



The access roads to the site of Flanders Hydraulics Research must always remain free for both incoming and outgoing staff, visitors or emergency services. Parking is only allowed at the designated places. It is forbidden to block doors and gates.



In the research facilities, it is forbidden to enter the hazardous areas of the installations without explicit permission. The hazardous areas are indicated with a yellow line around the installation. All work within these yellow lines must be carried out according to the guidelines mentioned in 3.2. This also applies to visitors, suppliers, etc.

Outside working hours, no vehicles used by the contractor may be stationed within the site without the permission of the Flanders Hydraulics Research. If vehicles are allowed to be stationed outside the mentioned hours, special safety signage will be provided by the contractor.

#### 2.3.2 Photography – filming – GSM – Similar devices

Photographing, filming or making video recordings - even by cell phone, smart phone or similar devices - is allowed only with the explicit approval of the contact person.

The use of mobile phone, smartphone or similar devices is prohibited while operating machinery, operating devices and vehicles. The use of these devices is also prohibited when working at height, unless there is a clear emergency which can affect health or safety of staff.

## 2.4 No smoking, drug and alcohol policy

Inside the buildings, offices and research facilities of Flanders Hydraulics Research, no smoking is allowed. At a number of locations in the open air, there is a smoking ban, which is clearly indicated. It is forbidden to throw cigarette ashes or other residues on the ground. Also smoking is prohibited while operating machinery, operating devices or vehicles. Cigarette tips must be extinguished before stopping in the designated waste bin.

Being under the influence and/or in possession of alcohol, drugs and other narcotics is strictly forbidden on the site of Flanders Hydraulics Research.

Any person who is visibly under the influence of alcohol, drugs or other narcotics, will be removed from the site.

## 3 Safety regulations

### 3.1 General

Everyone is responsible for his/her own safety, and the safety of their co-workers. In other words, everybody needs to prevent dangerous activities and situations. Everyone is obligated to report faults, damages or defects to the facilities, equipment and machines directly to the contact person.

- Prevent stumbling, falling and bumping from colleagues and yourself. Keep your workplace tidy and clean.
- Prevent loose cords. When moving electrical equipment, check the connections.
- The floor is not a storage place, pick up or remove items.
- Keep emergency exits, passages, extinguishers, electrical cabinets free from obstacles and fully visible. Make sure you know how to deal with disasters, you know the nearest emergency exit, where to gather after evacuation and know the first aid procedure.

### 3.2 Working on installations/machines

In the research facilities are a number of [hydraulic and nautical physical models](#). These models are installations which are considered as machines. De hazardous areas (indicated with a yellow line) can only be entered after following the safety guidelines. Before the start of the work, the installation must be cleared by a mandated person of Flanders Hydraulics Research. This person will perform a lock out, tag out and try out of the installations. The person responsible for the execution of the work will make an own lock out to prevent an unintentionally start. Within the hazardous area, safety shoes must be worn.

When working on or near machinery or installations with rotating or moving parts, it is necessary to apply following instructions:

- Due to the fact loose clothing are dangerous nearby rotating parts, wearing a skintight suit is mandatory.
- Long hair should be tied together.
- Rings, bracelets or necklaces are not allowed.
- The removal of safety shields of safety switches is only allowed after informing the contact person, and after turning off and locking the machine (LOTOTO = lock out, tag out, try out).
- Do not put tools or loose parts on the machines and do not pile up materials.
- Moving parts of machinery must not be cleaned, serviced or repaired when the machine is in operation.
- Make sure that the safety shields are always put back in place after each repair or maintenance.

### 3.3 Working with open flame

When working with an open flame, white flame or heat point (eg by welding, cutting, brazing, burning, grinding, etc.), a fire permit has to be made by an authorized person of Flanders Hydraulics Research. This fire permit is valid for the work described and during the scheduled time as specified in the license. The license must always be renewed after expiration of the period and may be

revoked for non-compliance with the requirements specified, long work interruptions, changing work conditions and / or unsafe acts. The fire permit will be delivered via the contact person.

