

# Permit To Work



# What is Permit To Work System

- The PTW system is a formal written procedure used to control access and activities of personnel in the construction
- To ensure safety of personnel and to prevent damage to equipment
- It also means of communication between site management, supervisors and operators, who carry out the work
- PTW normally implemented in a work activities near or inside the operating facilities, there's buried or near operational system or where the clients thinks that PTW is deemed necessary

# How is work controlled within the Permit To Work System

Work is controlled by following various steps detailed in the permit to work procedures and by using special documents called WORK PERMIT.

Work permits are not simple permission to carryout work, but they determine how the work can be carried out safely.

# Types of Permit To Work

- Hot Work Permit
- Confined Space Entry Permit
- Electrical Permit (Energizing and De-energizing)
- Excavation Permit
- Radiography Permit
- Crane Critical Lifts
- Man-basket Operation
- Cold Work Permit

# Hot Work Permit

Classified as any type of work which involves actual or potential sources of ignition and which is done in an area where there may be a risk of fire or explosion, or which involve the emission of toxic fumes from the application of heat.



# Confined Space Entry Permit

Is normally used to specify the precautions to be taken to eliminate the hazards of dangerous fumes, gases liquids, or solids of lack of oxygen, harmful residues radiation or moving machinery from confined space or from any other source before a person is permitted to enter a confined space.



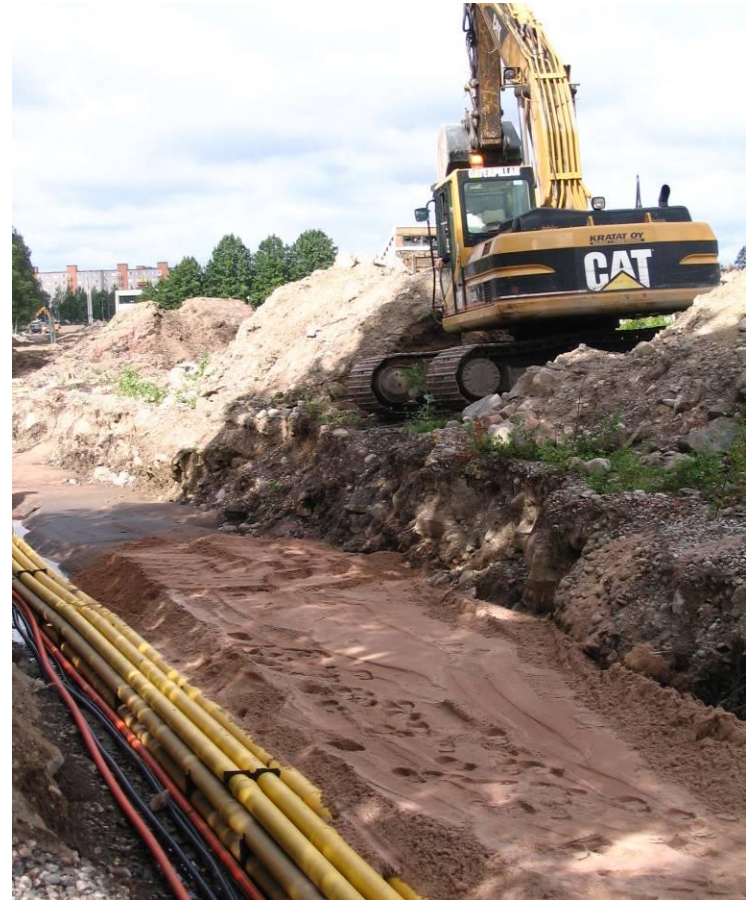
# Electrical Permit (Including Energizing and De-energizing)

Is normally used to cover any work on electrical equipment and precautions to be taken to eliminate the risk of electric shock / electrocution to people carrying out the work or damaged to property



# Excavation Permit

- Is required for any work to be carried out where existing lines or services may be buried or encountered.
- Any excavation deeper than 0.3 meter
- Excavation activities near existing structures (i.e. Electrical post, buildings, Permanent Equipments, etc...)
- Excavation activities in area classified as safe area for excavation, a blanket permit maybe requested for long duration of time





# Radiography Permit

Is normally used to cover industrial radiography – safe working practice and precautions to be taken to eliminate the risk associated with radio active sources.



# Crane Critical Lifts Permit

Permit is needed when lifting requires Rigging Study;

- Load is 40 Tones and above
- Crane lifts is performed in “High Risk Environment”
- Load is too big/wide to be lifted
- Lifting where 2 or more cranes are required



# Man-Basket Operation

- Prior to the use of any man-basket suspended from a crane for hoisting personnel, the highest level of Project management must determine and be sure that conventional means is more hazardous or impossible due to structural design or worksite conditions, approval must be signed.
- A trial lift is required prior to actual riding of personnel inside the basket to make sure that operator can safely position the man-basket in the intended location



# Permit Issuer Responsibilities

In the case of operational plant, the Company normally has its own permit system. The Operation Manager of the affected section of the plant or his designated representative shall be the permit issuer. In a non-operational area but existing facilities are already in place, The Contractor Area Construction Managers or Company Section head shall be the issuers of the permits.

