

SOP- 15Work Permit System**Purpose:**

To ensure that a safe system of work has been defined for the task so that work may be accomplished in a legal, safe environmentally acceptable and efficient way.

**General Operating Procedures and Best Practices:**

Only persons who have been trained and authorized shall issue, authorize or accept Work Permit (WP).

- Only work, which is specified on the WP, shall be undertaken.
- For jobs of long duration, as far as practicable, the WP shall cover only a particular phase of the task at a time, that can be fully specified and to be completed within the duration mentioned in the Permit.
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- If work requires isolation across operating boundaries, a separate isolation WP shall be issued as evidence that the task can proceed.
- The period of validity for a WP in defined areas within a site shall be the estimated time for the completion of the job, but no more than 8 hours or the period during which the Issuer / Eng. Officer is present at site. Work beyond this period shall be re-authorised by the respective Reliever(s) after re-assessment of the job location.

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- An Acceptor needing to continue with the job into the next shift/period must be asked to contact the Issuing Plant in the next shift and ensure the validity is extended provided that no change has taken place in the conditions stipulated in the permit.
- The permit issued on a particular day may be extended, if required, only for the shifts on that particular day. For work extending beyond the day and to continue on the next day(s) a fresh permit shall be issued.
- In accepting a WP the Acceptor must:
  - a) understand the scope of work to be carried out,
  - b) understand the isolations/preparations made
  - c) visit the Site with the issuer/engineering officer if necessary
  - d) sign the permit and retain the first COPY

**Special hot work precautions:**

Special hot work and fire prevention precautions and Standard Operating Procedures (SOPs) should be implemented if welding or hot cutting is undertaken outside established welding work stations, including 'Hot Work Permits, stand-by fire extinguishers, stand-by fire watch, and maintaining the fire watch for up to one hour after welding or hot cutting has terminated. Special procedures are required for hot work on tanks or vessels that have contained flammable materials

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A “permit-required” confined space is one that also contains physical or atmospheric hazards that could trap or engulf the person. Confined spaces can occur in enclosed or open structures or locations. Serious injury or fatality can result from inadequate preparation to enter a confined space or in attempting a rescue from a confined space. Recommended management approaches include:

- Engineering measures should be implemented to eliminate, to the degree feasible, the existence and adverse character of confined spaces.
- Permit-required confined spaces should be provided with permanent safety measures for venting, monitoring, and rescue operations, to the extent possible. The area adjoining an access to a confined space should provide ample room for emergency and rescue operations.

- Prior to entry into a permit-required confined space:

- Process or feed lines into the space should be disconnected or drained, and blanked and locked-out.
- Mechanical equipment in the space should be disconnected, de-energized, locked-out, and braced, as appropriate.

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- The atmosphere within the confined space should be tested to assure the oxygen content is between 19.5 percent and 23 percent, and that the presence of any flammable gas or vapor does not exceed 25 percent of its respective Lower Explosive Limit (LEL).
- If the atmospheric conditions are not met, the confined space should be ventilated until the target safe atmosphere is achieved, or entry is only to be undertaken with appropriate and additional PPE. Safety precautions should include Self Contained Breathing Apparatus (SCBA), life lines, and safety watch workers stationed outside the confined space, with rescue and first aid equipment readily available.

Before workers are required to enter a permit-required confined space, adequate and appropriate training in confined space hazard control, atmospheric testing, use of the necessary PPE, as well as the serviceability and integrity of the PPE should be verified. Further, adequate and appropriate rescue and / or recovery plans and equipment should be in place before the worker enters the confined space. Lone and Isolated Workers A lone and isolated worker is a worker out of verbal and line of sight communication with a supervisor, other workers, or other persons capable of providing aid and assistance, for continuous periods exceeding one hour. The worker is therefore at increased risk should an accident or injury occur.