### 3.4 Working in confined spaces

Working in water reservoirs and the Sediment Test Tank are cataloged as working in confined spaces. A working permit has to be made by an authorized person of Flanders Hydraulics Research. This working permit is valid for the work described and during the scheduled time as specified in the license. The license must always be renewed after expiration of the period and may be revoked for non-compliance with the requirements specified, long work interruption, changing work conditions and / or unsafe acts. The working permit will be delivered via the contact person.

The reservoirs are periodically tested for biological agents. The temperature of the water in the reservoirs has a constant low temperature, thereby formation of biological agents is not possible. Working in the waterreservoirs are always considered als working in confined spaces. The contractor has to act accordingly.

### 3.5 Working in explosion hazardous areas

The following zones are indicated as explosion hazardous areas:

- Woodworking place
- Cabinets and containers for flammable products
- Charging batteries

The working methods should have been discussed with the contact person and the health & safety services of Flanders Hydraulics Research. The explosion hazardous zone has to be cleared by the contact person before the start of the work and after the work has finished.

### 3.6 Working on electrical installations

Working on electrical installations may only be carried out after the approval by a BA5-authorized staff of Flanders Hydraulics Research. A list op BA5-authorized personell can be reveiced via the contact person.

The BA5-authorized employee has to make sure the electrical installation is voltage-free. The person responsible for the execution of the work needs to perform a lock out, tag out, try out before the start of the work.

### 3.7 Working on roofs

There are no collective or individual safeguards, such as handrails, anchor points, lines, etc, provided on the roofs of Flanders Hydraulics Research. The office buildings are limited to one floor, but the roofs of the research facilities are more than 10 m high. Hall 3 is provided with arches with vertical height  $\pm 5$  m.

The contractor must submit a plan of action with the proposed prevention measures. This plan of action should be approved by the WL and its health & safety services.

Wearing safety shoes with anti slip is mandatory. For access to the roof hall 1 and 2 a pumping station must be passed. This must always happen under supervision. Furthermore, it is not allowed

to eat, drink or use a GSM / Smartphone / tablet on the roof other than for taking a picture if the assignment requires this.

### 3.8 Working in the sedimentological laboratory

Within the [sedimentological laboratory](#), sediment and water samples are analysed. Access is not allowed if it is not a part of the assignment.

### 3.9 Working along the waterfront

Accidents along the water side can result in drowning or electrocution. Because this is a unsafe workplace, such situations must be avoided and should only occur if one is really forced to work here. The work may only be carried out by trained personnel who are adequately informed of the safety hazards and the precautions to be taken.

For assignments that are to be carried out along the Flemish waterways, not by hydraulic structures (such as locks, thrusts or quaysides), it is always mandatory to wear safety shoes S3, a high visible safety skirt and custom work wear. If you get into the danger zone (= 2m to the edge of the water) wearing a life jacket is mandatory if there is no collective protection (e.g. a handrail).

Flanders Hydraulics Research has a specific safety instruction card for these work areas. This card is available on request for inspiration. No further rights can be derived from it.

### 3.10 Working in locks or quaysides

The following safety instructions apply:

- The following PPE are mandatory Volgende PBM's zijn verplicht:
  - Safety shoes S3
  - a high visible safety skirt
  - A life jacket if there are no collectieve protective equipment available (e.g. a handrail)
  - Safety helmet
- Working along quaysides, there is a level difference to the water. A fall from height into the water is possible. Keep the time within the hazardous area (2m to the edge of the water) as short as possible. Go in a straight line to the water, do not walk past the quayside.
- During operations along water, there is always the risk of a smooth surface with a sliding hazard. Be vigilant for irregularities in the area that cause a risk of danger.
- Be vigilant for transport carried out by third parties on the location.
- Be wary of any obstacles overhead.
- Match your clothing to the outside temperature and temperature of the water.

These activities are always under the guidance of an employee of the Water Laboratory, which is authorized to carry out these work.

### 3.11 Working on board ships

Specific measurements are carried out on board ships. The following instructions apply:

- Safety shoes S3 are mandatory.

