

## TO 009 WORK PERMIT PROCEDURES

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### 1 Purpose and scope

This instruction applies to routine and non-routine work activities performed by process and maintenance employees in production units, mill services, harbor and laboratories. This instruction applies to both own employees and contractor employees. This instruction is applied also during annual maintenance and shutdowns.

All work activities must have a document which describes the hazards related to the work and how they are controlled. This gives a permission to perform the work. In addition, certain work activities require a written work permit, please see procedures in section 3 of this instruction.

#### Work activities require before starting either:

1. Written risk assessment and work instruction; instruction must be familiarized with the employees performing the work or
2. Work order created in maintenance system (please see section 2.1) or
3. Written work permit (please see section 3)

Or in certain cases:

4. Verbal permit; (please see section 2.2)
5. Safety plan (big contracts, projects, shared construction sites)

## 2 Work order and written last-minute risk evaluation

### 2.1 Kuti work order (kuti refers to maintenance system)

There are special instructions for hazard observation and planning of maintenance works. Before starting the work, employee(s) must have a written last-minute risk evaluation either by using "Tuumatuokio" booklet, check-list printed out with the work order or template used by a contractor.

### 2.2 Verbal permit – other work activities ordered by foreman/supervisor

Non-repetitive works which don't include any special hazards. These works may be performed after verbal permit and last-minute risk evaluation by the employees ("Tuumatuokio booklet). If work is evaluated to be more hazard than first expected, it requires more planning – either written instructions, or if there are not available, written work permit.

Please note that signing the last-minute risk evaluation form tells participants of the evaluation, it doesn't transfer any responsibilities of planning or supervising to employees doing the work.

"Tuumatuokio" booklets are returned to foreman for receiving a new one. Information in "Tuumatuokio" booklets can be used in updating risk assessments and work instructions. Instruction TTo 013 Last minute risk evaluation/Tuumatuokio instructs informing foreman about observations made during last-minute risk evaluation and that can be done by using the booklets. Booklets don't require archiving and they must be disposed properly (name information).

## 3 Written work permit

### 3.1 General

Written work permit is required:

- a) for certain hazardous tasks
- b) when work is performed and supervised by a contractor (with certain exceptions) => contractors don't know hazards related to Outokumpu's production and processes and they need to be recorded in work permit.

#### The issuer of work permit

- Is responsible for safety of the working environment and coordination of the work
- Gives a permission to do the work in his own are of responsibility. **In production departments the issuer of work permit is typically a supervisor (area manager or shift manager).**

- Note! The issuer must check that the permit is adequate and complete the permit by adding relevant information of work place hazards and control measures.

**Responsible supervisor - Managerial supervisor (Outokumpu):**

- Finds out hazards related to the work and adequate control measures to ensure safety of the work and executes them before starting the work.
- Is responsible of safety of the work
- Applies the written work permit after filling in the permit form
- Gives or organizes induction to the area and work
- Monitors the safety of the work
- Is responsible of the quality of the work and cleanliness and order after the work has been finished.

**Responsible supervisor - Managerial supervisor (Contractor):**

- Finds out hazards related to the work and adequate control measures to ensure safety of the work and executes them before starting the work
- Is responsible of safety of the work
- Applies the written work permit. If contractor has named supervisor at site, prefills the supervisor the work permit form together with contractor supervisor
- Gives induction to area and work to his own employees
- If there is no work instruction, work order or safe system of work described, contractor must make a written plan describing how the work is done safely. This document will be attached to permit or essential parts of it are recorded in the permit.
- Monitors the safety of the work
- Is responsible of the quality of the work and cleanliness and order after the work has been finished.

**Named supervisor to the contractor supervisor:**

- Is responsible for giving induction to area and work to the contractor supervisor

### 3.2 Check-in

Place or monitoring room for check-in is recorded in the permit. Employees performing the work are obliged to check-in at area's operators and they must ensure that operators in the area are aware of their work activities in the area.

- Personal check-in is recorded to the control room log book or other system, where information can be obtained afterwards (name, phone number, work area, date and time)
- Starting the work is always agreed with area's responsible supervisor

### 3.3 Work activities that always require a written work permit

#### Work activities in the table below require ALWAYS written work permit

There are more detailed instructions at production departments of personnel that gives permit to work in different cases.