- The Issuer has the sole authority to issue the permit.
- The Issuer shall be fully aware of site conditions, the type of work to be carried out and all the requirements stated in the permit.
- The Issuer shall conduct an onsite inspection jointly together with the Receiver to ensure that site conditions are safe to permit the work and all requirements stated in the permit are implemented prior to the issuance of the permit.
- The Issuer shall withhold the issuance of the permit if the requirements are not met, or site conditions are not safe for the work to carry out.

# Permit Issuer Responsibilities

- The Issuer shall, if noticing the presence of any other potential hazards, risks that may jeopardize the safety of the worker, tools or equipment advise the Receiver of appropriate countermeasures to be taken.
- The Issuer shall ensure that all required safety-monitoring measurements are properly done and so stated in the permit.
- The Issuer shall ensure all personnel involved in the work are fully aware of Emergency procedures.
- Once informed the work is completed, the Issuer shall visit the site jointly with the Receiver to ensure that the work is ceased and the site is kept clean and tidy without any smouldering exist.

# Permit Receiver Responsibilities

Task supervisors who are directly responsible for the work stated in the permit shall be the Receiver of the Permit. He shall clearly define the job to be done, the exact location and nature of the work. Also to ensure that the conditions on the permit are met in full

- The Receiver shall be fully aware of all requirements stated in the permit and comply with them at all times.
- The Receiver shall fully brief the work crew to ensure that requirements are clearly understood by the crew under his supervision.
- The Receiver shall ensure the work is performed in accordance with the conditions specified in the permit. He shall remain at the work site to supervise the work.
- The Receiver shall ensure that under no circumstances shall by his own discretion or his crew change the original scope of the work, which is described in the permit.

# Permit Receiver Responsibilities

- The Receiver shall request a new permit in the event a change in the scope of the work becomes necessary.
- Whenever site conditions are drastically changed, the Receiver shall immediately stop the work and inform the Issuer of the change for further instruction from him.
- Upon the occurrence of an emergency the Receiver shall immediately stop the work and shut down all equipment.
- The Receiver shall report the completion of the work or the expiration of the validity of
- the permit to the Issuer and ensure that the site is kept clean and tidy without any smouldering/ignition sources.
- If the work in progress requires extending the validity stated in the permit, the Receiver shall suspend the work and request an issuance of new permit.

# HSE Permit Coordinator Responsibilities

- The HSE Permit Coordinator designated by Area Construction Managers is responsible for daily coordination of the work permits.
- He is responsible for full clerical control of the system including retention of the closed out Work Permits for one-month period.
- Has the full overview of the planned, open and suspended work permits on visual display in his permit to work office.



# Operational Procedures for the Work Permit System

1. A Work Permit consists of a set of three pages. The White page shall be kept by the Receiver and kept at the work location, Yellow page shall be kept by the Issuer and Green page shall be kept by the HSE Permit Coordinator.
2. The description of the work shall be a precise statement of the planned activity, the location of the work by identification of the area or equipment to be worked upon. Broad scopes of work of a general nature are not acceptable.
3. Method Statements, Risk Assessments and/or Job Safety Analyses will be produced for critical activities and shall be attached to and form part of the permit. Such additional documentation shall be attached to the original of the Permit.

# Operational Procedures for the Work Permit System

4. Where additional Permits or Certificates are required, they will be attached to and form part of the Permit to Work.
5. The Receiver shall produce the permit to Contractor responsible personnel for the work requested in the permit for review and verification by 15:00 hours a day prior to the commencement of the work
6. As soon as the review and verification has been made, the Receiver shall bring the verified permit to the HSE Permit Coordinator.
7. The HSE Permit Coordinator shall scrutinize the permit including safety precautions and requirements stated in the permit and deliver it to the Receiver. The HSE Permit Coordinator should consult HSE personnel for professional advice or suggestions required to work safely.

# Operational Procedures for the Work Permit System

8. The Receiver shall bring the permit to the Issuer who shall review the permit to ensure that all required safety precautionary measures are stated and authorizes the permit.
9. On the day of the work, the Issuer in the person together with the Receiver shall go to the site to ensure that all requirements in the permit are met and hand over the permit to the Receiver
10. Issuance of the permit to the Receiver in the office shall not take place.

# Operational Procedures for the Work Permit System

11. Upon receipt of the permit from the Issuer, the Receiver can commence the work.
12. When no further work is to take place under a permit, the Receiver shall sign off and return the permit to the Issuer to close the permit.
13. Upon receipt of the permit, the Issuer and the Receiver shall inspect the work site to ensure that no smouldering is present, the work site is clean and tidy and equipment is left in a safe condition.

