



Global Products

Work Authorization Standard (Permit to Work & Hazard Assessment)

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Global Products – Work Authorization Standard

1.0 Introduction

A work authorization system is a mechanism to identify, communicate, mitigate, and control hazards associated with work that has the potential to adversely impact health, the environment and safety.

This standard defines Global Products requirements for Work Authorization / Hazard Assessment.

Numbers in Parentheses (e.g., (1)) indicate linkage to the requirement in the Enterprise Control of Work and Hazard Assessment Standards

This standard aligns with the Enterprise Control of Work and Hazard Assessment Standards

Standard Terms and Definitions are linked [here](#).

2.0 Requirements

1. Work Authorization is required for all the following circumstances: (1)
 - a. Work (including maintenance) that is perceived to have a significant potential for injury, incident or environmental release or risk that has been identified by incident history.

Emergency response work carried out during the initial containment (control) phase of an emergency is excluded from the definition of general work for the purposes of this standard and as such does not specifically require the use of a Work Permit but must still be carried out in a controlled and managed fashion. Ongoing response work after the containment phase, i.e., clean-up work, does fall within this definition of general work.
 - b. When specialized work permits are initiated (e.g., Isolation of Hazardous Energy, Hot Work, Confined Space Entry and Excavation).
 - c. When work is performed in a process area that involves breaking into a line, equipment or vessel that contains actual or potential hazards, or if the work may pose a hazard that is not typically present.
 - d. If there is a transfer of work and responsibility from one group to another.
 - e. If there is communication across more than one area, group, or technical discipline to accomplish the task (Simultaneous Operations (SimOps)).
 - f. When the Area Controller (Hub Manager, OPS manager/supervisor or M&C Project Manager) determines that a permit is required.
2. Individual workers shall not self-issue a permit. (3)

- a. Global Products shall follow the [Contractor Permitting Strategies](#) guidance for managing, approving, and accepting permitted work at remote locations where applicable.
3. Global Products shall use the Task Consequence Catalogue (TCC) as the list of work tasks within the scope of the CoW process. The TCC shall define task according to the consequence potential for all work tasks as Low, High, or Critical consequences and each task will define additional considerations, requirements, supporting documents as part of the safe planning and execution of the task. (HA:3)
4. A hazard analysis shall be performed in accordance with the [Enterprise Hazard Analysis OE Standard](#) when planning work within the scope of the Control of Work (CoW) process: (HA:1)
 - a. To identify significant, potential hazards.
 - b. To identify the need for special processes such as gas testing.
 - c. To identify if work will require permits (e.g., Permit to Work, Isolation of Hazardous Energy, Hot Work, Confined Space Entry and Excavation) or certificates.
 - d. To assess the need for or evaluation of Simultaneous Operations (SimOps).

Note: level of HA developed for tasks shall be defined as reflected within the Products TCC:

- Level 1 HA (developed by single person) – for all Low consequence tasks.
- Level 2 HA (involve at least 2 people) – for all High & Critical consequence tasks.

The hazard analysis shall include, at a minimum:

- a. An overview or description of the task, and
- b. Actual and potential hazards, and
- c. Controls and mitigations for identified hazards (HA:2)

For similar, repeatable work, a hazard analysis from previous work may be used as a template but shall be reviewed and updated to reflect the actual conditions and work scope of the current task and location. (HA:4)

A Job Safety Analysis (JSA) or equivalent shall be conducted by a competent person at the work site prior to beginning work to: (HA:5)

- a. Verify that all identified controls are in place and functioning, and
- b. Identify and mitigate any jobsite hazards that may not have been addressed in the hazard analysis.

Persons performing work shall continuously assess the task for changing conditions and stop work if conditions do not reflect the content of the hazard analysis (e.g., new hazard identified, controls no longer in place). (H:9)

5. Task Planning, Preparation & Hazard Analysis will occur through Global Products Work Planning Process (e.g., Routine Work Control, Capital Project, IMPACT/Turnaround, Task Consequence Catalog (TCC), etc.) (HA:1-4-6)

