimum training requirements identified in the Training Section of this procedure (Section 8.10).
- b) **Communication:** The Lead Executor must be able to speak, read and write English as well as communicate with all workers in the work crew. The Lead Executor must be capable of explaining all of the hazards and mitigation considerations.
- c) **Toolbox Talk:** The Lead Executor is responsible for conducting a “toolbox talk” with the work crew immediately prior to work commencing to ensure all work crew understand the conditions of the PTW.
- d) **Plant Emergency:** The Lead Executor must understand the plant alarms/sirens and ensure all workers know the location of emergency equipment including evacuation routes and assembly points. The Lead Executor must take personal responsibility to know the nearest emergency equipment and alarm facilities. Once the emergency situation is normalized, the Lead Executor is responsible to request the permit issuer to revalidate the permit.
- e) **Compliance:** The Lead Executor is responsible for fulfilling the conditions agreed to on the PTW for the duration of the work. The Lead Executor does not have the authority to operate any equipment or process valves belonging to the equipment owner, unless detailed on the PTW. The Lead Executor does not have authority to reduce PPE required, unless detailed on the PTW.
- f) **Multiple Permits:** Lead Executor may receive Five permits simultaneously, if the following conditions are met:
 - The permits are required for different tasks in the same Plant Unit/Area
 - The permits are not for different craft (*e.g. Lead Executor cannot be the same for mechanical and electrical jobs, this requires two Lead Executors*).
 - For all tasks, The risk can be managed by PTW only (i.e. JSA is not required)
 - Lead Executor is not taking part in the task execution other than job supervision
 - Lead Executor shall assign ONE Lead Worker from the working team, in each task, to act as task supervisor and guide the team during his absence

Note: QAPCO Operation Shift Supervisor/Sr. Safety Officer can limit the number of permits issued to one Lead Executor if they feel that the control at the site is not as desired and there is a high potential for incidents to occur
- g) **Stay at the Job Site:** If the Lead Executor have to leave the job site for any reason, all work must be stopped. If the Lead Executor is to be replaced with another new Lead Executor, the original Lead Executor shall communicate conditions of the PTW to the new Lead Executor including hazards and associated mitigations and then permit shall be revalidated by the Permit Issuer.

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- h) Gas Monitoring / Recording:** Lead Executor is responsible to ensure that gas monitoring readings are promptly recorded on the work permit form. Lead Executor to provide reasons for any missing readings.
- i) Operator's Presence:** Lead Executor must ensure the operator's presence before starting the job if any of the following conditions exist:
- Before carrying out the first-break in the system, if the job involves opening / loosening up flanges, caps, and plugs.
 - If the requirement for operator's presence is stated in the permit.

Operator's presence in any case does not substitute for PTW requirement

8. Work Crew

- a) Toolbox talk:** Each member of the work crew is responsible to participate in the toolbox talk and to understand the hazards and precautions of the PTW.
- b) Plant Emergency:** Each member of the work crew is responsible for understanding the response to an alarm/siren, knowing the location of nearest emergency equipment and alarm facilities, including evacuation routes and assembly points.
- c) Sign the Permit:** Lead Executor will sign on permit and each member shall participate in the TBT and LMRA.
- d) Work Crew Change:** If the work crew changes during the performance of the work, the Lead Executor must facilitate a toolbox talk with the new work crew
- e) Hazard Awareness:** Workers must stop work and inform the Lead Executor immediately if the conditions of job site changed during the course of the work.

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8. PROCEDURE METHOD

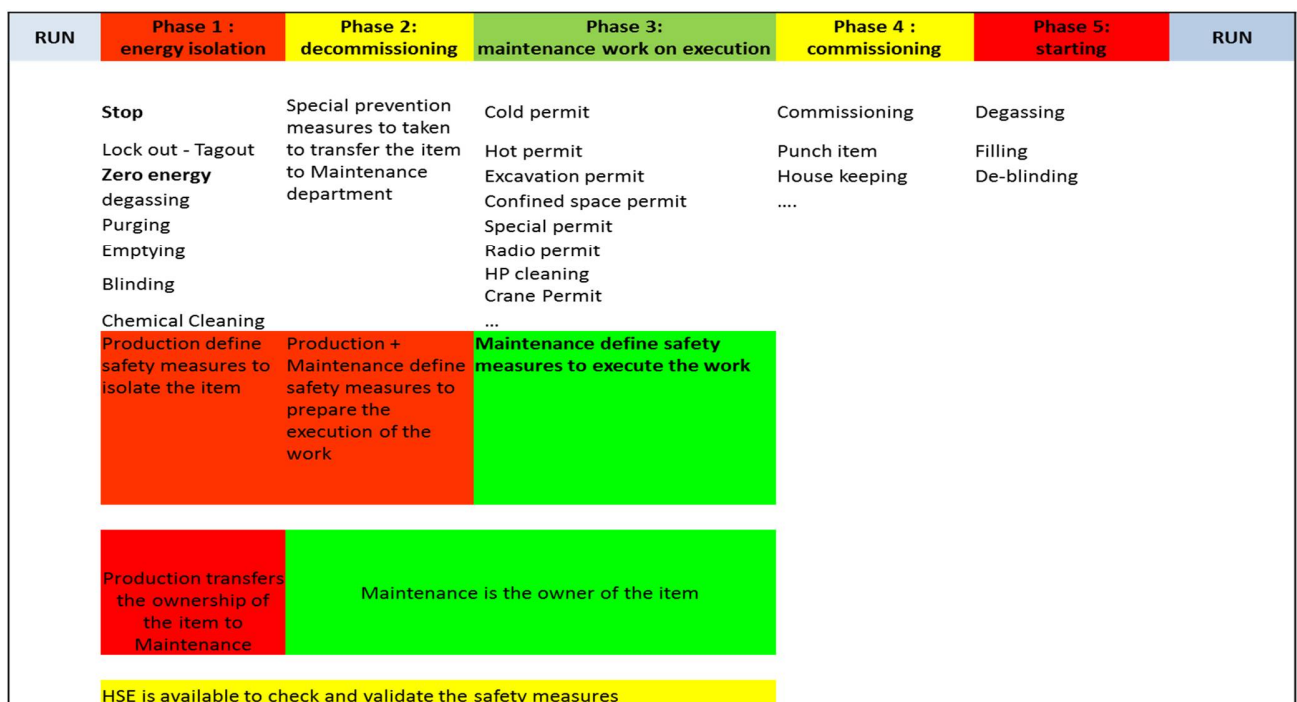
The work permit is an operational safety barrier to protect against undesired incidents. Through the permit system we ensure that normal safety barriers are not taken out of service or rendered inoperable unless compensating measures are put in place.

