

ICDP-OSG Health & Safety Regulations



Definition of Dedicated Personnel

PA - Project Authority:

One and only one designated person at location is allowed to make ultimate decisions for all project matters. This commonly is one of the Principal Investigators. The name has to be communicated to the ICDP office in Potsdam ahead of the mobilization of the OSG logging team.

PIC - Person In Charge

For all matters on-site and at the attendant local infrastructure (camps, hotels, labs) responsible person(s) capable of making decisions have to be designated. Their names have to be communicated to all OSG logging team members upon their arrival.

SR - Shift Responsible:

One and only one designated person in each shift being responsible of all actions and allowed to make all on-site decisions. This can be a scientist, the head of the drilling crew, or a designated supervisor.

OUR - Operation Unit Responsible:

One and only one person of each operation unit being responsible and capable of making decisions. An operation unit can be the on-site project science team, a separate science team, a service company, local helpers, and of course the OSG logging team. The OUR will designate other personnel as contact person for its operation unit per shift. Often the PA is also the OUR of the on-site science team.

FAH - First Aid Helper:

One person at least in each shift who is qualified to render first aid. An official certificate is necessary. In each shift this name will be made known to the OSG logging team.

ICDP HS Preparations

The PA will make sure that all information relevant during works and stay of the OSG logging team will be supplied immediately to the OSG logging team leader. This has to include the following:

1. *advise* of specific hazards of a project related to:
 - environmental/climate/political/societal conditions
 - overall logistical conditions
 - on-site logistical conditions
 - specific technical on-site conditions
2. *advise* of all potential hazards and identify corresponding necessary precautions
3. *advise* of the effective HS regulations of the project
4. *advise* of the on-site information flow
5. *advise* of the on-site chain of command
6. *advise* of the HS responsible person
7. *advise* of the risk assessment and respective HS instructions and make both easily available at the drill rig, the camp or hotel, or any other project places

8. *hold a training* of all participants on the specific drill site conditions, with participant's list and signature
9. *hold on-site training* for later arriving personnel with participant's list and signature
10. *conduct on-site safety briefings* for each shift and during cross-over meetings
11. *establish a continuous control and documentation* of all HS relevant incidents by a designated individual who is responsible for HS procedures
12. *report to ICDP* upon every incident, without any exceptions and/or magnitude of incident

Communication

A good communication with fast information flow on-site and to remote partners is a powerful tool to overcome problems and to provide safe and healthy working conditions.

The OSG logging team leader, on-site and remote, has to be informed as soon as possible about instances or complications that might cause changes of the working conditions and/or to the schedule of operations. This applies even if there are no immediate consequences visible for the OSG operation. Implications are sometimes hard to recognize during a problematic situation. A friendly working atmosphere would not leave some participants uninformed anyway.

Safety Instructions

The OSG logging team must be formally instructed in a joint safety meeting as soon as possible after arrival and always before the first work shift. All participants have to confirm by signature that they were informed and instructed on all safety procedures. The instruction portfolio has to depict:

- all assessed hazards at the drill site and on the way to and fro
- specific HS regulations of third parties, e.g. the drilling contractor or a shuttle service provider etc.
- mandatory protective clothing and gear (PSE – Personal Safety Equipment), and for which areas of the drill site
- emergency meeting points and escape routes
- the FAHs and the locations of first aid kits
- all PICs and everyone within the command structure have to be made known by name badges visibly attached to clothes or hard hat
- all OSG logging team members have to at least one time practice special safety trainings, e.g. a 'life boat drill' or 'fire drill'/evacuation procedures etc.

Safety briefing at the beginning of each shift

Before a new shift starts to work a short safety meeting addresses the latest news, changes, problems etc. It is held by the SR and usually takes less than 5 minutes.

General Working Conditions for OSG personnel

Availability of food and drinking water

The project has to provide to all participants the opportunity to supply themselves with food and drinking water. In case of extremely poor and/or difficult logistical conditions the project will provide food and/or drinking water. The SR has to ensure sufficient drinking water is available at the drill site at all times. This includes situations when fresh supply is temporarily impossible, e.g. if weather conditions prohibit access with fresh supply to the drill site or drilling barge.

Rest Periods

Under normal environmental conditions the time for recreation (sleeping, eating and bathing) must never be less than 10 hours. This time must not include time for transportation (shuttling) or any other work related activities.

Exceptions in urgent or emergency cases are only allowed during a total time not longer than 48 hours. Personnel who worked that long afterwards has to keep a recreation time of at least 24 hours without shift work.

In case of extraordinary physically demanding environmental conditions the minimum recreation time expands to 12 hours. Such conditions are:

- very high altitude (> 2500 m),
- extremely hot or cold climate ($T < -10\text{ °C}$, $T > 38\text{ °C}$),
- extremely humid or dry climate,
- strong winds (> 7 Beaufort/14-17 m/s)

during more than half of the regular working time.

Personal Protective Equipment

When working at the drill rig it is compulsory to always wear protective clothing:

- working shoes with steel toe protection at all times
- hard hats at all times except inside an office, sleeping or bathroom container
- safety gloves when handling tools or samples
- safety glasses when handling tools or samples
- ear protection when working inside a designated area with high noise level
- reflective vest (clean) at all times
- heavy duty pants and jackets when especially mandated
- life vest where and when mandated

Control of HS Conditions & Documentation of Hazardous Situations

The HSR has to control daily all HS relevant conditions. This can happen by checking instruments, material, crew/team members, and by requesting information from the respective responsables. The HSR has to use an official custom-made form for each project, based on the ICDP check-list shown below.

Everyone who becomes aware of working conditions, which are potentially unsafe he/she has to report this immediately to the PA and other PICs. The SR has to stop

the operation or workflow and demand that counteractions are taken immediately to eliminate the unsafe working conditions. If no counteractions are initiated, or they show to be insufficient to re-establish safe conditions, the OSG logging team leader has to report this immediately to the ICDP office. ICDP will then decide whether to suspend OSG logging operations until conditions improve to an acceptable safety level.

The project has to keep a record of all HS related instances. This should be completed in the ICDP form given in the *ICDP-OSG HS incident report*. It has to be reported to the ICDP office in Potsdam via email to: icdp-office@icdp-online.org.

Confirmation of HS Safety Instructions - Project:

Family name:

Given name:

Organization:

This is to confirm that I have received and understood the HS regulations for the DIVE Drilling Project. I understand that I am required to comply with these regulations.

Place/Date:

Signature: