

Open Grid Europe
The Gas Wheel



Safety Requirements for Contractors

Safety Requirements for Contractors

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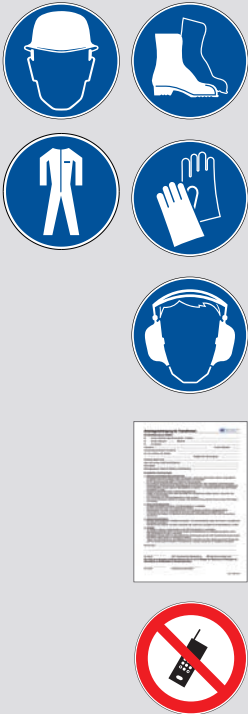
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General Safety Rules



The following safety rules apply to all work carried out for Open Grid Europe GmbH:

- Safety helmet, safety boots and suitable clothing must be worn (except in site office/portacabin/site, amenities).
- In accordance with the risk assessment and separate marking of special areas, additionally/alternatively personal protective equipment (safety goggles, safety gloves, safety harness etc.) must be used.
- In noise areas (noise level > 85 dB(A)) ear protection must be worn.
- Prior to starting certain work, the necessary work permit must be obtained.
- Contractor personnel are only permitted access to the work areas indicated to them.
- Mobile phones may not be brought into explosion hazard areas.

In addition, on the premises of gas plants the following rules apply:

- In addition to helmet and safety shoes, flame retardant clothing (jacket and trousers) and safety goggles must be worn.
- Smoking and the use of an open flame is categorically prohibited.
- Vehicles are only allowed onto the premises for loading and unloading operations. The speed limit is 20 km/h. The German highway code (Straßenverkehrsordnung) has to be followed.
- The use of electric/electronic equipment requires the express approval of the site manager.
- Taking photographs with/without a flash requires express approval.
- Carrying and consuming alcoholic beverages and other intoxicating substances is not permitted.
- In an emergency (siren is sounded), all persons must gather at the designated assembly point and follow the instructions of the emergency supervisor.



1. Introduction



General

Open Grid Europe GmbH gives top priority to safety and safety-conscious behaviour by its employees and all persons working at its offices, stations and construction sites. This “Safety Requirements for Contractors” brochure lays down safety rules to be observed by all contractors. In addition, all relevant statutory rules and regulations on safety and the prevention of accidents as well as all applicable codes of practice must be observed. On sites subject to inspection by the mining authorities, the contractor must also comply with the mining regulations.

The contractor is responsible for the safety of its personnel and must take all measures required and contractually agreed to ensure that the contracted work can be completed safely. By accepting the order, the contractor also accepts these Safety Requirements and compliance becomes part of his contractual obligations.

Scope

These “Safety Requirements for Contractors” apply on all premises and construction sites of Open Grid Europe GmbH and its subsidiaries and, without exception, to all personnel performing work for or on behalf of Open Grid Europe GmbH.

Non-Compliance

Open Grid Europe GmbH reserves the right to verify that contractor personnel comply with these Requirements and, in case of non-compliance, to ban such personnel from the hazardous area or from the premises.

Further, Open Grid Europe shall be entitled to close down a construction site until hazardous conditions have been remedied. Any and all costs arising out of or in connection with any such site closure will be borne by the contractor.





Working Hours

On Open Grid Europe premises, the contractor must carry out his work in accordance with the arrangements concerning working hours in force. On construction sites outside Open Grid Europe premises, working hours must be agreed with the site manager before the work commences.

The provisions of the working time law must be observed. Any changes in working hours must be agreed with the operations/site manager.

For work on Sundays and public holidays, the contractor shall obtain the appropriate exemptions from the competent authorities. A copy of the exemption shall be handed over to the operation/construction management.

Further Information

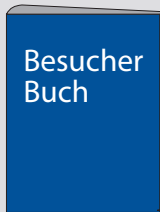
For any questions on work safety measures, please contact the responsible operations/site manager. For any other questions, please contact the work safety department at:

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2. Access Authorization



Registration

On sites with a gatekeeper, staff of third party contractors shall register with the same. The gatekeeper will inform the company and then hand over the visitor's badge. This badge must be returned to the gatekeeper after the end of the work.

On sites without a gatekeeper, staff of third party contractors shall register with the site management of Open Grid Europe. Entering and leaving is to be noted in the visitors' book.

On construction sites, staff of third-party contractors shall register with the competent construction management.

In Open Grid Europe office and operating locations, third-party staff shall present a suitable **ID document** (e.g. identity card) in order to obtain a badge. During work on Open Grid Europe operating and construction sites, third-party staff may be randomly checked for identity. There, too, appropriate identity papers (e.g. identity card, employee badge, residence permit, social security card) must be kept at hand.

