

# Information Sheet

## Working Alone

***According to Article 8 of the Ordinance on the Prevention of Occupational Risks (VUV), the employer is only authorized to permit employees to undertake dangerous work when they are appropriately trained to carry out such work. Additionally, the employer must ensure that employees are appropriately monitored in situations in which they undertake dangerous procedures alone.***

### **Admissibility of solitary workspaces**

**Basic Principle: Working alone is not permitted whenever the work could lead to injuries which would necessitate the immediate help of a second person.** This is particularly the case in the following situations (the list is not all-encompassing):

### **Work that prescribes a constant monitoring through a second person (independent of time of day):**

- Working on any live electrical installations
- Working near watercourses / in running water
- Working in combustion rooms / furnaces, chimneys and connection canals
- Working in containers and confined spaces
- Working in tunnels / shafts, caverns, cavities and channels
- When climbing into / working in silos
- Working in mines, in rock layers containing natural gas
- Working with sources of radiation outside of specially equipped rooms
- Working using compressed air and respiratory equipment
- Demolition work
- Working while being on the ropes
- Working when being on the ropes including safety of interception
- Forest operations containing special risks such as working with motorized saws, working on steep slopes, moving of logs and climbing trees
- Working on tracks
- Working on utility poles

### **Work, which may only be performed in sight and within earshot of another person (independent of time of day):**

- Work on technical equipment in special operation (e.g. installation, construction, trouble-shooting, fault-rectification and maintenance)
- Work in areas that are normally not accessible and are not secure
- Work where there is a danger of being caught in moving parts
- Work with chemicals or glassware
- Climbing (above a height of 3 m)

### **Requirements**

#### **Demands on employees**

- Employees must be psychologically and intellectually (awareness of the relevant danger) competent to work alone
- They must be physically capable of carrying out work alone
- They must be of full age

#### **Demands on solitary workspaces**

- Is there, close to each solitary workspace, a connection (e.g. telephone, radiotelephony, radio or wire alarm) to a certainly occupied position, that is appropriate and meets the degree of the possible danger, guaranteed?
- In case of an accident, do all solitary workspaces have registered and investigated their dangers and possible injuries (risk assessment / identification of dangers according to SUVA publication 44094.D)?
- Have the required measures (e.g. referring to the risk assessment, and the like) been implemented corresponding to the risk assessment?
- Is guaranteed that the required assistance to solitarily working individuals is provided on time according to a contingency plan?

### **Instructions**

- People, that are working alone, have to be informed about their precise work assignment and they must be carefully instructed in the operation of machinery they are using.
- They must be aware of the dangers that exist in the working environment and they must know the requisite safety precautions (correct behavior, wearing protective equipment).
- People working alone must know exactly how to react in unusual or dangerous situations, for example in case of machine malfunctions, production disturbances, liquid or gas emissions, fire (e.g. call for help, emergency exits, ...).
- They must be instructed on access routes to safe areas and on the correct use of necessary personal alarm signaling equipment (e.g. telephone, walkie-talkies). Before starting to work, these systems have to be checked in order to ensure, that they function correctly.
- The users are responsible for the regular maintenance of emergency equipment (e.g. radiocommunication, dead-man sensor,...).
- At least on an annual basis, checks must be carried out to verify that the concerned people have appropriate knowledge and abilities to work alone. If necessary, instructions must be repeated.

### **Situation at ETH Zurich**

Many workspaces at ETH Zurich include the possibility of being exposed to dangers. Since it cannot always be assumed that a second person will be in sight or within earshot of an employee outside of normal working hours, the rules relating to working alone are to be complied with. **This means that in principle without the presence of another person or an appropriate alert system no work of a potentially dangerous nature may be undertaken which is forbidden in accordance with the rules stipulated above.** Routine procedures, from which the exact procedure is known or from which technical or structural measures have been undertaken to prevent an injury during operational pro-

cesses involving dangerous materials or machinery, may be carried out alone. For this reason, **the guidelines are to be applied comprehensively or are to be laid down specifically in writing for certain workspaces.**

#### Example: Working in the laboratory

- Trainees, students, and apprentices are not allowed to work in a laboratory without the supervision of an assistant.
- Any work before 8 a.m. or after 7 p.m. requires an additional approval from the head of the working group. Diploma students may work before 8 a.m. resp. after 7 p.m.; their mentor is responsible for their safety and has to be present.
- All other employees must make sure to have a second, emergency qualified, person to be present, whenever they work with chemicals or glass equipment, on holidays, or between 10 p.m. and 6 a.m. Both/all persons are responsible for each other and for a safe work procedure.
- Planned night-, weekend- and holiday work using chemicals or glass equipment must be announced early to the group safety officer or assistant.

#### Monitoring possibilities

A conducted risk assessment / identification of dangers referring to the SUVA information sheet 44094.D shows by means of an evaluated matrix the demands that the monitoring system has to meet (cf. table listed below). Specialists from SSHE are happy to provide assistance with assessments of needs and the choice of equipment.

Tab.1: Demands on the monitoring system (according to SUVA information sheet 44094.D)

Demands on the monitoring system	suitable for danger level			
	fields 1	fields 2	fields 3	fields 4
Working solitarily is prohibited	X			
Continuous, will-independent surveillance, such as <ul style="list-style-type: none"> <li>• individual monitoring device</li> </ul>		X		
Periodical surveillance through a person or a monitoring system, such as <ul style="list-style-type: none"> <li>• automated, timely regulated controlling phone calls</li> <li>• manual radiotelephony calls</li> </ul>			X	
Surveillance not compulsorily necessary				X

#### Further Information / legal basis

- VUV, Ordinance on the Prevention of Occupational Risks
- SUVA, checklist "solitarily working individuals", 67023.D
- SUVA, information sheet "Working solitarily can be dangerous. A manual for employers and safety officers", 44094.D

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