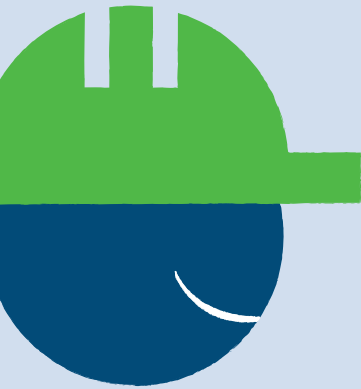


A **safe** work environment

for external operatives



There are **many risks** involved in the work at a wastewater treatment plant

To ensure that you are aware of all the precautions you must take, please read this folder before you start work. We seek to ensure that the work is performed responsibly with respect to health and safety, and that cooperation between us is a pleasure for both parties.

If you have any misgivings whatsoever, please ask your BIOFOS contact person for advice.

Enjoy your work!

Kind regards

BIOFOS Work Environment Organisation
(the guys with the green helmets)

To ensure that the work is performed responsibly, many precautions have to be taken. Ask questions such as these and you will be off to a flying start.

1.

Is there a risk that I might fall or that something might fall on me while I am performing the work?

2.

Am I wearing the correct work clothing and appropriate PPE?

3.

Do I have access to hand-washing facilities close to the workplace?

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1. PRACTICAL INFO

Digital registration



When you arrive at BIOFOS, it is important that you check in at our terminals. This ensures that we know where you are at all times, in the event of an evacuation situation. When you check in, you will receive a sticker that must be visible on your clothes. At the end of the workday, remember to check out. See location of terminals on the **overview maps**.

Car parks

You are permitted to park only in marked parking spaces. If you wish to park your vehicle elsewhere, you must reach an agreement with your contact person.

Traffic

Max. permitted speed on BIOFOS premises is 30 km/h.



Alcohol and narcotics

BIOFOS has a zero-tolerance policy regarding the use of alcohol and narcotics. The use of alcohol and narcotics at BIOFOS is strictly prohibited. BIOFOS reserves the right to dismiss any person thought to be under the influence of alcohol or narcotics.

Smoking

BIOFOS has smoke-free work time and place regulations, where everyone can move around without being exposed to second-hand smoke. These include everyone working on our three plants, as well as contractors and visitors. This means all of our areas and land registers are smoke-free, including inside private and commercial vehicles. External contractors and visitors have to comply with BIOFOS' ambition about smoke-free work hours, and are encouraged to not smoke right outside our areas. Snuff and the like are equated with tobacco smoking and is not allowed.



1. PRACTICAL INFO

Accidents and near misses



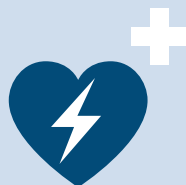
If you or a colleague are involved in an industrial accident or near miss, please notify your contact person. At BIOFOS, we intend not only to learn from accidents/near misses but also to rectify the conditions that cause them. In this way, we seek to avoid accidents and near misses in the future.

Fire and evacuation

In the event of a fire, proceed slowly and calmly to the nearest muster station and follow instructions. If possible, follow BIOFOS employees. If necessary, call Security **+45 32 57 58 13** or the emergency services **1-1-2**. Notify Security if you have called **1-1-2**.



Defibrillator



Check the map to find the nearest defibrillator. Do not be afraid to use it. For assistance, call Security on **+45 32 57 58 13**.

In an emergency

Fire, police and
ambulance services

1-1-2

BIOFOS Security
+45 32 57 58 13

Tidiness helps to prevent accidents at work

1.

Cordon off the work zone with signs or barricade tape.

2.

Make sure you have everything you need and locate it where it will not be in anyone else's way.

3.

If possible, run cabling and hoses along walls and fencing – not on pathways. If possible, cables and hoses should be hung up.

4.

Keep the workplace tidy to prevent the risk of tripping over tools, cabling, hoses or component parts.

5.

Make sure that you store or locate your components and tools safely, so that they do not fall down.



Tidy up and clean adequately
when your work is completed.
When you leave, make sure
the location is at least in
the same condition as it was
when you arrived.



3. HYGIENE

You must ensure that you maintain **good standards of hygiene** when you work with wastewater/sludge



Follow these five guidelines

1.

Wash your hands frequently, always before and after going to the toilet and before eating.

2.

Take a shower at the end of your shift and during the working day if you get dirty.

3.

Change work clothing regularly and when it is visibly soiled, from wastewater or sludge.

4.