Without an identity document, no work shall be permissible on premises of Open Grid Europe GmbH. Open Grid Europe GmbH disclaims all liability for any costs and delays resulting from absence of such proof of identity.

Taking along other Persons/Visitors

Other persons or visitors may be taken along on the premises only with the express authorisation of the competent operation or construction management. These persons shall also comply with the applicable safety regulations and use the necessary personal protective equipment.

3. Emergencies and Accidents

First Aid

Any Contractor must comply with the first aid provision set out in law and specified by the employers' liability insurance association.

These include:

- making available a sufficient number of **first aid personnel**
- making available **first aid facilities** (including at least annunciator, first aid material, first-aid log) at a clearly marked location
- putting up «First Aid» lists
 - with the **names** of all available first aid/medical personnel
 - with all **important phone numbers** (first-aid, doctors for first aid, rescue coordination centre, hospitals, ambulance, authorized physician (Durchgangsarzt), fire brigade, police etc.) at a prominent location.

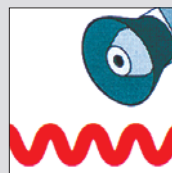


Alarm

In case of alarm (siren or two-tone alarm at under-ground storage and compressor stations) the following action must be taken:

- stop all **machines and equipment**
- stop all work immediately
- **stop smoking** in authorised areas and extinguish cigarettes
- **clear roads** and access ways
- leave place of work
- **meet at assembly point** (usually the rescue centre)
- follow instructions of emergency supervisors.

Work may only be resumed following an instruction by the operations/site manager.





Reporting of Hazards/Accidents

Any hazard (e.g. fire, gas leak) must be reported to the operations/site manager immediately and the hazardous area must be cleared without delay.

Contractors must report **accidents** of their employees at the station/site to the local operations/site manager without delay. A copy of the accident report shall be forwarded to the operation/construction management. Incidents/near-misses shall also be reported.

Unsafe conditions or actions that may lead to accident or injury shall be reported to the local operation/construction management.

Each employee shall be responsible for workplace safety in his/her area.



Ambulance Arrival

The arriving ambulance must be directed towards the injured person(s).

Accident Inquiries

Accident inquiries must be carried out in cooperation with the Occupational Health and Safety Department/Bereich Arbeitssicherheit of Open Grid Europe GmbH.

4. Health and Safety Management

Description of the Working Procedures

For the intended activities, the contractor shall describe the working procedures in the planning. This [process description](#) must list all essential working steps required for provision of the service. The process description shall be presented to the operation/construction management upon request.

Risk Assessment

Taking into account the process description, the contractor shall familiarise himself with any hazard in his workplace area prior to the commencement of work. Existing hazards and protective measures to be taken (e.g. technical measures, personal protective equipment) must be listed and matched in writing. For the Risk Assessment, the following order is to be observed:

- S – Substitution
- T – Technical protective measures
- O – Organizational protective measures
- P – Use of personal protective equipment and measures to influence workplace behaviour

The contractor shall be responsible for monitoring implementation of and compliance with the protective measures. The risk assessment is to be kept at hand and presented to the operation/construction management upon request.

[In case of uncertainty](#) with regard to existing hazards, the contractor shall consult the operation/construction management.





Safety Briefing

The contractor must ensure that his personnel and the personnel of any sub-contractors are informed about

- these **Safety Requirements**,
- any further applicable **legal and trade association rules**, regulations, directives, and usage and operating instructions and manuals, as well as
- **workplace-specific hazards** and appropriate protective measures, in accordance with the above risk assessment.

Each briefing must be **recorded in writing** and the document presented to Open Grid Europe GmbH upon request to demonstrate that these safety briefings have been carried out.

Personnel not briefed on safety must not work areas subject to these Safety Requirements at any time.

The frequency, the type and the scope of the routine safety briefings must be selected in accordance with pertinent laws, rules and accident prevention regulations as well as the current situation.

Foreign-language Staff

When foreign-language employees are to be deployed, the contractor shall ensure **sufficient communication**. To this purpose the contractor's supervisor must be proficient in the German language.

The foreign-language employees must be able to describe the work order towards the operational/site management of Open Grid Europe GmbH and to make an emergency call.

The contractor shall be responsible to ensure that the foreign-language employees will understand the contents of the safety briefings or other instructions.

Construction Site Documents

On the construction site, the contractor shall keep all the documents in a central location for the purpose of providing evidence of proper construction site management. These shall comprise at least the following:

- Organization chart of the staff on-site
- Process description
- Project-related risk assessment
- Operating instructions for hazardous materials (including the material safety data sheets), work equipment and activities
- Emergency Response Plan
- Documentation of instructions and briefings



- Staff list
- Evidence of qualifications
- Assignments for the control of devices or machines
- Evidence of the occupational health examinations
- List of the personal protective equipment (PPE) provided
- Test certificates of the devices and machines
- Evidence of the regular safety inspections of the construction site
- The necessary permits and plans, as well as the schedule.