Work
When work is supervised by a contractor, for example building and dismantling scaffolds in production areas, process cleaning, building and HVAC maintenance (heating, ventilation and air conditioning)  Exceptions: <ul style="list-style-type: none"> <li>• Standard works* defined by the client for which a risk assessment and standard operating procedure (SOP) are prepared; and repair works that can be performed according the SOP</li> <li>• Works, for which a safety plan has been created (e.g. projects)</li> <li>• Works in office and outdoor areas performed by property and maintenance service companies</li> <li>• Inspection walks and visits performed by supervisors and work planners</li> </ul>
Prevention of un-expected start-up of a machine is there is no written instruction available
Hot work and hot work on roofs (hot work permit)**
Work done in confined or closed spaces such as containers or exhaust gas pipes
Working in the danger zone of a crane or near the electrical cables or crane (e.g. construction of scaffolds in such locations)
Work related to chemical and gas pipes and equipment
Pressure equipment and related piping
Work in EX-rooms
New excavation works in the plant area, works in the dams and works effecting cleanliness of waters excluding excavation works defined in safety plans of a project which have a risk assessment and work plan

Works in the NeRe area; only external employees; Outokumpu employees work according own instructions
Works in the CO2 danger zone; only external employees; Outokumpu employees work according own instructions
Works on the roofs of production units***
Works with the risk of falling if there is no documented risk assessment
Troubleshooting in a danger zone while production is ongoing
Working on a straight ladder (only in special cases)
Other hazardous works specified by the area's management
Situations where the energies of the machine or equipment cannot be completely isolated

\*) These standard works are listed in a separate document by client

\*\*\*) Permissions for hot work are applied from area's shift manager (OKTO P3) or another named supervisor.

\*\*\*) Not applied to property and maintenance service companies for which works performed in the roofs are standard works. In additions to control measures in SOP (e.g. personal gas detectors) and check-in at control rooms people performing these works must have an induction for roof works (e.g. evacuation in hazardous situations).

### 3.4 Practical arrangements

Recoding of the permit is done by responsible supervisor and performer of the work together with permit issuer.

Written work permit is valid for 24 hours. After that is must be updated or renewed. In shift change it must be updated with signatures.

Description of the work method, hazards, risks and control measures and names of responsible persons are recorded in the work permit.

Permit issuer gives permission to start work after checking the place where work is to be performed.

Permit template has multiple pages (page 1: the permit; page 2: hazardous work permits etc.). It is on electronic form and it can also be used in paper form.

In the work place induction (tick the box in the form) all issues mentioned in the induction form are familiarized and confirmed with signatures.

Permit requires signatures from the person who is applying the permit (responsible supervisor) and from the permit issuer. If the applier is a contractor, signatures are required from all the employees performing the work. Electronic form can be send for information via e-mail.

After filling in the permit, it is copied. Permit must be in the possession of applier, issuer, employees, shift manager/area manager of the area and if necessary available in the area's control room or other relevant place.

### 3.5 Changes during the work

Responsible supervisor must notify all involved parties of all changes he is aware of that may affect the safety of the work.

If the responsible supervisor, the permit must be updated accordingly.

In shift changes the proper communication must be taken care of according to normal shift change procedures.

Changes during the work day must be taken into consideration and risk assessment and permit must be updated accordingly.

If changes are significant and they have an impact on the work safety, the permit must be withdrawn, and new permit issued.

### 3.6 Final inspection and archiving the permit

After finishing the work, it is the duty of the responsible supervisor to check the work and archive the permit for six (6) months.

#### Most significant updates to previous version

Section	Change
3.1	Specified why written work permit is required: certain hazardous works and work performed and supervised by contractor.
3.1	Specified the responsibilities for a permit issuer: the issuer must check that the permit is adequate and complete the permit by adding relevant information of work place hazards and control measures
3.3	New exceptions when written work permit is not required: <ul style="list-style-type: none"> <li>• Standard works* defined by the client for which a risk assessment and standard operating procedure (SOP) are prepared; and repair works that can be performed according the SOP</li> <li>• Works in office and outdoor areas performed by property and maintenance service companies</li> <li>• Inspection walks and visits performed by supervisors and work planners</li> </ul>
3.3	New exception when written work permit is not required for works at roofs: property and maintenance service companies for which works performed in the roofs are standard works. In additions to control measures in SOP (e.g. personal gas detectors) and check-in at control rooms people performing these works must have an induction for roof works (e.g. evacuation in hazardous situations).