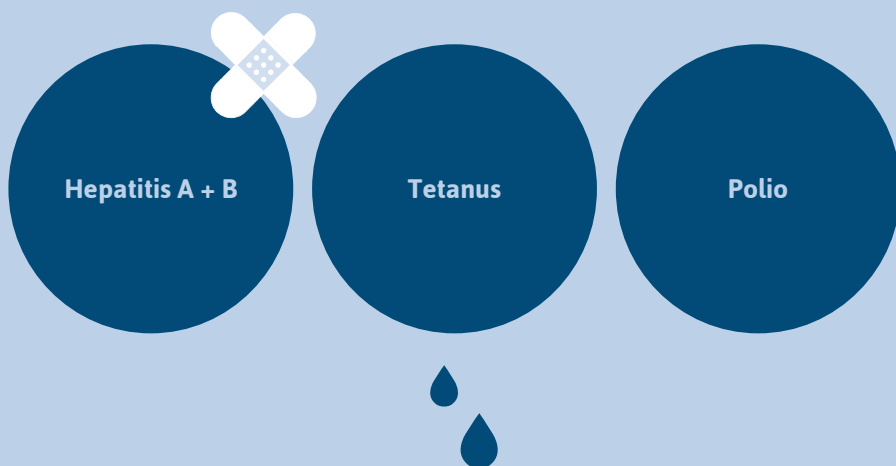
To prevent the spread of infection, do not take home work clothing and footwear that has been in contact with wastewater/sludge.

5.

Do not work, if you have an open wound.

When you work at our plants you risk **exposure to wastewater**

You should be vaccinated against the following diseases:



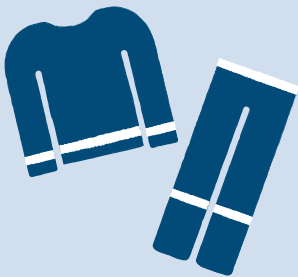
Work performed on treatment plants or in sewers is subject to the **Working Environment Act** and the **Sewerage Executive Order**. It is your employer's responsibility to ensure that the work is carried out accordingly.

5. WORK CLOTHING

Work clothing

When working at BIOFOS, you must wear antistatic safety footwear, long trousers and a shirt/jacket. If you perform high-pressure cleaning and similar dirty work, you must also wear a protective suit/coveralls and mask to protect you from backwash containing bacteria.

Does not apply to work carried out in administrative areas.





NB: You must always bring your own safety equipment

If PPE is required, it is imperative that you select the correct protective equipment before you start the work and until the work is finished. Your employer is responsible for ensuring that you have the appropriate approved PPE, work clothes and (if necessary) tools you need to resolve your task at BIOFOS.

You are at great risk of contracting infections via your eyes, mouth and face when you work with wastewater.

You must protect your eyes, mouth and face if there is a risk of hazardous mechanical or chemical contamination with e.g. dust, shavings, splinters and sprays.



Eye protection

You must always wear eye protection (protective goggles, visor or welding helmet) when you work or frequent locations at which there is a risk of aerial particles and spray, or hazardous radiation.



Breathing protection

If regulations dictate, you must wear breathing protection before you start work and until the work is finished. Breathing protection must enclose your face and fit with the other items of PPE you use, such as eye protection, hard hat and hearing protection. The type of breathing protection you wear depends on the type of work you will be doing.

You will need a fresh air respirator if you work in an area where there is a risk of suffocation due to depleted oxygen concentrations (e.g. a well), if you require protection from potent pollutants or if you will be working with an unspecified combination of pollutants.

Many different types of filter can be inserted into breathing protection. Always make sure that you are using the correct filter.

NB: Breathing protection is a heavy burden on your circulatory system and certain restrictions may apply with regard to the duration of its use.



Hearing protection

You must wear hearing protection at locations marked with the appropriate warning signs or if your work exposes you to noise levels in excess of 85 dB(A).

6. PERSONAL PROTECTIVE EQUIPMENT (PPE)



Fall protection

If you are working at a location where there is a risk of falling to a lower level and no barriers, railings or similar measures are erected to prevent falls, you must determine whether to wear fall arrest equipment or if it is possible to establish alternative fall preventive measures. As a rule of thumb, fall preventive measures must be taken when the work is to be performed at a height of more than 2 metres above the ground.

When you use fall arrest equipment, you are obliged to draw up contingency plans for rescue in the event of a fall because a person hanging in the air risks sustaining injury. All the involved parties must receive instruction in the contingency plan in the event of a fall, including if and where there is access to suitable rescue equipment.

Fall protection equipment must be appropriate for the job, CE-approved and have passed the annual inspection.

Fall arrest equipment may only be worn in connection with short-term work tasks, or if it is not possible to take alternative fall protection measures.



Gloves

Always wear gloves when you work at BIOFOS. Apart from protecting you from abrasion, vibration, heat/cold and knocks, gloves also protect you from chemical substances and the risk of infection. NB: you should know against which chemical substances your gloves offer protection.