Supervision

The contractor must ensure the presence of a supervisor. This supervisor must be named to the local operations/site manager before the work is started. Work on site may not start unless a **supervisor has been nominated**.

If a maximum of two persons are assigned to the site, it may be agreed with the operations/site manager not to nominate a supervisor. This exception does not apply to activities liable to involve hazardous situations.

The supervisor must ensure compliance with all safety instructions (incl. these Safety Requirements) by **regular checks**. The supervisor must adequately document the checks carried out.

If any deficiencies affecting safety are found, the supervisor must

- point out to site personnel that **pertinent safety rules and regulations** must be observed,
- take appropriate **safety measures** and
- **report such deficiencies** to the local operations/site manager immediately.

The supervisor may himself be involved in the contract work, provided that this does not affect his responsibilities as a supervisor. If several contractors work at a station/site, a **coordinator** has to be agreed with the operations/site manager and nominated in writing to make sure contractors do not endanger each other's staff. Safety instructions issued by the Open Grid Europe operations/site manager or their authorised representatives (e.g. Open Grid Europe supervising personnel) must be followed immediately.



Checkliste	
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Work Permit

Basically, work on behalf of Open Grid Europe may be carried out only after the «Work Permit for Contractors» has been issued.

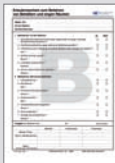
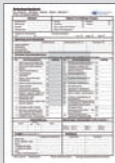
Work permits must be obtained from the operations/site manager for the following work:

- work in fire and explosion hazard areas (e.g. near pipelines carrying gas or plant in hazardous areas) and
- entry into vessels.

The work permit is issued on a work permit and/or approval form containing all further stipulations regarding necessary safety measures and supervision.

Medical Examinations

The contractor's employees must undergo regular medical examinations, if the contract work is liable to have effects or involve activities, which may be detrimental to their health. In such cases, the contractor must demonstrate to the operations/site manager before the contract work is started that the necessary medical examinations have been performed. If such proof cannot be furnished, contractor personnel are not allowed to commence work.



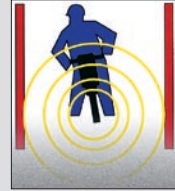
Emissions

Basically, work procedures and equipment must be selected to cause as low emissions as possible.

On the construction sites, arrangements shall be made to reduce the spread of noise and dust to a minimum. The Federal Immission Protection Act (Bundesimmissionsschutzgesetz, BImSchG) is to be adhered to.

Completion of Work

Following an interruption or the completion of the contract work, the operations/site manager must be informed about the work status/completion of the work. Any work affecting plant functioning, safety facilities or operability must be demonstrated to have been properly completed.



5. Personal Protective Equipment

The scope of personal protective equipment must be decided in accordance with possible risks and recorded in writing during the risk assessment prior to starting work (see section 4) and the operations/site manager must be informed accordingly.

The contractor must provide his personnel with sufficient protective clothing and equipment for their personal safety.

The supervisor shall urge the staff to use the personal protective equipment and monitor compliance.

On construction sites the following **must always be worn**:

- safety helmet,
- safety shoes,
- protective clothing; shorts are not allowed.



On the premises of gas plants (e.g. operational areas of storage and compressor stations, M+R plants) or construction sites in the vicinity of gas-containing lines, the following additional rules apply:

- safety goggles,
- flame-retardant protective clothing (jacket and trousers).

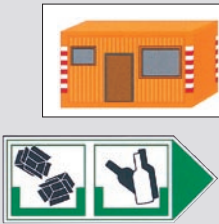
In addition, in accordance with the marking of certain areas or work-related risk assessment, as an alternative or in addition further personal protective equipment shall be used, e.g.:

- safety harness in risk areas,
- ear protection in designated noise areas,
- safety gloves.

The operations/site manager is entitled to stop persons not wearing the required protective equipment from proceeding with their work.



6. Site Rules



Installation and Maintenance of Site Facilities

The locations of site facilities such as **changing rooms, office and warehouse portacabins** as well as **mobile sanitary facilities** must be agreed with the operations/site manager. Construction sites, work places, amenities and sanitary facilities must be **kept in a clean and tidy condition**.

Dangerous substances (explosive, flammable or toxic material etc.) must not be stored in the changing rooms, offices or portacabins.

Own-use filling stations as well as stationary LPG vessels must be erected, secured and marked as required. The location of these facilities must also be agreed with the operations/site manager.

Safe Working Environment

High-risk spots such as ditches or uneven surfaces must be removed/repaired or made safe and adequately signposted immediately.

Floor openings must be covered with an undisplaceable cover made of suitable material which may be tread upon or must be made safe by installing barriers.