It is the duty of everyone involved in the planning, preparation, execution and restoring equipment involved in the permit system to evaluate the hazards and control them so that the work can be performed safely.

All details of work must be settled, discussed and agreed between the different parties involved and responsible persons for mutual understanding to carry out the work with safe condition and safe practices throughout the duration of the job.

The permit to work system is a type of safe system of work and must work along with other systems, procedures and standards to protect the personnel, assets and environment.

For the task of proper handing over of equipment and to identify the responsibilities of the lead executer, the area owner will help to reduce the risk level during execution of task and the commissioning of equipment. Below is the detailed Work flow with responsibilities.



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ITEM: 8.1 Type of Permits

Following Permits & certificates are implemented in QAPCO facilities :

- Permits
 1. Cold Work Permit (*IN-250-HSE-07*)
 2. Hot Work Permit (*IN-250-HSE-08*)

- Certificates:
 1. Confined Space Entry Certificate (*IN-250-HSE-09*)
 2. Excavation Certificate (*IN-250-HSE-10*)
 3. Radiography Certificate (*IN-250-HSE-12*)
 4. Lifting Activities Certificate (*IN-250-HSE-13*)
 5. Electrical Isolation and De-Isolation Certificate (*IN-250-HSE-14*)
 6. Authorization of Security Bypass Certificate (*IN-250-HSE-15*)

Certificate is a supplementary document and cannot be issued alone without a work permit (either Cold or Hot), except for Electrical Isolation/De-Isolation and Authorization of Security Bypass Certificate for Operation purposes.

8.1.1 Cold work permit

A cold work permit is issued for all cold jobs performed in QAPCO facilities. It is mandatory for the task which will be performed by different entities. Cold work permit will be issued for activities within the QAPCO Mesaieed facility where the Lead Executor is from another department/company and enters into a formal agreement with the permit issuer who is the equipment/asset owner to perform a job in a safe manner.

All jobs performed by this permit will not have a spark potential or generate any open flame during the course of the work. The other hazards related to the job and the site will and can remain the same and it is the responsibility of the plant operations to prepare the equipment safely and hand it over to the executor.

The plant operations/area owners are also responsible for providing a safe work site for the Lead Executor.

Some Cold permits can be identified as **LIGHT** Cold permit based on frequency, potential hazards, and control measures.

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8.1.2 Hot work permit

All works that pose a spark potential or create an open flame mandates the issuance of a hot work permit in QAPCO.

Before initiating hot work permit it should be determined by the Lead Executor and the operations if:

- The hot work can be eliminated
- Hot work can be moved to a location that is free from combustibles
- If work cannot be moved then the combustibles are moved away from the hot work area or properly shielded against ignition.
- Schedule hot work in such a manner, that plant operations that could expose combustibles to ignition are not started during hot work activity.

All open flame hot works in QAPCO will commence only after the area is gas tested and lower explosive limit (%LEL) in the area is 0%. The Field Operator will conduct this gas testing.

Work must proceed within 30 minutes of doing the gas test for all open flame hot work jobs. If not the gas test shall be performed again prior to starting the hot work.

Any vehicle that needs to enter the restricted area (after Plant Safety Gates) requires a restricted hot work permit. The vehicle should meet the criteria set up by QAPCO in terms of its worthiness to enter the restricted area and the driver should possess a valid GCC driving license as a minimum

8.1.3 Confined Space entry Certificate

This certificate is a pre requisite for entry into confined space, provided a valid work permit is issued at QAPCO. A Confined Space is defined as a space that is potentially hazardous in terms of flammable gases, toxic atmosphere, limited entry or exit and not designed for continuous occupancy.