- A life jacket must be worn when:
  - Dis- and embarking ships
  - When working overboard
  - When the ship has no completely closed railing.
- When the ships cranes are operating, a safety helmet must be worn.

These instructions are applicable for:

- 13h-measurements
- Taking sediment samples
- Measuring turning cycles
- Measuring half tide ebb
- Maintenance tidal posts Oosterweel and Prosperpolder

## 3.12 The choice and use of work equipment

### 3.12.1 General provisions

Only the work equipment may be used, taking into account the circumstances and risks related to the environment where the tasks are performed (such as water, shock, heat, cold, dust, explosive atmospheres), that meet the health, safety and environmental requirements. The equipment is fit for the user, well maintained and in good condition.

All work equipment subject to inspection should be clearly marked and the inspection certificates must accompany the work equipment.

All work equipment must be used according to the manufacturer's instructions, so that the workers are not compromised.

The organization of the site, including the installation of the equipment and machinery shall not disturb the operation of FHR. Equipment may be stored at those places, appointed by the contact person.

At the end of the working day, all work equipment must be protected against abuse. Loose pieces will be removed or securely fastened in case poor atmospheric conditions such as storms and lightning may arise. Precautions have to be taken to prevent hazardous conditions.

The use of work spotlights with incandescent or halogen lamps is discouraged in the environment with increased risk of fire (wooden floors, area of textiles, paper, oil, and other flammable products). The use of LED spotlights is recommended. Work spotlights and other equipment emitting heat should never be left unattended and should be disabled in (temporary) non-use.

All persons subject to a safety function, a function with increased alertness or activity with a specific risk (drivers and operators of cranes, vehicles, appliances, etc.) must be in possession of a technical skills certificate and a valid medical fitness certificate. The machines, equipment (including lifting equipment, cranes) and vehicles may be operated only by those authorized persons. Training certificates and a statement of authorization must be presented for the start of the work.

### 3.12.2 Use by contractors of work equipment owned by Flanders Hydraulics Research

The contractor must bring the necessary work equipment based on the information given and the work to be performed.

The work equipment of Flanders Hydraulics Research may be used only with permission of the contact person and after receiving the appropriate written instructions. The contractor is obliged to

ensure their good condition and proper operation and use them at their own risk and responsibility. During the use, the supervision on the equipment is entrusted. After completion, the work equipment has to be returned in the same condition as when received. Work equipment that is not handed in at the end of the contract or are damaged shall be replaced or repaired at the expense of the contractor. Flanders Hydraulics Research reserves the right to ask for a signed receipt of the equipment lent by the contractor.

### 3.13 Choice and use of collective protection equipment (CPE)

The contractor is responsible to apply the necessary signalization and barricades. This is done in consultation with the contact person.

If it is technically impossible to provide collective protection, the contractor must provide personal protective equipment.

All areas (even surrounding) that are affected by the work in progress must be clearly marked.

After completing the tasks, all fences, parapets, railings, etc., must be returned by the responsible contractor in their original condition, unless otherwise agreed with Flanders Hydraulics Research.

The contractor should signal any dangerous obstacle on the site of Flanders Hydraulics Research.

### 3.14 Choice and use of personal protective equipment (PPE)

The contractor shall provide its staff with the necessary work clothing and personal protective equipment to safely perform the appointed tasks. The control on the compulsory wearing of and training in the use of it also is the responsibility of the contractor.

Flanders hydraulics Research reserves the right to carry out checks and to stop work if the obligation to comply with the duty to wear is not respected.

### 3.15 Choice and use of dangerous products

The contractor must, prior to the start of the work, provide the contact person with the Safety Data Sheet (SDS) of all products to be used. The use of the products must be approved in advance by the health & safety services of Flanders Hydraulics Research.

Dangerous products must be properly packaged. There should be no unintended release of products. The packaging must be clearly and indelibly marked, with the name and applicable hazard symbols.

The contractor is responsible for the products used by him as well as for the waste originated from its use.

### 3.16 Asbestos

On the site of Flanders Hydraulics Research is asbestos present in so-called "bound" state. These places have a label / sticker. When in doubt, contact the facility manager.