Opening and removal of light grids or railings shall require the prior consent of the operation/site management of Open Grid Europe GmbH. Such grids or railings may be disassembled only after appropriate protective measures against falling have been taken.

Warning tape is not allowed for lockout and fall protection. Immediately after the completion of the work, the grids and railings must be properly installed again.

In case of any risks due to left objects or materials, Open Grid Europe reserves the right to clear and clean the area of work, or have it cleared/cleaned by another company at the contractor's costs.





Alcohol, Smoking and other Drugs

Consumption of alcoholic beverages or other intoxicating substances of any kind is not permitted.

No work must be carried out under the influence of alcohol. Therefore, alcoholic beverages or other intoxicating substances must not be brought onto the site/station.

Hazardous areas as well as the entire storage facility/compressor stations site are no smoking areas. **Smoking is only permitted** in the designated smoking areas.

Authorised Areas/Conduct

All contractor personnel must keep within their appointed work areas and must not obstruct site/station operations. Contractor personnel must leave their work areas after working hours and must not cause any disturbances or unnecessary noise. Presence at the workplace outside of specified working hours is not permitted.

Amenity rooms used for breaks must be agreed with the operations/site manager.

Open Grid Europe operating installations, valves and other functional equipment serving site/station operation must not be entered, climbed on, changed or operated in any way without approval and express instructions by the operations manager.

Carrying out private work on the Open Grid Europe premises is not permitted. Photography and the use of mobile phones (cell phones) are permissible only with the express consent of the management. Carrying such devices in explosive areas is prohibited.

Warning signs, traffic signs and other safety signs must be observed and must not be changed or removed without approval by the operations/site manager.



7. Work Equipment



Safe Condition

All work equipment such as vehicles, machinery, tools, equipment, etc, used for the contract work must comply with valid safety rules and regulations and must be kept in a safe condition. The provisions of the Ordinance on Industrial Safety and Health (Betriebssicherheitsverordnung) are to be adhered to.

Equipment requiring testing must be checked regularly by a qualified person. The inspections carried out must be documented in writing. The date of the next test is to be marked clearly by affixing a label to the equipment.

On every working day, the user must control the equipment to be used for safe operating condition.

In case of any doubt about the safe operating condition of the equipment, Open Grid Europe GmbH reserves the right to inspect the testing documentation (inspection logs) and/or prohibit the use of the equipment.

Removing Defects

Any defects found in the equipment, tools etc. used by the contractor must be remedied immediately. If such defects cannot be remedied, the defective equipment, tool etc. must be taken out of service. The use of Open Grid Europe tools and equipment requires the approval of the operations manager. Defects in Open Grid Europe equipment, tools etc. must be reported to the operations/site manager.

Protective Equipment

Protective equipment on machines, equipment and plant and other safety equipment designed for personnel safety must be used as intended by the manufacturer. Removing or tampering with such equipment is not permitted.





Lock-out and Tag-out

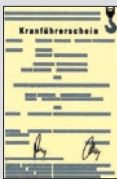
Before any work may be performed on equipment, it must be made sure that all energies are identified and insulated or stored energy switched off and discharged. The system must be **locked out and tagged out against reactivation**.

Prior to commencement of maintenance, cleaning, set-up work, etc., the **equipment and systems must be switched off** at the main circuit breaker in coordination with Open Grid Europe and secured by a personal padlock against – inadvertent – reactivation. Additional lock-out by means of a **personal padlock** is required even if the main switch is already secured by padlocks of other employees.

This procedure shall be applied to short-term stay within the facility, too. During work interruptions, such as breaks, the system must remain locked out by means of the padlock.

User Qualifications

Machines and equipment requiring special user qualification (e.g. industrial trucks, hoisting gear) may be operated only by specially trained staff. Certification of the training is to be demonstrated upon request.



Diesel-powered Vehicles and Machines

Indoor operation of internal combustion engines with diesel fuel is basically prohibited. If the use of diesel-powered vehicles and machines is indispensable, compensatory measures such as particle filtration, connection to a ventilation system, etc. must be taken.

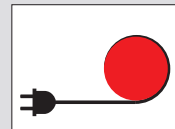
8. Work on Site

8.1 Electrical Equipment on Construction Sites

Due to the particular strains that occur on construction sites, electrical equipment such as hand held power tools, extension cables or cable reels must be suitable and approved for such use, e.g. by overheating protection, splash protection, rubber insulation sheaths.

Electrical equipment and systems may be built, altered, repaired and tested only by [qualified electricians](#). Electrical equipment must be supplied with power from special feed points, e.g. [construction power distribution boards](#), miniature construction power distributors. Outlets in indoor installations may not be used as feed points.

Electrical installations and equipment must be tested before initial commissioning and re-commissioning after any modifications. In addition, they must be checked at regular intervals. The checks are to be documented in inspection logs.