Any breakage of the plane of the opening of the confined space by any part of the entrants' body is termed as entry and this mandates that no person will even peep into a confined space without a valid confined space entry certificate.

Note: A confined space certificate is not an authority to enter any confined space.

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8.1.4 Excavation Certificate

This Certificate is a prerequisite for any kind of excavation work, provided a valid work permit issued at QAPCO. An excavation is defined as the removal of soil or earth to a depth greater than 30 centimeters.

In case of an excavation is more than 1.2 meter depth, a confined space entry certificate shall be issued in addition to the excavation certificate.

Note: An excavation certificate is not an authority to start excavation.

8.1.5 Electrical Isolation and De-isolation Certificate

This Certificate is used for isolating the electrical energy that drives the equipment. This certificate can be used as a single entity without any associated permit/certificate for electrical isolations that are required by operations according to their discretion.

8.1.6 Lifting Work Certificate :

For all lifting works inside QAPCO, a lifting work certificate is a prerequisite for any lifting activity at QAPCO. It ensures that crane and all its lifting gears/accessories meet the stipulated certifications for carrying out the job.

8.1.7 Authorization for security bypass Certificate

This certificate must be used for bypassing any interlock or inserting an override to the process, or equipment operation or any Fire and Gas system/function. As a first step it is necessary to reconsider whether the bypass is necessary or other alternatives are present that can be adopted.

The department manager has to approve this certificate and it is mandatory to ensure that there are other protection barriers that will protect QAPCO asset from damage that will back up the absence of this interlock or security.

8.1.8 Radiography Certificate

This Certificate is used for all radiography works related to the non-destructive testing of equipment after repair or construction. This work is normally executed after office hours to minimize the exposure of personnel to radiation.

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ID	Activity	Risk1	Risk register reference	Supporting IT system module	Document reference	Responsible org. position
8.1	Work Permits	NA	NA	NA	PR-QSS-114	HSE Dept.
8.2	Task Preparation	Yes	Refer Department Risk Register	SAP EHS	PR-QSS-114	Asset owner
8.4	Risk Analysis	NA	NA	NA	PR-QSS-127	JSA Template
8.5	Control Measures and PPEs requirements	NA	RR	SAP EHS	LMRA/ JSA/ Zero Energy	Permit handlers
8.6	Acceptance and issuing of Permits	NA	NA	NA	PR-QSS-114	Permit handlers
8.7	End of task & closing of Permit	NA	Dept. RR	NA	PR-QSS-114	Permit handlers
8.8	Cancellation of All isolation	NA	NA	NA	PR-QSS-114	Permit handlers
8.9	Permit suspension	NA	NA	NA	PR-QSS-114	Permit handlers
8.10	Permit Extension OR Revalidation	NA	NA	NA	PR-QSS-114	Permit handlers
8.11	Training & competency	Yes	Dept. RR	LMS	PR-QSS-114	Ops Managers
8.12	Monitoring & Auditing	NA	NA	NA	PR-QSS-114	Ops Manager/ HSE
8.13	Other Requirements	NA	NA	NA	PR-QSS-114	Permit handlers

PROCEDURE COMMENTARY:

QAPCO PTW System exists to protect people, assets and the environment from damage. QAPCO PTW procedure describes the PTW system (how Permit work is identified, approved and controlled) and outlines the details necessary for all personnel involved in the PTW system to carry out their work safely and with proper regard for the environment.

General Requirements:

- **Permit Issuer and Lead Executor:** A qualified Permit Issuer and Lead Executor must be identified on every PTW.
- **Posting and Tracking Permits:**
 - a Permit Issuer must store the Permit Issuer copy in a central area (e.g. Production may store copy in CCR).

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- b Lead Executor must visibly post the Field copy in a permit pouch at the job site
- c For the permits issued in the operating areas Permit Issuer must inform respective board operator about the PTW issued.
- d Permit issuer keeps the track of PTW issued in the respective areas through field operator.
- e Maintenance Coordinator/Shift Supervisor must track the issuance and closure of permits in their respective areas as per PTW Tracking system.
- f The Permit Issuer is responsible to ensure all supporting documentation is compliant prior to the work beginning and during permit closeout.
- g Permit Issuer must review the emergency equipment, escape routes (considering wind direction), assembly points and alarm locations applicable to the area of work, with Lead Executor, and Fire Watch as applicable.

In case of maintenance work out of normal working hours (after 2:30pm, at weekends and at official holydays), a job information (annex-10.5) form must be filled out by execution and has to be sent (by email) to the concerned plant Maintenance Coordinator before 02:00pm on working days.

ITEM 8.2: Task Preparation

Before accepting the permit for a task, operations department/ asset owner will prepare the equipment for task execution. Actions to be taken, but not limited to the following:

- The need for electrical isolation will be expressed by the permit issuer
- Ensuring that all equipment isolations are done is the responsibility of the plant operations.
- It is the responsibility of the operations to check for any safety conflicts that may arise due to the presence of other work permits in the area. When there is a safety conflict, no permit shall be issued until the conflict has been resolved.
- Once all the necessary isolations in terms of process, electrical and other stored energy sources have been carried out so that the equipment is under zero energy level and all isolation points are clearly identified in the field, the permit will be processed by QAPCO authorized permit issuer.
- Once the work permit is signed, it means ownership of equipment is changed from operation to Lead Executor responsibility. Lead executor is also responsible for all the actions taken for making the job safe. However, permit issuer should communicate and update the Lead Executor regarding any additional hazards arising from abnormal operations.