- a. Area Controllers (Hub/Ops Manager, supervisor or M&C Project Manager), Permit Issuers and Supervisor will be notified of the work to occur in their area. (e.g., through a Scheduling Process.)
6. The Permit to Work must include the following minimum requirements: (4)
 - a. A defined work scope.
 - b. Work boundaries including area limitations and period of validity.
 - i. Area limitations shall be limited to ensure the work crew has ready access to the Permit to Work and associated hazard analysis.
 - ii. Validity of a Permit to Work shall not extend beyond the end of the current shift of the Permit Issuer without permit renewal as described below in 14b.
 - c. Name of the Company performing the work
 - d. Types/classes of equipment and tools to be used during the planned work.
 - e. Relevant equipment preparation information (e.g., isolation, purging, cleaning, etc.)
 - f. Last contents of associated process equipment along with relevant process safety information (e.g., SDS, temperature and pressure).
 - g. Identification of critical process equipment in the work area that may be damaged during the performance of the work (e.g., sensitive equipment such as small-bore tubing, pressure gauges, ball valves, control valves, start/stop switches).
 - h. Cross-references to other required documents must be clearly identified (e.g., other required permits, hazard analysis, PPHA, Essentials Checklists, critical consequence plans, procedures)
 - i. Gas testing results must be clearly documented when gas testing is required.
 - j. Restrictions and safeguards required for safe execution of the planned work.
 - k. Required Personal Protective Equipment (PPE)
 - l. Space for signatures and dates of Permit Issuer, Permit Holder and any other required approvals.

Only the Permit Issuer or authorized designee can make changes to the information on the forms. When such changes are required, the Permit Issuer must collect the original and all copies of the work permit or form and the changes made to each one. Once the changes are made, the Permit Issuer must communicate the changes to the Permit Requester or Permit Holder, who must initial the permit/forms to denote acceptance of the changes. All work crew must be briefed on such changes before resuming work.

7. There shall be a means to ensure that clear communication and coordination of work is ongoing to address possible permit conflicts and/or SimOps. (5) (HA:4)

To identify and evaluate precautions to ensure that work may be conducted safely, a pre-job safety briefing is required to be held each day work is undertaken, even if the work is a continuation of the previous day's work using a work permit which has been renewed.

The Permit Issuer or his delegated alternate is expected to conduct the Field Review at minimum 1 time for all critical and designated high consequence work which lasted more than half a shift.

8. The information in the Permit to Work and associated documentation shall be communicated in a language appropriate for the personnel working on the planned work. (5) (HA:7&8)
9. Joint Job Site Visit (5)
 - a. The Permit Holder and the Permit Issuer shall visit the work location prior to issuing permit to ensure:
 - i. The scope of the planned work is understood.
 - ii. The location of the planned work is agreed upon.
 - iii. The restrictions pertaining to emergencies and process safety are agreed upon (e.g., nearest emergency muster points, eye wash / showers, sensitive process equipment)
 - iv. The restrictions for SIMOPS activities that are or will be occurring in the area are clearly understood.
 - b. The Joint Job Site Visit may be waived for designated low consequence tasks approved by hub Management. These may include but are not limited to:

<u>VOC Monitoring / LDAR</u>	<u>Analyzer/Instrumentation Rounds</u>
<u>Field Instrument Maintenance</u>	<u>Area Lighting Repairs</u>
<u>Vibration Testing on Rotating Equipment</u>	<u>Steam Trap Surveys</u>

10. The Permit Issuer shall review both the Permit to Work and the associated documentation (hazard analysis, Essentials Checklists/Start Work Checks, PPHA, plans, etc.) with the Permit Holder. (2&5)
 - a. Project manager, permit issuer shall reference the Task Consequence Category (TCC) for further guidance regarding permit requirements (permit required or permit not required (PNR)), assigning task consequence level and associated documents to perform tasks. (HA:3)
 - b. The Permit Issuer is responsible for assuring that hazards relevant to their responsibilities are addressed – these include process safety hazards, compatibility of nearby work (SIMOPS) and the confirmation that the essential safeguards identified on essentials checklists/Start Work Checks and PPHA are in place.
 - c. The Permit Holder is responsible to ensure that task and hazards associated with their work are appropriately addressed on the hazard analysis, including the effective application of essential safeguards.

11. Permit to Work Authorization (2&5)

- a. Once agreement has been reached and any required safeguard verifications have been completed, the Permit Holder shall sign to indicate that the requirements are understood and that the work crew will comply with them.
- b. Work may not proceed until the Permit Issuer has signed and released the permit.
- c. If the Permit Holder changes after the Permit to Work has been issued, the Permit Issuer shall review the documentation with the incoming Permit Holder prior to the resumption of work.