8.2 Slinging of Loads

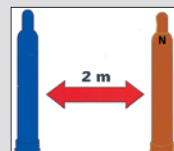
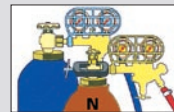
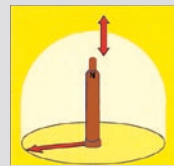
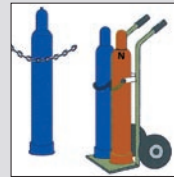


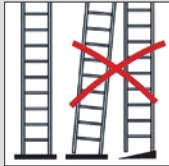
- Use only suitable slinging gear. Flat or round slings and ropes are not suited for sharp-edged or hot loads.
- Safety helmets, safety boots and safety gloves must be worn during slinging operations. In noise areas, ear protection must be worn.
- Maximum loads and angles of inclination must be observed.
- If slinging is manual, wait for slinger to indicate that load can be lifted.
- Do not stand or walk below suspended loads.
- Use ropes to guide loads during transportation.
- When loads are lifted, do not stand between the load and a fixed object such as a wall, a machine or stored material to avoid injury by the swinging load.
- Do not place down load until all persons (including slinger) are outside the risk area.
- Defective slinging and lifting equipment must be disposed of.



8.3 Handling of Gas Bottles

- Do not store gas cylinders in rooms below grade or in narrow pipe trenches.
- Gas bottles must be protected against **falling** over and **impact**; do not throw, drop or roll gas bottles over the floor.
- Only suitable **transportation** equipment (cylinder trolley, bottles transportation rack) may be used.
- Keep ignition sources at a **safe distance** from the cylinders.
- Close all **valves** on bottles not in use and replace protective cap.
- Install pressure **regulator/reducer downstream** of the bottles valve, which complies with the pertinent standards.
- **Hoses and hose connections** used must be in a proper condition.
- Oxygen valves and accessories must be kept free of oil and grease.
- **Liquid Gases**
For any work below grade or if hoses in excess of 40 cm are used, leakage gas monitoring devices must be employed. Above grade, cut-off devices initiated in case of hose rupture may be used instead of the leakage gas monitoring devices.
- High-pressure gas bottles containing flammable gases (acetylene, LPG) and fire enhancing gases (oxygen) must not be stored in the immediate vicinity of each other.
- Fuel gas and oxygen lines must be at least 3.00 m long.



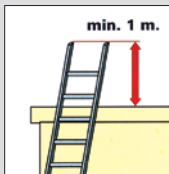


8.4 Ladders, Steps, Scaffolding and Safety Harnesses

Ladders and steps

- Do not use metal ladders in the vicinity of live conductors
- Do not put excessive loads on ladders and steps.
- Set up ladders and steps so that they are stable, and secure them against sliding or toppling.
- Ladders to be placed on or near roadways must be conspicuously marked. Secure ladders against being knocked over.

Ladders



- Observe correct leaning angle, i.e. $\alpha = 65^\circ$ to 75° for ladders with rungs.
- Only place ladders against safe objects (not against window panes, wires or poles etc.).
- Where higher areas have to be accessed, the leaning ladder must extend a minimum of 1 m above the point of support.
- Only minor work may be carried out from leaning ladders. The maximum allowable height for working on ladders is 7 m.
- No work with or on hazardous substances or work requiring machines to be held with both hands may be performed from ladders designed for leaning against walls.

Step ladders

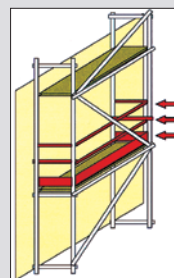
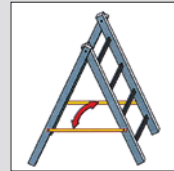
- Do not step on the top rungs of step ladders.
- Do not use step ladders to access higher places of work.
- Only use step ladders where they can be properly spread; the straps/chains linking both sides of the ladder must be pulled tight.

Extending ladders

- A safety harness must be worn when using extending ladders higher than 10 m.

Scaffolding

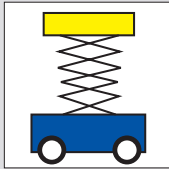
- After erection of the scaffolding, proper installation and safe function must be checked by the scaffolder. The inspection may be carried out only by an appropriately qualified person. After completion and testing, the scaffolding must be marked at a conspicuous point. If the scaffolding is not ready for use, it must be marked clearly as such and may not be entered.
- Prior to use, the user must check the scaffolding to verify its safe function.
- Scaffolding must be fitted with a 3-part side barrier.
- Scaffolding must be installed to ensure that there is no danger of injury caused by any falling objects.
- Mobile scaffolding and platforms must be fitted with lever brakes for secure and firm parking and must not be moved when occupied. Parking spindles must not be fitted with up-facing handles.
- Cross connections (extensions) between mobile platforms and buildings are not permitted.