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ITEM 8.3: Task Risk Analysis

The primary propose of work permit is to identify the basic risk assessment of the task and take appropriate control measures to reduce the task risk to as low as reasonably practicable.

The Work permit defines the work with a clear description. It is the responsibility of the Permit Issuer to conduct a “job site inspection” with the Lead Executor to ensure that the equipment and worksite has been properly prepared and identify all the potential hazards.

Permit issuer and Lead Executor must also identify hazards associated with the work, and document the precautions to be taken for all identified hazards associated with the work to proceed safely before signing the PTW.

Mitigations required for a specific sub-task or period during the activity shall be clearly mentioned and explicitly specified in the permit form.

Permit issuer should indicate in the PTW form on the requirement of field operator’s presence during the first-break in any system if the PTWs issued

- Involves opening / loosening up flanges, caps, and plugs.
- Lists out all the precautions necessary for performing the jobs and
- All the control measures to be in place to perform the job safely.

Based on the level of risk it is necessary for the involvement of 3 parties (plant operations, job executor, safety & other relevant dept.) for the authorization of the permit and the permits should be signed only when all the safety precautions prescribed in the permit are implemented and checked.

Job readiness audit shall be conducted by safety representative for critical jobs, such as (confined space, excavation, lifting activities & open flame hot work)

A detailed job safety analysis has to be performed based on the JSA evaluation criteria specified in the Job Safety Analysis procedure (PR-QSS-127).

ITEM 8.4: Control Measures and PPEs Requirements:

Based on the risk analysis QAPCO operations and job executor will define the control measures and PPEs requirements for task to manage the hazards at acceptable level.

Permit issuing authority (plant operations) shall identify special precautions to prevent / control the releases to environment, accidental, or through normal drainage and venting for vacating containments, or those generated during work.

Some of the control measures from the list will have to be taken by the lead executor and his team while executing the job.

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Any other precautions to be taken but not listed shall be added in the space provided.

Permit issuer and lead executor have to understand the task risk and control measures.

Lead executor should understand the requirement of PPEs and responsible to arrange them.

Lead executor should ensure that his team must use all required PPEs during execution of activity.

Following documents shall be attached with the permit copy whenever applicable:

- JRA
- JSA
- Blind List
- Lifting Plan
- Sketch/Drawing
- Mechanical Excavation Clearance
- Continuous Gas Monitoring
- CSE Entry Log Sheet
- Line Cutting Location Identification
- Vehicle Entry Card

All Other document/ Permit supporting documents shall be managed as per defined matrix (Appendix:10.11)

ITEM 8.5: Acceptance and Issuing of Permits:

A location/department manager is overall responsible for the permit compliances.

Assigned permit issuing authority shall ensure that the task has been defined clearly to execution team and he understood the risk and defined safety precautions and then signed the permit for issuance.

He must ensure that all work operating instructions are communicated to the execution team and operation team members.

Plant operations/ issuing authority should ensure that if any isolation is performed against the task it should be defined in the work permit.

If any certificate required, plant operations /area owner shall ensure that certificates are approved & control measures are implemented before issuing work permit.

Permit issuing authority / plant operation should ensure that all required reference documents are to be attached with permit.

Permit issuing authority will communicate and obtain the signature of an "Other Affected Plant" when required. (Such as nearby plant which may be affected while performing the task).

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Lead Executor must understand the work content and the requirements of the task before signing on the permit. When the executor signs the permit the person accepts all the conditions prescribed by the permit and takes the responsibility to abide by all the conditions prescribed in the permit. For high risk activities such as open flame hot work permit and other special certificates (confined space, excavation, Crane/Lifting operations) executor Supervisor/ Planner should initiate the permit expressing that all potential hazards are identified and control measures are adequate. Lead executor shall perform the last minute risk analysis before the start of task and verify the zero energy of equipment from plant operations.

Lead executor should hold a TBT with the working group, discuss the content, the requirements of the task and its HSE implications. He must ensure that all members of his work group party understand what is required.

Issuing authority Section Head or his delegate is required to approve (Hot work, excavation, confined space & security bypass, Crane/Lifting Operations) after confirmation that all risks are identified and managed.

Permit to be authorized by Field Operator before the start of the task.

Area Field operator shall demonstrate the Zero energy to the lead executor (when required).

The Field Operator is responsible for validating the control measures and authorizing the work Permit before the work starts. He will normally do this at the task area.

If any job is suspended due to another job of higher priority the lead executor has to inform the CCR and return back his copy of permit to CCR with reason of job hold/ suspension.

ITEM 8.6: End of work & Closing of Permit

When the job is completed it is the responsibility of the job executor to **perform the housekeeping** of the area and inform the Permit Issuer that work is completed.