- Before working on materials with asbestos-sticker, the facility manager must be contacted.
- Any damage to materials that are equipped with a sticker should be reported immediately to the facility manager.
- The removal of asbestos containing materials is only allowed with special precautions, by specially trained staff.

### 3.17 Safety at the offices

Although offices generally are not dangerous workplaces, employees are also at risk here.

- Prevent slips, falls and bumps from colleagues and yourself.
  - Avoid loose electrical cords. When moving electrical equipment, consult with the facility manager about the location of outlets and the use of extension cords. The use of extension cords must be kept to a minimum.
  - The floor is not a storage area. Store materials correctly or remove them.
  - Close drawers of desks and cabinets if you do not stand in front of them.
  - Never stand on desks or chairs, borrow a ladder.
- Signal defective cords, plugs and equipment to the facility manager, do not perform any repairs yourself.
- Keep emergency exits and passageways free, make sure you know how to act in emergencies. Make sure you know where the emergency exit is, where the gathering point is in case of evacuation and know your nearest first aider.
- In offices you usually work with several colleagues. Because people are different, it will not be possible for everyone to have an optimal indoor climate. You can help yourself through your clothing. Please consult with colleagues using the control possibilities of the building (windows open or closed, ventilation). Large variations in temperature or draft problems can be reported to the facility manager.
- Keep your work area clean and tidy. Make sure that at the end of your working day, your desk and floor are tidied up and freely accessible for the cleaner. Dispose of waste in the bins. Do not leave food, empty cups or glass on the workplace if you are away for a long time. The following waste streams are sorted separately:
  - Paper en cardboard
  - PMD
  - Residual waste
- Meld gebreken aan snoeren, stekkers en apparatuur aan de gebouwenverantwoordelijke, voer zelf geen reparaties uit. Zorg dat er geen overbelasting optreedt bij elektrische apparaten.



## 4 Environmental requirements

### 4.1 Waste and excess materials

The basic principle is maximum separated waste. Unless otherwise specified, the contractor takes care of the legal and regular removal of waste from its own materials and products derived from the execution of the works. The contractor shall endeavor to avoid the waste to spread in case of bad weather.

If the job includes processing or installation of packaged goods, the contractor is obliged to take back and remove the package. The term "package" means all products made of any material, which are used to enclose or protect the goods to process or install.

### 4.2 Environmental incidents and accidents

The contractor needs to do everything in his power to prevent situations leading to a environmental disaster.

In case of an incident that may effect the environment (fumes, vapors, spillage, contamination of soil, contamination of sewers, watercourses, noise, ...), it should be reported immediately to the contact person. The contractor needs to take all measures as soon as possible to limit the damage.

## 5 Emergency situations

### 5.1 Internal emergency number

For all accidents, sudden illness, fire and other emergencies, immediately call the internal emergency number of Flanders Hydraulics Research.

**Phone number: 0032 3 201 81 00**

If inaccessibility of this number, the following number can be tried out:

Function	Name	Mailadres	Internal number	Cell phone
Internal emergency number			0032 3 201 81 00	
First aid			0032 3 201 81 12	
Facility manager	Boris Van Dingenen	<a href="mailto:boris.vandingenen@mow.vlaanderen.be">boris.vandingenen@mow.vlaanderen.be</a>	0032 3 224 61 86	0493 24 69 85
Manager Quality, Health & safety and Environment	Davy Peeters	<a href="mailto:davy.peeters@mow.vlaanderen.be">davy.peeters@mow.vlaanderen.be</a>	0032 3 224 63 25	0472 42 35 35

## 5.2 Report accidents

Every case of injuries and near misses is reported as soon as possible to the contact person so that immediate action can be taken to prevent accidents with the same cause in the future.

The emergency response can be activated by injury. These are accessible via the internal emergency number **0032 3 201 81 12**. The location of the first aid is indicated in Appendix – Floor plan.

## 5.3 Fire

Any person who observes smoke or fire must immediately activate the fire alarm. Then everyone should proceed to the general assembly area (see Appendix – Floor plan).

# 6 Appendix – floorplan