Protection Against Falling

- Work of any kind may only be performed once all necessary safety measures have been taken to prevent falling from scaffolding, ladders etc.
- Before the beginning of the work, the anchor devices must be defined in cooperation with the supervisor.



8.5 Use of Mobile Elevating Work Platforms

- Mobile elevating work platforms may be operated only by persons who are
 - at least 18 years old,
 - duly instructed in the operation of the platform and can furnish written evidence thereof,
 - commissioned in writing by the entrepreneur to do so and who
 - have a valid occupational health examination for driving and control activities for work at elevated positions.
- Prior to use, the user must control the platform for proper condition.
- The working area must be secured against unauthorized access.
- All persons in the area are required to wear helmets.
- Inside the cage, people must use PPE to secure against falling (fall arresting system).
- For the operation of mobile elevating work platforms, at least two persons are required.
- The manufacturer's operating manual is to be complied with.

8.6 Use of Industrial Trucks

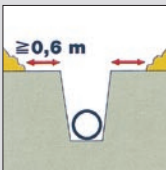
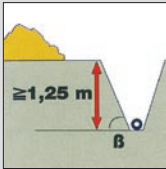
In the use of industrial trucks, in particular forklift trucks, the following safety requirements are to be observed:

- Deploy only forklift truck drivers that are
 - at least 18 years old and reliable,
 - trained (**operator's license**),
 - **commissioned in writing** by the entrepreneur and have a valid occupational health examination for driving and control work.
- Before use of a forklift, the user must check it for proper condition.
- Forklifts must be equipped with an acoustic reverse gear control and wide-angle rear-view mirror.
- Forklifts must be equipped with a retaining system for the driver (e.g. seat belt).
- The forklift may be left only when it is secured against inadvertent movement (remove the ignition key!).
- Operate forklift only from the driver's seat.
- Do not pass through or linger under a raised load.
- Only approved accessories may be used.

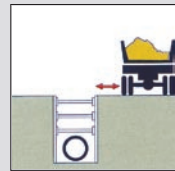
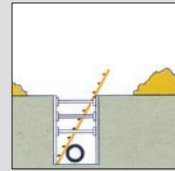


8.7 Work in Excavations and Trenches

- During excavation work, all influences must be taken into account which may affect the stability of the trench walls. These are e.g.:
 - Disturbances of the soil structure (fissures, dislocations)
 - Aggradations
 - Groundwater sinkings
 - Inflow of stratum water
 - Strong vibrations (transport, piling work).
- Basically, pits and ditches with a depth of **more than 1.25 m** must be sloped or shored in compliance with the accident prevention regulation «Construction Work» and DIN 4124. The angle of the slope depends on the type of soil excavated. If vibrations occur or the soil is only banked up, sufficient safety measures are required even in the case of lower depths.
- Trenches and excavation pits must provide sufficient working space. The minimum widths according to DIN 4124 are to be adhered to. Work to be carried out may necessitate wider working areas.
- **On the edges** of excavations and trenches, a 0.6 m wide strip must be kept clear of excavated material, objects not used and obstructions of any kind.



- Excavations and trenches with a depth of more than **1.25 m** must only be entered by suitable means such as ladders or stairs.
- Trenches with a width in access of **0.8 m** must have cross-overs with a minimum width of 0.5 m.
- At **trenches with a depth of more than 1.25 m**, the cross-overs must have a 3-part rail on both sides.
- **Construction vehicles, machines, lifting equipment** etc. must be kept at a safe distance from the trench edge. This safety distance will depend on the total weight of the vehicle and the safety measures taken (sloping or bracing).





8.8 Securing of Workplaces on Roads

- Prior to the commencement of any work affecting traffic on public roads, the contractor shall obtain the **traffic-relevant instructions** of the competent authority pertaining to the nature and scope of the safety measures for the site.
- The traffic-relevant instructions and the road signs/ regulation plan must be available on-site.
- The site must be properly equipped with all the necessary protective equipment, traffic facilities and road signs. The contractor must regularly check these facilities and service them if necessary.
- People who are deployed in the street area and/or close to the traffic area must wear conspicuous reflective clothing during work.
- In particular, the directives for the securing of workplaces on roads (Richtlinien für die Sicherung von Arbeitsstellen an Straßen, RSA) are to be complied with.