Closing the Permit: The Permit Issuer and Lead Executor must complete the Closing part by signing on permits on all copies. Whoever is closing the permit assumes all responsibilities associated with the permit closure.

After finishing the work, the executor has to tick off the **reason for closing** the permit whether it is due to "end of work", due to "validity expiry" or due to any other specified reason.

Area Field operators have to verify the task completion, equipment condition and initiate the closing of the permit.

Validity expiry is used when the permit has exceeded the period of given validity period in section-1 of the permit.

The permit closing is done by the Lead Executor by inserting his name, date, time and signing off.

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In the event a copy of the permit is misplaced the permit has to be closed in the available copy with remarks that the relevant copy is misplaced and has to be mutually agreed by the issuer, executor and the safety personnel.

Job Site Inspection: A job site inspection by the Permit Issuer/ Field operator & the Lead Executor must be done to ensure that the work is complete and housekeeping is done including segregation of waste containers and appropriate labeling.

The permit issuer (plant operations or asset owner) has to inspect that the work area is restored to normalcy and housekeeping conducted before closing the permit.

For the permits issued in classified areas, inform respective Shift Supervisor about the PTW closure

If verification of the task completion may result in hydrocarbon release, the verification should be carried out after closing all hot work permits and confined space entry certificates linked to the area.

ITEM 8.7: Cancellation of all Isolations

- All cancellation of energy isolations pertaining to a specific job should be done only after closing of all the permits associated with the job.
- If multiple electrical isolations are present in one permit, it is the responsibility of the operations to ensure that all the permits that are linked to every isolation are closed.
- Similarly, if multiple work permits are linked to one electrical isolation permit, it is the responsibility of the operations to ensure that all the permits linked to the isolation are closed and that power cables of the electric drive are connected before issuing electrical de-isolation permit.
- Operations shall confirm isolation point identifications if any, viz. tags have been removed.

ITEM 8.8: Permit Suspension and Invalidity (refer Appendix to 10.2)

A work permit can be cancelled or suspended at any time depending on the situation of the work site. The work must be stopped if:

- There is an emergency siren activated.
- The preconditions and requirements for the work permit/certificate are not fulfilled
- A dangerous or unsafe situation arises or operational conditions indicate the necessity to stop the work.
- A reportable incident occurs during the work
- The validation period expires
- Inability to complete job due to lack of resources, e.g. spares parts.

The executor has to ensure that he will leave the work site and equipment in safe condition.

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When a permit is suspended it is the responsibility of the Lead Executor to approach the operations and revalidate the permit.

In the event of a reportable incident or an emergency in the permit area a new work permit has to be processed after closing the existing permit & site verifications.

ITEM 8.9: Permit Extension or Revalidation: (Refer to Appendix 10.2)

Revalidation of PTW

The permit to work can be valid for the job duration stated by the permit issuer on the document but will not exceed by the defined period. The daily approval of the PTW for execution is valid for one shift minimum after the first approval. The revalidation of the permit has to be done at the beginning of every production shift by signing the rear of the executor copy by the issuing authority and executor.

Hand over: If work is to be carried over to another shift, the job shall be properly handed over to the relieving personnel. The hand over shall ensure that the new crew is aware of the job, the status of the job, and any additional information in regards to the job.

Permit Issuer to verify conditions of the original permit. The outgoing Permit Issuer and/or Lead Executor shall communicate conditions of the PTW to the new Permit Issuer and/or new Lead Executor including hazards and associated mitigations.

Permit can be revalidated only if the following conditions are met: Permit issuer should verify the conditions at site before revalidating the permit:

- Same location
- Same asset/asset conditions
- Same job description
- Safety precautions stated in the permit and/or JSA are FULLY implemented at site.

The executor shall be responsible for monitoring the validity and extension of the Work Permit, and shall inform to Permit Issuer for revalidation in time.

After revalidation, Permit Issuer must inform respective board operator of revalidation.

A permit can become invalid if:

- The job scope has changed and is not in accordance with the description given the permit.
- If any **corrections** are made on a completed and issued permit.
- Site conditions are changed.
- A reportable incident occurs during the work

Once a permit has become invalid, the executor has to close the invalid permit and a new permit has to be processed.

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Response to Plant Emergency Sirens

If the gas detector alarms or plant emergency siren sounds at any time during the job:

- a **Stop all work**; all permits are cancelled automatically in both affected and non-affected areas. Refer to the Emergency Response Procedure and Action Plan for more details.
- b Equipment must be turned off and secured as quickly as possible.
- c Lead Executor is to notify the Permit Issuer / Field Operator about status of equipment and workers team.

Changes in conditions during validity of the permit

1. Permit Issuer and Lead Executor must review the changes.
2. Work must be stopped and Permit Issuer be immediately informed if there is:
 - a Change in scope of the work.
 - b Change in work method.
 - c Change in the tools or equipment being used which changes the hazard.
3. If changes affect the permit conditions then new permit must be issued.

For example: If a tool that is not intrinsically safe need to be used in classified area then a hot work permit must be required.