**The issuer shall return the invalid permit to the HSE Permit Coordinator for file.**

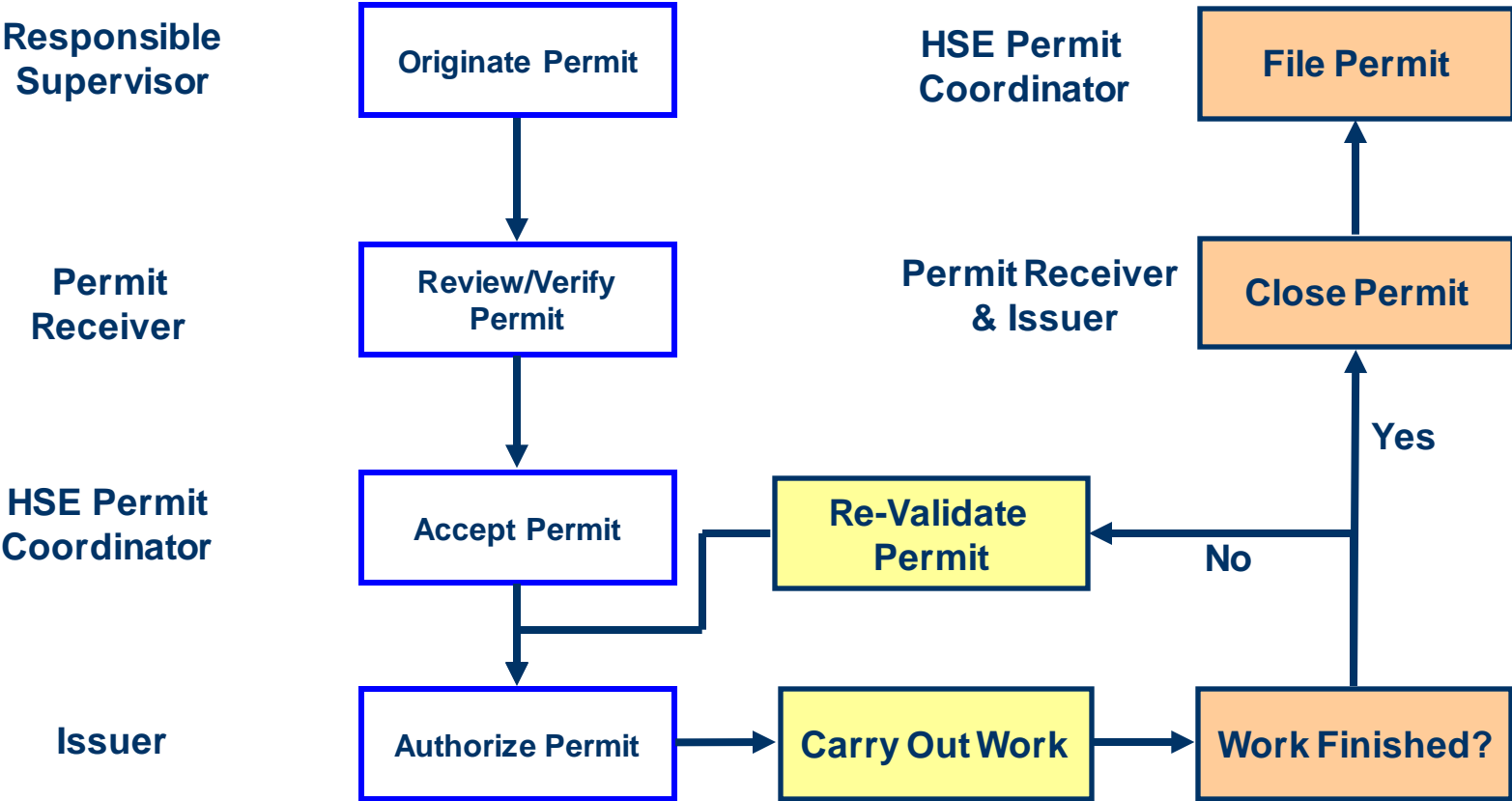
# Revalidation of the Permit

- When the work calls for any extension of the permit, the Receiver shall suspend the work and request an extension of the validity to the Issuer.
- The Issuer is responsible for ensuring that all precautions and requirements are still in place and the conditions in the work site are maintained safe for personnel and equipment.
- If the issuer agrees to extend the permit he shall define the time of the expiry and sign in the permit to authorize the extension.
- The Receiver returns the extended permit to the work site and resumes the work.

# Emergency Situation

- When an emergency, such as a fire incident, Toxic Gas Release, Natural calamities has taken place the Receiver shall immediately stop all works and shut down all equipment.
- All permits shall be nullified and no work shall be resumed unless new permits have been issued out by the Issuer.
- Prior to the issuance of a new permit, the Issuer shall visit the work site to ensure that there is no imminent hazard/risk present and that the work site is safe for work.

# Work Permit Flow Chart



# Summary

- The Permit to Work is designed to provide a safe system of work that can be applied to works identified by virtue of perceived risks.
- This shall be applied to the Contractor controlled Construction activities on the Project.
- Permit requirements for activities other than those mentioned in this procedure will be re-evaluated especially for potentially hazardous activities where an extra degree of work control is felt to be appropriate.