8.9 Handling of Dangerous Substances



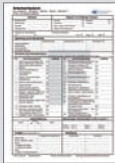
- **Before using substances or mixtures**, the contractor must
 - determine whether these substances are dangerous substances as defined by the Dangerous Substances Directive (Gefahrstoffverordnung),
 - check whether substances with a lower health risk can be used instead,
 - determine potential risks when using the substances,

- keep the relevant material safety data sheets and operating instructions at hand on the operation/ construction site,
 - brief site personnel on the safe handling of the substances and
 - give the operations/site manager a list of all dangerous substances used.
- Containers or packages must be properly labelled.
 - Receptacles into which substances are filled must bear the same label as the original receptacle.
 - Dangerous substances and mixtures must be stored such that the health of personnel and the environment are not put at risk.
 - If the air at the place of work is likely to contain dangerous substances, measurements must be made to ensure that **maximum levels** are not exceeded.
 - In case of **exceedance of the limits** and in certain activities, special occupational health examinations must be carried out.
 - If site personnel are likely to come into contact with dangerous substances, suitable **personal safety equipment** must be provided.
 - **Employment restrictions** must be observed.
 - Any **incidents** during handling of dangerous substances must be reported to the operations/site manager immediately.



8.10 Work on Gas Pipelines

Major accidents can occur if methane gas escaping from a pipeline is ignited or equipment is not properly used. Therefore, the following instructions must be followed:



- Sufficient **escape routes** must be provided (a minimum of two ladders in the excavation).
- **Hazardous areas** must be closed off and marked (barriers, warning signs, warning tape, guards).
- Before commencing work on the pipeline, a **work permit for fire** and explosion hazard areas must be obtained.
- Only **trained personnel** must be used.
- For any work on gas pipelines, **flame-retardant protective clothing** must be worn.
- **Ignition sources** must be removed from the work area.
- **Prior to welding** on a pipeline under operating pressure, an expert of the responsible regional operations department must check the condition of the pipeline.
- At least two **PG 12 fire extinguishers** must be available to extinguish any fires.
- In case of **sudden hazards**, the work must be stopped immediately and the supervisor must be informed.

9. Road Safety

Driving onto the premises of underground storage and compressor stations requires the express approval of the operations/site manager and is only permitted under exceptional circumstances, e.g. for loading and un-loading of tools and equipment etc. Unless permission is given, the vehicles must not leave the station roads. Driving into hazardous areas requires the written approval of the operations manager.

On the premises, the German **highway code** (Straßenverkehrsordnung) has to be followed. The maximum speed limit is 20 km/h.

Vehicles may only be parked in **designated parking areas**, usually off the station premises. Open Grid Europe reserves the right to have any vehicles parked without Open Grid Europe approval **removed** at the cost of the vehicle owner. Parking on and off the premises is at the vehicle owner's own risk.

Driving on roads on and leading to the premises must not be restricted by construction and installation work over any kind of dirt or debris left on these roads. Any **such dirt** or debris must be removed by the person(s) responsible immediately. The roads must not be used as a temporary storage area for material or machines.

If **roads need to be closed** off, such road closures must be agreed with the operations/site manager in due time. In order to be able to coordinate work on site, the operations/site manager must be advised of the arrival of any heavy goods vehicles ten days in advance.



10. Fire Protection

Everyone is obliged to contribute to the prevention of fires by prudent behaviour. The fire protection regulations of the operating locations are to be observed.

Preventive Action

• General rules of conduct

- Hazardous areas may only be entered if a written approval by the operations/site manager has been given.
- All fire extinguishing equipment, escape routes and emergency exits must be accessible at all times.
- Smoking is not permitted in no smoking areas.
- Easily flammable and combustible waste must be kept in appropriate containers provided for this purpose.
- Fire and smoke protection doors are to be kept closed. Modification, wedging or fixation of fire or smoke control doors is strictly prohibited.

• Welding and spark-generating work

- Welding and spark-generating work may only be carried out if approved in writing (form).
- All combustible material must be removed from the area in which welding and/or spark-generating work is to be performed. If this is not possible, such material must be protected with an appropriate cover.
- Depending on the scope of work to be carried out, a fire guard must be deployed. This guard must also inspect the work area following completion of the work.
- A sufficient number of suitable fire extinguishers must be available.



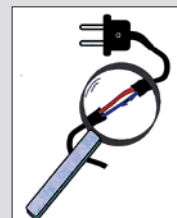
- **Flammable liquids and compressed gases**

- In the work areas, flammable liquids and compressed gases must only be kept in quantities required for one day's work.
- Any quantities exceeding those required for one day's work shall be stored in accordance with relevant rules and regulations.



- **Electrical devices**

- Any electrical devices not directly required for the contract work (coffee machine, radio etc.) may only be used if expressly authorised by the operations manager.
- Where possible, all electrical systems and equipment not required for Open Grid Europe plant operation must be switched off after use.
- If any of the contractor's equipment is damaged, the damaged equipment must be shut down/ stopped and removed from service immediately. Any damage to Open Grid Europe equipment must be reported to the responsible operations/site manager immediately.





Action in Case of Fire

1. Keep calm.

2. Immediately report fire to the fire department and the operating/construction management, stating the exact details of the location of the fire.