12. Pre-Job Briefing (7) (HA:7&8)

- a. Permits and hazard analysis/JHA/JSA must be reviewed with all workers in a language appropriate for the work team immediately prior to beginning work to ensure that they understand the hazards and required safeguards for doing the work.
- b. A review of the Stop Work Authority expectations must be reviewed as part of the Pre-Job Briefing.
 - i. The Permit Holder/work supervisor leading the pre-job briefing should identify stop work criteria for the tasks with the work crew.
- c. For all critical consequence tasks and high consequence tasks designated by the facility, the Permit Issuer shall participate in the Pre-Job Briefing with the work crew to ensure relevant process safety restrictions and safeguards are discussed.
 - i. Global Products Management may waive this requirement during designated work scenarios such as turnarounds and projects when the potential consequences of the task have been eliminated or reduced to “low”.
- d. Any new work crew members that join after the Pre-Job Briefing shall receive a full briefing of the Permit to Work and associated documentation (hazard analysis, plans, etc.) before joining the work. (7) (HA:7&8)
 - i. The new crew members shall sign onto the hazard analysis as described in the Hazard Analysis Standard.

13. Permit to Work and associated documentation shall be posted at the job site so that it is available for all workers and verification personnel to review. (7) (HA:8)

14. Permit to Work Renewal, Shift Handover, Suspension and Work Completion. (6-7)

- a. Permit Cancellation – All work shall stop, and the worksite made safe when a change in scope that creates a significantly different hazard occurs (e.g., cold work task requiring hot work methods, task changes making entry into a confined space necessary.) A new permit must be issued to resume work.
- b. Permit to Work Renewal (work incomplete that will not be continued on the next shift, but will be continued on a future shift) (6)
 - i. Upon completion of the shift, the Permit Holder shall notify the Permit Issuer of the status of the work.
 - ii. Permits can be renewed daily up to a maximum of 6 consecutive working days after the day of issuance (7 days total).

- iii. A process for permitting designated safe hot work areas (as defined in F&L Hot Work Standard) may allow longer time limitations as defined by F&L locations.

Should site conditions change or should the work stop for a period of more than **1-hour (30-min for CS, HW, Excavation, & IHE)** with no one in attendance, the General Work Permit and any additional Work Forms must be revalidated before work can be restarted. Revalidation requires the Permit Issuer to verify that all conditions and requirements on the permit and forms remain in effect. The work may be resumed only after the Permit Issuer has given approval to restart the permitted work.

- c. Shift Handover (Work continuing into the next shift) (7)
 - i. Permits are valid until the end of the shift of the Permit Issuer unless noted in iii & iv below.
 - ii. Low consequence tasks may continue up to two hours past shift change with verbal confirmation from the outgoing shift.
 - iii. High and Critical consequence tasks may be extended up to two hours past shift change by the outgoing Permit Issuer provided that the extension is in writing on the permit (Permit Issuer initials below his/her original signature).
 - iv. The oncoming shift Permit Issuer may renew the permit up to two hours after starting the shift.
 - v. The Permit Holder shall stop all work if the Permit to Work has not been renewed within two hours after the Permit Issuer shift change.

Shift Handover - Locations where shift team operate, the shift team responsible for permit issuance must review permits and any associated forms and hazard assessment / JSA at shift change to ensure that the incoming shift personnel are aware of the work status and condition of the equipment. Details of ongoing work permits at shift change shall be included in the turnover logs.

Permit Extension – An existing permit may be extended as defined below in the same shift, provided that the responsible permit issuer is still on site. Extensions of permits shall be documented on the permit.

The permit issuer shall perform the following steps to extend the form:

- Confirm that all conditions, requirements, and controls remain in effect
 - Request new gas testing, as required, and record results on applicable forms i.e., permit, confined space entry form, etc.
 - Obtain signature from permit holder and issuer on all copies of the extended permit
- d. Permit Suspension – All work shall stop, and the worksite made safe in the following circumstances: (7)
 - i. Change in job site conditions that may create a potentially unsafe condition
 - ii. Gas monitoring indicates concentrations outside of the accepted values as noted in Confined Space and Hot Work Standards.
 - iii. An injury or incident at the job site (other than minor).