-
- 1. Fire & Safety Representatives must inspect the job site after a work stoppage due to emergency or incident to revalidate jobs in this site.*
 - 2. Field Operator shall immediately barricade the area in case of any incident happened to preserve the scene for investigation purposes.*
-

ITEM 8.10: Training and Competency:

a) Training for executor

Lead Executor may be QAPCO or contractor employee but he must go through the basic QAPCO trainings such as QAPCO Safety Induction.

b) Training & Competency for Lead Executor

Safety Induction, QAPCO 12 Golden Rules, QAPCO PTW training and test, in addition contractors have to pass PTW interview with QAPCO Safety.

Lead Executor must have Basic English language understanding, he should read, write & communicate in English.

The Contractor Focal point has to initiate the request for Lead Executor by using PTW training request form (Appendix 10.9)

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All Contractors acting in the capacity of a Lead Executor / Safety Officer must be assessed as:

- After completion of trainings, an interview to be conducted by QAPCO Sr. Safety Officer (HSE Department) to check the overall understanding of QAPCO PTW rules.
- During the interview following skills, but not limited to, will be assessed:
 - a The candidates English language comprehension, reading and writing.
 - b The candidates awareness of QAPCO emergency Response communication, incident reporting, site or task hazards,
 - c Understanding and basic knowledge of QAPCO procedures, safety policies, related to his services as Lead Executor / Safety Officer Duties as appropriate.
 - d Contractor Safety Officers should be certified as Authorized Gas Tester (AGT) to be approved to sign Open Flame Hot Work Permits and Confined Space Entry Certificates. (*if contractor safety officer not AGT certified QAPCO safety will support to perform initial gas testing*)
- Based on the interview result, Lead executor ID card will be issued.
- Department Managers shall ensure that all individuals involved in Issuance, Acceptance, of PTW are aware of, and trained in the requirements of the work permit procedure.
- Responsible Department manager/ his delegate will nominate PTW handlers (Signatories) and communicate to HSE department.
- HSE Division will arrange “PTW training” for new employees based on job position under NEOP program (New Employ Orientation Program).
- The validity of training will be 3 Years. All PTW handlers (Signatures) should go for refresher training after every 3-years.

HSE Division will conduct the PTW Procedure refresher training periodically, only successful ***candidate with (70%) score will be considered as PTW signature authority. (Issuer or Executor).***

Test will be conducted in English language only.

Department training focal persons are responsible to maintain & track their employees PTW training record for validity.

ITEM 8.11: Monitoring & Auditing

Monitoring and Auditing of the PTW system is intended to:

- Check whether people are complying with the PTW system;
- Check whether the PTW system is meeting its objectives;
- Identify necessary improvements to the PTW System.

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Monitoring:

Monitoring of the system consists of regular checks by supervisors responsible for managing the operation of the Permit to Work System. The field verification checklist or audit checklists are included in respective procedure/ instructions such as (LT&T, Work at height, lifting, confined space etc.) which can be used during the execution of field visits, while making safety observations, or when conducting the safety walks by the company’s leaderships.

Field verification checklist constitute a set of simple and practical tools, aimed to detect meaningful deviations, and correct them, and to improve the quality of discussions with field personnel.

It is optional for Operators and Technicians to use the Field Verification Checklists, as they are the direct PTW issuers and executors, and are required to go to all details needed to ensure safe work.

Auditing:

Auditing is intended as a thorough examination of the way the system is operating, as a verification of the effectiveness of monitoring process described above and should be conducted by the Safety professionals in their capacity of system auditors.

The PTW Audits are done with standard checklists (Appendix-10.6) and must concentrate on examining evidence relating to the items on the checklists.

A PTW system Auditor should report significant observation with remedial actions in audit report and submitted to area owner for corrective actions. (Appendix-10.6). Department Manager ensures that appropriate corrective actions are taken for auditor’s significant observation.

Line Organization Seniors (e.g. Site Managers, Plant Managers, Principal Engineers, and Engineers) can also conduct audits using the detailed Audit Checklists, and score their compliance, in order to:

- Identify, document, and report key areas of improvement in Safe Work Practices (SWP) compliance in their daily / monthly operations and safety forums (e.g., daily production meetings, ALT meetings)
- Quantitatively monitor the SWP compliance through SWP score from Audit Checklists, and thus compare with HSE Audit scoring.

ITEM 8.12: Other Requirements:

a) Tool Box Talks

It is the responsibility of the executor to conduct the tool box talks with all the work crew under his responsibility who will be performing the job described in the permit. These talks must be conducted at work site before the job commences.

Tool box talks are conducted for all jobs requiring the permit. They must also be conducted during permit revalidation.

The tool box talks must be conducted between the permit issuer and the executor before signing the permit.

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Toolbox talks should include the following at a minimum:

- The Last Minute Risk Assessment (LMRA)
- The job and site specific hazards.
- Individual responsibilities
- The work plan and safe work methods to be employed
- Any potential conflicting activities at the work site
- The work site preparations, protection and precautions
- Compliance with all the permit prescribed precautions and PPE requirements
- The equipment involved in the job and their hazards
- Specific emergency action plan for any incident.

b) LMRA (Last Minute Risk Assessment)

The Last Minute Risk Assessment (LMRA) is a brief, individual, mental hazard assessment of a task and the worker(s). It is conducted by the lead executor on the field before and during the work to identify any other hazards that may present due to site or equipment conditions. (Refer to Appendix: 10.7)

LMRA Application:

The **Last-Minute Risk Assessment** (LMRA) is conducted by lead executor on the field. For the Maintenance works, the supervisor is accountable to do the LMRA with the members of his team.