Hard hats/**helmets**

You must always wear a protective hard hat if there is a risk of head injury. Always wear a hard hat in areas marked with a “Wear helmet” pictogram.

You must always wear a hard hat if there is e.g. a risk of materials, tools or other objects toppling or falling, or if you work in confined spaces where it is difficult to move without bumping your head (e.g. in tanks, wells and pump shafts).

Dispose immediately of any hard hat that is cracked or has been exposed to a heavy blow or crush.

7. VEHICLES, MACHINERY AND EQUIPMENT

Cranes

Always check that the crane has been inspected and shows no visible signs of damage. A crane must carry the inspection label from the most recent inspection.

The crane hook must be suspended outside pathways when not in use.

When you leave the crane, the load must be lowered onto a firm underlay. Loads must always be lifted and swung as close to the ground as possible. **NEVER** walk under a suspended load!

During crane operations, hard hats must be worn **AT ALL TIMES**. The wearing of hard hats is mandatory within the crane's working reach.



Forklift trucks

If you wish to drive a forklift truck at BIOFOS, you must have a forklift licence. You must produce your licence on demand. You must have a forklift licence also to operate a pallet stacker with a lift height of more than 1 metre.

BIOFOS' machinery

Contact BIOFOS operatives before you start to work on BIOFOS' machinery and equipment. You must agree the repair work with them. They will ensure that the part of the plant or machinery in question is withdrawn from operation and cordoned off so that you can work safely and responsibly.

Under particularly hazardous conditions, a work description and risk assessment report must be prepared. See section on *Explosive atmospheres (ATEX)*.



Lifting gear

Any lifting gear used in connection with lifting (slings and chains, etc.) is subject to an annual inspection. Check that the lifting gear has been inspected and that it is intact before you use it. Every item of lifting gear has an inspection label. Damaged lifting gear must **NOT** be used. Dispose of it immediately.

Scaffolding and ladders

Mobile scaffolding, platforms and similar equipment must be used in preference to ladders.

In the event of using scaffolding in excess of 3 metres high, the scaffolding may only be erected, altered or dismantled by persons who have a specific scaffolding qualification.

Never use boxes, ladders or other items on the scaffolding as a means by which to gain extra working height.

All castors on mobile scaffolding must be locked during use. The erection of railings is mandatory, regardless of scaffolding height. Clear scaffolding of personnel before moving it.





**Check your ladder
before use. Use it only if it
has been inspected. If the ladder
is damaged, do not use it.
Dispose of it immediately.**



8. PRECAUTIONS IN CONNECTION WITH VERY HAZARDOUS WORK

Chemical substances

Chemical substances can be hazardous if inhaled, ingested or if they come into contact with the skin. Chemical substances can be dangerous if you do not know the right way to handle them. Think twice before using chemical substances. Always wear the correct type of protection in the shape of goggles, shields, gloves, work clothes, etc.

Hazardous chemicals are marked with a white diamond-shaped label (hazard pictogram) with a red border. Chemical substances marked with a square orange label with a black border must no longer be used.

You must have up-to-date chemical safety data sheets on your person, either in electronic form or on paper. BIOFOS reserves the right to forbid the use of a given substance or material.

Check that you know where to find first aid equipment (e.g. eyewash stations and emergency showers) before you start work. Make sure that there is a spillage kit/absorbent material in the vicinity of the work you will be doing, and that these materials are suitable for absorbing the chemical substance in question. Before you start work, clarify whom to contact in the event of a spillage.

If you will be working with **epoxy** and **isocyanates**, you may only work with these substances if you are specially trained to work with them. You must produce your training certificate on demand.





Work in wells, sewers, and basins

With regard to work down in a well, sewer, basin or structure where the atmosphere is potentially explosive, may have depleted oxygen concentrations or otherwise constitutes a risk to health, you must prepare a work and risk assessment before starting the work. Your BIOFOS contact person will review your assessment before the work can begin.

In the event of work in wells, you must always use a tripod kit with a safety line/pulley. The person who will be lowered into the well or structure must wear fall arrest equipment. Do not forget to clean all safety equipment after use.

Wells, sewers, basins (underground basins) and structures must be aired/ventilated and gas levels measured before the descent.

As a rule of thumb, there must be two guards above, whose task is to safeguard the person or persons working below.

A guard must:

1. Focus consistently on the job in hand
2. Provide help to persons in the event of injury and emergency,
3. Be capable of operating the pulley and rescue equipment, and
4. Calling for help if necessary, e.g. by phone
+45 32 57 58 13.