- iv. The Facility emergency alarm is sounded
- v. The Permit Issuer withdraws the permit
- vi. A required safeguard is no longer present or functional (examples: gas detection failure, safety watch no longer available, etc.)
- vii. Any employee exercises Stop Work Authority
- viii. Change in scope of the work that was not anticipated
- ix. The permit expires
- x. More than two hours has elapsed without permit renewal past shift change (see 14b above)
- xi. The addition of task steps or equipment to a JSA does not require permit suspension and revalidation providing that:
 - The work crew and Permit Holder / work supervisor are made aware of the changes and
 - The addition does not change the scope of the work (permit shall be revalidated for changes in scope).
- e. Revalidating suspended permits – When work is stopped due to potentially unsafe conditions as described in section 14d above, work may resume only after: (6)
 - i. The unsafe condition has been resolved.
 - ii. The Permit Holder and Permit Issuer both agree that the work is safe to resume.
 - iii. The QGT has determined that gas concentrations are within the acceptable values as described in the Portable Gas Detection Standard (when required).
 - iv. Both the Permit Holder and Permit Issuer (and the QGT when required) have initialed or signed the permit authorizing permit revalidation.
- f. Work Completion – (work is complete and closed out) (8)
 - i. The Permit Holder shall notify the Permit Issuer that the work is complete.
 - ii. The Permit Issuer or designate shall visit the job site to verify the work is completed per the job scope and that the job site has been left in a safe and orderly condition.
 - Global Products may identify tasks that do not introduce changes to the work site that do not require a post-job site visit as noted in 9b above.
 - iii. Upon verification of work completion, control devices may be removed.
 - iv. When applicable, equipment shall be verified as being ready to return to service.
 - v. Tasks that are listed as Permit Not Required (PNR), verbal conversation shall take place with person performing work and Head Operator (HO) to ensure work completion. (9)

15. Safeguard Verification (6)

- a. Permit Issuer and the Permit Holder are responsible for monitoring and verifying that the work is performed safely and consistent with the permit conditions.
- b. Designated Site Checkers are responsible for conducting a job site review and verification of safeguards (including engineering, administrative, individual) during the performance of all critical consequence tasks and high consequence tasks designated by the facility.
 - i. The frequency of inspection shall be fit-for-risk and aligned with the potential consequence and the maximum period between inspection is 6 hours.
 - ii. The initial joint job site visit (Section 9) is the first verification and validation of safeguards. Work lasting less than 6 hours does not require additional documented safeguard verification.
- c. Global Products may designate Site Checkers for designated work scenarios such as turnarounds and projects to ensure adequate oversight and verification.

16. Post-Job Debrief and Lessons Learned

- a. For confined space entry tasks, a specific debrief protocol shall be developed between the Permit Holder and Work Crew to feedback on the task execution to identify improvement opportunities for risk reduction or other areas of improvement.
- b. Other tasks shall have a process in place for identifying improvement opportunities for risk reduction and other areas of improvement. These may include near miss / near loss reporting processes or other similar systems.
- c. The information from the debrief process shall be conveyed to the relevant parties who can review the feedback for possible action.

17. Products locations shall maintain documentation of employees and contractors authorized to issue and verify permits. Specific permitting functions include but are not limited to:

- a. Permit Issuance
- b. Verification of permit by work area/equipment supervisor.
- c. Verification that work complies with permit conditions.
- d. Verification that the work site is restored, and operations are safe to resume.

18. Personnel assigned responsibilities in PTW/CoW roles shall be trained and competent.

19. Training requirements and competency assessment shall be documented, including but not limited to: (H:10)

- a. Personnel defined as permit holder.
- b. Personnel issuing/approving permit.
- c. Personnel in charge of work area/equipment where work is performed.
- d. Personnel who verify work in compliance with permit conditions.
- e. Personnel who verify the site is restored, and operations are safe to resume.

- f. Personnel involved with the development of the hazard analysis.
- g. Qualified Gas testers

Refresher training shall be provided as defined by the COW Training & Competency process or whenever an incident has occurred where the root cause indicated a lack of knowledge of the work permit process.

20. The PTW system shall define the policy for record retention that meets regulatory, corporate, and operating company requirements (or at least 6 months, whichever is more).
- a. PSM regulated facilities shall maintain all hot work permits for a duration of no less than 3-years.

3.0 Roles and responsibilities

Roles & Responsibilities are found within the [Roles and Responsibilities Document](#)

4.0 Documents Reference List

Title	Attachment
Contractor Permitting Process	Contractor Permitting Strategy
Task Consequence Catalog (TCC)	TCC

5.0 Document Control

Description	Enterprise	Products Specific
Approval Date	Dec 2021	Nov. 2022
Next Process Document Review	Dec 2026	Nov. 2027
Control Number		Version 1.2

5.1 Document Change History

Date (DD/MM/YR)	Version Number	Description of Change
11/11/22	1.0	New Global Products Standard
8/16/23	1.1	Section 2.0 Requirements: Revised timeline for revalidation of permit to align with gas detection standard.
6/4/24	1.2	Added PSM requirement to retain all hot work permits for 3-years for PSM regulated locations & defined levels for HA development.