Benefits of LMRA

The LMRA is used to review day-to-day operational and procedural systems to identify hazards on the field that have been overlooked in the equipment or process design, e.g. change post start-up, lack of proper procedures or training, equipment or process modification.

- It is simple and easy of use.
- The time to do it is disproportionately less compared to its value.
- Opportunity to Empower employees as loss prevention experts.
- Integrates prevention of losses with operating procedures.

Principle

No one can plan for every eventuality

Things change like:

- Scope
- Unexpected events
- Local activities
- People
- Weather
- Circumstances

Everyone has to be responsible for their own and coworkers' safety

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Before work can begin, it must be ensured that all risks are under control and the necessary prevention measures have been taken. Use LMRA card(Appendix 10.7) and think about each question carefully. If you have answer No from one of the questions, it is imperative that you contact your supervisor. Where this is the case, you may not start the works under any circumstances.

Here is simple guidelines how to use LMRA:

Step 1: What I have to do?

Step 2: What are the hazards and the risks?

- What do you think can still go wrong?
- Which hazards or risk do you see?
- What are the hazardous situations?

Step 3: What kind of measures must be implemented to eliminate or reduce the risks?

- Which measures can be put in place to remove the risks that still remain or to make them acceptable?

Step 4: What kind of actions must be taken to ensure safe performance?

- Implement the measures that are necessary to remove the risks that still remain or to make them acceptable.
- In other words, ensure that the activities can be carried out safely.
- Keep the measures in place during the works.
- Evaluate the measures on completion of the works.

c) Zero Energy

Area Field operator shall demonstrate the Zero energy to the lead executor (whenever required).

During the issuing of the PTW in the control room, if the job is to intervene on equipment with a potentially energy, the operator and the intervener make together **on the field** a checking of absence of energy related of the equipment on which the intervention is planned.

This shall be done by using of Zero Energy Card (Appendix-10.8)

The objective is to ensure together the absence of energy on the field before starting the work. (Appendix 10.8)

The first step is to identify the sources of energies in the document 'Control zero-energy' related safety measures are mentioned in PTW.

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In the document 'Control zero-energy', safety measures were classified and grouped according to the type of energy:

- Pressure,
- Product/fluid,
- Temperature,
- Electricity,
- Atmosphere/environment, (means no gas or no hazardous product)
- Mechanical.

In front of each safety measures, the checking method to realize (according to the possibilities of installation) is noted to ensure the absence of this type of energy.

- Exercise will be done at site, the operator and the intervener carry out together the absence of energy checking.
- The operator demonstrates to the intervener the absence of energy; they complete the entire document "control zero energy" (for the energy concerned, it means the checking done), and they sign each one clearly at the bottom of the document.
- The intervener keeps the full document and the work can begin.
- If the absence of energy control is not possible or if it turns out that the lack of energy is not complete, some additional precautionary measures must be taken as example, the port of specific PPE, use of tools, a different working method, the presence of the operator during the work, .etc.
- The additional precautionary measures are indicated on the bottom of the document.
- If in the PTW, safety measures requesting the specific port of EPI are noted, the intervener demonstrates operator and their equipment with him to do the job and then they must complete together the document 'control zero energy'.

ITEM 8.12: Safety Variance: **

It is recognized that all situations cannot be addressed in any one procedure, program or standard. Therefore, safety variance shall be used for situations where it is required to vary from the established standard or practice.

The purpose of this variance is not to avoid established safe work practice or standards but to address case-by-case situations where following the procedure is not possible to comply or an equally safe alternative that make more practicable for a task. Safety variance is applies to intended safety deviations in the Company to the written requirements (it includes PTW and its associate procedures, instructions or guidelines).

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Safety Variance Permit Approval process: (Appendix 10. 10)

- a. A Risk assessment (JSA) shall be conducted for all Safety Variance Permit requests. JSA template and team will be as JSA procedure. Safety manager shall be mandatory member of JSA related to variance.
- b. The asset owner, seeking approval, shall prepare an safety variance permit form Appendix 10. variance package with all applicable documents for review and approval.
- c. All the steps defined in Appendix 10.10 Should be followed.
- d. A register for Safety variance shall be maintained by HSE Support department.

9. RECORDS

The owner / executor of change shall maintain the following, but not limited to, records / documents for reference:

#	Document / Record ID	Document / Record name	Responsible department or section
1	-	Work permits	Kept in the plant control room, maintenance for a period of one month.
2	PR-QSS-114	Permit to work procedure	available online via Intranet

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10. APPENDIX

Note: Annexures template can be updated without revising the complete procedures

10.1: Service Level Definition

10.2: Permit / Certificate Requirements

10.3: Authorization & Signature Matrix

10.4: Responsibilities for permit process

10.5. Job information Form

10.6: PTW Audit check list

10.7: LMRA checklist

10.8: Zero Energy Checklist

10.9: PTW Training Request & Approval Form

10.10 Safety Variance

10.11- PTW attachment Matrix

10.1 SERVICE LEVEL DEFINITION

The key services and service levels listed below are required to complete the activities contained within this procedure

#	Service	Service level	Service provider	Service customer
1	SAP EHS	Standard	SAP	PTW Noncompliance observation recorded as EHS Module

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10.2 JOB SCOPE AND THE CORRESPONDING PERMIT/ CERTIFICATE REQUIREMENT IN QAPCO COMPLEX.