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Where workers may be required to perform work under lone or isolated circumstances, Standard Operating Procedures (SOPs) should be developed and implemented to ensure all PPE and safety measures are in place before the worker starts work. SOPs should establish, at a minimum, verbal contact with the worker at least once every hour, and ensure the worker has a capability for summoning emergency aid. If the worker is potentially exposed to highly toxic or corrosive chemicals, emergency eye-wash and shower facilities should be equipped with audible and visible alarms to summon aid whenever the eye-wash or shower is activated by the worker and without intervention by the worker.

**Safety Precautions:**

- Fall prevention and protection measures should be implemented whenever a worker is exposed to the hazard of falling more than two meters; into operating machinery; into water or other liquid; into hazardous substances; or through an opening in a work surface.
- Fall prevention / protection measures may also be warranted on a case-specific basis when there are risks of falling from lesser heights.

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(or protocol for replacement / refurbishment):**

System Audit for checking effectiveness of the WP system

It is very essential to understand the effectiveness of the work permit system and this can be achieved through regular system audits.

- The Site Safety representative or EHSS department shall conduct formal audit of WP system covering all defined areas at site, at least once in a month, to confirm its appropriateness and full compliance to all provisions of this Standard.
- The audit shall be carried out using a checklist developed based on this Standard. Formal audit reports shall be prepared and appropriate corrective actions identified
- The EHSS department head and project head shall personally carry out random checks of Work permits records.

**Signage systems and symbols or coding:**

Signages various work permit requirements at certain location of workplace;

**Training needs:**

Training to Manager, Site Staff and EHSS Personnel on Inspection Procedures, Discussions & format instructions for Contractors Personnel.

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Responsibility for implementing the work permit system: While the responsibility of implementing the procedure lies on all personnel, employees of the vendor, contractor and their supply chain actors, specific responsibilities have been allotted, keeping the significance of the standard in mind.

**1) Project head/in-charge/owner**

The project owner will have the following specific responsibilities

- Nominate managers (department or functional heads) who have authority to appoint persons who may issue or accept WP in their areas of responsibility
- Define the plant area boundaries within which their teams will issue WP
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- Issue a register of any specific tasks exempted from this procedure in their areas of responsibility, after consultation with the Safety representative and concerned managers
- Carry out random checks on WP issued

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2) Vendor/Contractor Safety Representative The EHSS officer or the safety representative of the vendor/contractor should

- Be responsible for imparting the training on WP system and upkeep of the training packages. The training packages must be based on this Standard.
- Conduct internal system audits on WP at least once two months and report findings to the management team at site.

3) Issuer of Work Permit

The issuer of the work permit should:

- Be responsible for determining the nature and extent of the job to be carried out, possible hazards and the necessary precautionary measures to be taken prior to issuing the permit,
- Ensure that necessary isolations are carried out,
- Provide acceptor with necessary Method Statements / Risk Assessments (where applicable)



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- Take assistance of maintenance manager/officer in carrying out above responsibilities in case of an engineering job, § Ensure that necessary precautionary measures are taken prior to authorizing the permit.,
- For jobs directly under charge of the Issuer, the Issuer of WP shall:
  - a) Select competent people for the job
  - b) Be responsible for explaining the safe Work Method to the persons carrying out the job provide them with proper tools / PPE
  - c) Be overall responsible for the job.

## 4) Acceptor (&amp; the Contractor Supervisor) of the Work Permit

The acceptor of the work permit should

- Assist the issuer / maintenance officer in hazard identification and developing Method Statement (if required)
- Provide the issuer / maintenance officer the names of all persons carrying out the job
- Be responsible for explaining fully to his subordinates the nature of the hazards involved in carrying out the task and any precautions necessary to protect others who may be in the area
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- Ensure that the nature and extent of the work does not differ from that described in the permit and that all persons under his control understand the precautions that they are required to take

#### **Site management:**

##### HOUSEKEEPING STANDARDS

- ❖ General Housekeeping: Each Contractor shall clean all areas of site and structure (exterior and interior) involved in its respective contract work immediately before final inspection;
- ❖ Protection and Control: risk areas demarcation, avoid

#### **Info and Instructions to be passed on to communities:**

- emergency response plan, emergency information and signal types and meaning, emergency response and control provisions on site;