**Do not forget
to check if you
have access
to first aid
equipment**

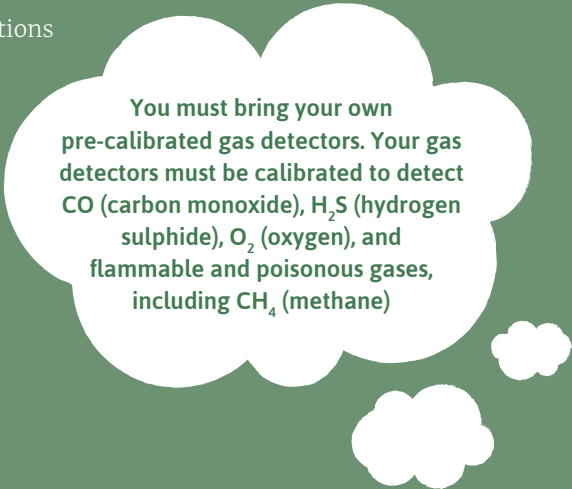
8. PRECAUTIONS IN CONNECTION WITH VERY HAZARDOUS WORK

Gas detectors

In areas where such devices are mandatory or in which there is a risk of poisonous or explosive gas emissions, portable gas detectors must be used.

The following are examples of such areas:

1. Wells
2. Basins
3. Sewers
4. Sieve filter systems
5. ATEX zones
6. Remote pumping stations



You must bring your own pre-calibrated gas detectors. Your gas detectors must be calibrated to detect CO (carbon monoxide), H₂S (hydrogen sulphide), O₂ (oxygen), and flammable and poisonous gases, including CH₄ (methane)

Explosive atmospheres (ATEX)



In the event of work in ATEX zones, you will always need BIOFOS' approval. You must prepare a description of the work and a risk assessment in cooperation with Security. The person responsible for operation of the unit in question must always be notified of work in ATEX zones.

For work in an ATEX zone, special regulations regarding work clothes always apply e.g. antistatic work clothes and other PPE.



8. PRECAUTIONS IN CONNECTION WITH VERY HAZARDOUS WORK

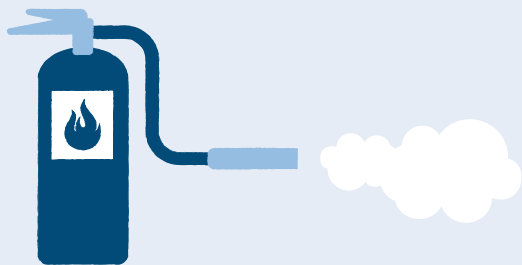
Hot works

Hot work describes all types of work using tools, such as an angle grinder, welding apparatus, gas burners and similar equipment, the use of which generates heat or sparks.

You may only perform hot work if you have an approved certificate. You must also have a hot works permit. BIOFOS can supply the hot works permit sheet on request.

As a rule of thumb, hot work may not be performed in ATEX zones, in areas where there are highly flammable and flammable liquids, or in areas where there is flammable insulation material.

Depending on the work, one person may be nominated to check for fire 60 minutes after the work is completed. You must bring your own fire extinguishers and ensure that these are located less than 5 metres from the workplace.



Ash and residue

Sludge combustion produces ash and residue. The red sludge ash and the light grey residue contain several heavy metals. Both are corrosive when wet or damp.

Avoid contact with sludge ash and residue and, in the event of contact, wash thoroughly. If there is a risk of inhaling either of the two, respiratory protection including a P3 particle filter and dust safety goggles must be worn.



9. CONTACT INFORMATION

Wastewater treatment plant **Lynetten**

Refshalevej 250
1432 København K
tlf. **+45 32 57 32 32**

www.biofos.dk
post@biofos.dk

Office hours

Mon–Fri: 9–14

Security Tel.

+45 32 57 58 13

Manned 24/7.

Defibrillator



Assembly point



Digital registration



Wastewater treatment plant **Avedøre**

Kanalholmen 28
2650 Hvidovre

Office hours

Mon-Fri: 9-14

Security Tel.

+45 32 57 58 13

Manned 24/7.

Defibrillator



Assembly point



Digital registration



Wastewater treatment plant **Damhusåen**

Parkstien 10
2450 København SV

Office hours

Mon-Fri: 9-14

Security Tel.

+45 32 57 58 13

Manned 24/7.

Defibrillator



Assembly point



Digital registration



Version 3. August 2023

Safety symbols

Source: ICMSAFETY.COM #SAMMENFOREBYGGERVI.





Practical info

Site maps

BIOFOS is Denmark's largest wastewater company. We treat wastewater for 1.2 million people living in 15 municipalities in the Copenhagen metropolitan area at our three treatment plants, Lynetten, Avedøre and Damhusøen.

We exploit wastewater resources to produce climate-friendly energy in the form of electricity, biogas and district heating for the grid. BIOFOS also has an active school service, where students receive education in wastewater, the environment and sustainable energy every year.

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