- Who is reporting?
- What has happened?
- How many persons are affected/injured?
- Where has anything happened?
- Hold the line for further inquiry!

3. Bring yourself and other persons out of the danger zone.

- Warn persons in danger.
- Take any helpless persons with you.
- Close doors.
- Follow the marked escape routes. Do not use elevators.
- Follow instructions.



4. Attempt to extinguish fire.

- Ensure self-protection.
- Use facilities for fire fighting (fire extinguishers, hose station/wall hydrant).
- Switch off power supply to burning electrical equipment, if possible.

After Fire

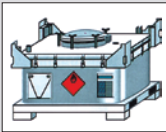
- Leave place of fire untouched so that fire investigations do not produce false results.
- Do not replace half empty or empty fire extinguishers. Immediately arrange for authorised company to check and refill the fire extinguishers.



11. Environmental Protection

Handling of Wastes

A



Wastes such as debris, wood, glass wool, residual cable, insulation and packing material, cloth, solvents, used oil, and all other types of waste, collected during the contract work at the stations/sites of Open Grid Europe GmbH must be stored by the contractor in approved containers or receptacles. The contractor shall be responsible for the procurement of the containers or receptacles and the instigation and implementation of proper disposal in accordance with the waste regulations.

Open Grid Europe waste containers may not be used by the contractor!

The containers/receptacles must be located at a suitable place to be agreed with the operations/site manager.

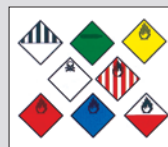
On sites outside enclosed stations, the waste collected must be disposed of immediately or at least stored transiently in a secured facility until proper disposal.

At enclosed stations, disposal may be as required. The waste collected must have been removed from the site/station by the time the construction work is completed.

Material not used and scrap material must be collected at a special location intended for this purpose and must be removed by the time the contract work is completed. **If not disposed of in due time**, Open Grid Europe reserves the right to have the waste disposed of at the cost of the contractor.

When a transport of dangerous substances leaves the enclosed premises of Open Grid Europe GmbH or takes place in the open construction site area, the rules for the handling of dangerous substances shall be complied with. All obligations arising out of the above regulation, including those for the sender and any loading/ unloading personnel, have to be met by the contractor.

Figure 1. Screenshot of a medical record form.



Handling of Water Polluting Substances

In the handling of water-polluting substances, the water protection regulations of the Federal Government and the countries, as well as – where applicable – of the districts and municipalities shall be adhered to.

Water polluting substances and waste must be stored such that waters or the soil are not polluted. The same applies to any process plant, machinery and equipment used. Type-approved equipment/systems must preferably be used. Precipitation water must basically be kept out.

Spilling of water-polluting substances must be excluded. Attention is drawn to the ban on disposing of water-polluting substances into water bodies, into the soil or a sewer.

If soil or water is polluted despite the preventive measures described above, adequate measures must be taken immediately to limit any damage caused and the incident must be reported to the operations/site manager immediately.



Use of Specialised Companies

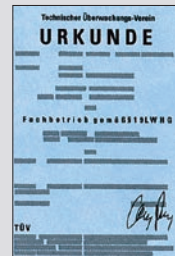
Plants designed for the storage, filling, handling, production, treatment and use of water polluting substances may only be installed, erected, maintained, repaired or cleaned by specialised companies as defined in the Federal Water Act. In these cases, prior to commencing with the work, the contractor must submit to the operations/site manager a valid certificate showing that he is either

- authorised to use a quality label of a quality inspectorate recognised under German construction legislation or
- that he has signed an inspection contract with an inspection body for a minimum two-year inspection.

Moreover, a valid test report by the inspection body must be furnished showing the scope of work the specialised company is authorised to perform.

Residual Pollution

If there are signs indicating the presence of previous pollution or any other pollution of the soil, the operation/construction management is to be informed immediately and the work ceased.



12. Declaration

This declaration is an integral part of the contract between Grid Europe GmbH/the affiliated company as the purchaser on the one hand and the contractor on the other and may only be signed by authorised persons. The signed declaration shall be returned to Open Grid Europe GmbH/ the affiliated company together with the order acknowledgement (Auftragsbestätigung).

The contractor hereby undertakes to observe the provisions detailed in the "Safety Requirements for Contractors" when performing the agreed contract work for Open Grid Europe GmbH/ the affiliated company. The contractor undertakes to inform all of his employees, subcontractors and sub-suppliers working on the contract about the existing safety requirements.

Contractor

First name, Surname

Address

Postal Code

Town

Phone

Date

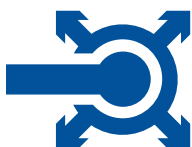
Signature

Company Stamp

Open Grid Europe GmbH
Kallenbergstraße 5
45141 Essen



April 2012



Open Grid Europe
The Gas Wheel

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