Permit Type / Job Scope	Cold work permit	Hot work permit	Confined space entry Certificate	Excavation Certificate	Electrical isolation & de-isolation Certificate	Lifting work certificate	Authorization for security bypass Certificate	Radiography Certificate
Color of permit						None	None	None
Primary Validity of permit	One Shift	One Shift	For Job Scope	For Job Scope	For Job Scope	For Job Scope	For Job Scope	For Job Scope
Revalidation period	14 Days	One Week	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Any job in restricted area	√							
Spark potential or open flame		√						
Confined space entry job	√ ^[1]	√ ^[1]	√					
Excavation job	√ ^[1]	√ ^[1]		√				
Electrical isolation job					√ ^[1]			
Lifting works	√ ^[1]	√ ^[1]				√ ⁽³⁾		
Inhabiting of process or Fire Securities							√ ^[3]	
Radiography	√ ^[1]	√ ^[1]						√

^[1] This type of certificates will be linked to the main task permit (either cold or hot)

^[3] This type of certificates can be issued separately or linked to a task permit (either cold or hot) or Certificate (e.g. Confined Space Entry)

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10.3 PERMIT AUTHORIZATION AND SIGNATURE MATRIX

Signature	Requestor	Operations Shift Supervisor / Permit Issuer	Lead Executor /Shift responsible	Head of Section	Execution Supervisor	Area Field Operator	Department Manager	Electrical Planning Engineer	Automation Planning Engineer	Mechanical Planning Engineer	Inspection Representative	Crane Operator
Permit												
Cold work Permit	√	√	√			√						
Hot work permit	√	√	√	[*]√	[*]√	√						
Confined space entry Certificate	√	√		[*]√		√						
Excavation Certificate	√	√	√		[*]√			√	√	√		
Electrical isolation & de-isolation Certificate	√	√	√									
Lifting Certificate	√		√		[*]√							√
Security bypass Certificate	√	√	√	√		√	√					
Radiography Certificate											√	

[*] The Plant section head, Execution supervisor (or their competent delegates) will sign the open flame hot work to approve and authorize the open flame hot work.

[*] Execution supervisor will approve the Lifting and excavation certificates

[*] Plant head of section or his equivalent will approve the confined space entry certificates

For any work during weekends or out of normal working hours that requires the signature of Head of Section or Manager, the guard duty (or his delegate) can represent them after receiving authorization from them to sign on their behalf.

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10.4 RESPONSIBLE FOR ISSUANCE AND ACCEPTANCE OF PERMITS/ CERTIFICATE

Area/ Plant	Permit Issuer	Head of Section	Lead Executor	Execution Supervisor	Elect/ Mech./ Automation ^[*]
LDEP1/2/3 & LLDPE	Shift supervisor/ Shift coordinator	Head of Section of Respective Plant	QAPCO / Contractor Employee	QAPCO Employee/ Task execution Planner	QAPCO Maintenance planning Representative
Ethylene	Shift supervisor/ Shift coordinator	Head of Section of Respective Plant	QAPCO / Contractor Employee	QAPCO Employee/ Task execution Planner	QAPCO Maintenance planning Representative
Utilities	Shift supervisor/ Day Maint. coordinator	Head of Section of Respective Plant	QAPCO / Contractor Employee	QAPCO Employee/ Task execution Planner	QAPCO Maintenance planning Representative
Logistics	Shift Controller/	Head of Section of Respective Plant	QAPCO / Contractor Employee	QAPCO Employee/ Task execution Planner	QAPCO Maintenance planning Representative
Warehouse Stores	Inventory Coordinator	Head of Inventory	QAPCO / Contractor Employee	QAPCO Employee/ Task execution Planner	QAPCO Maintenance planning Representative
Contractor Yard/ laydown area	Area owner (Designated Person)	Head of Section	QAPCO / Contractor Employee	QAPCO Employee/ Task execution Planner	QAPCO Maintenance planning Representative
Buildings	Building Owner	Respective section head	QAPCO / Contractor Employee	QAPCO Employee/ Task execution Planner	QAPCO Maintenance planning Representative
Roads	Infrastructure and General Services	Respective section head	QAPCO / Contractor Employee	QAPCO Employee/ Task execution Planner	QAPCO Maintenance planning Representative
Work Shop	Maintenance	Respective section head	QAPCO / Contractor Employee	QAPCO Employee/ Task execution Planner	QAPCO Maintenance planning Representative
Petrol station	Maintenance	Respective section head	QAPCO / Contractor Employee	QAPCO Employee/ Task execution Planner	QAPCO Maintenance planning Representative

[*] Required only to sign the Excavation Certificate as per the task scope.

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