

# **General Safety Regulations for Contractors Working within the Sphere of Responsibility of Neptune Energy Deutschland GmbH**

The corporate principles on health, occupational safety and environmental protection (HSE) listed below are binding for both all employees of the company and all employees of any contractors working in the company.



# HEALTH, SAFETY AND ENVIRONMENT POLICY

Our Goal is to conduct our business activities with no harm to people, no damage to the environment and no accidents, today and in the future.

Neptune Energy requires the active commitment to, and accountability for, HSE from all our people, employees and contractors alike.

We believe that incidents are preventable in all our activities and we require the relentless collaborative effort of professional and responsible individuals to drive this ambition.

All personnel working on behalf of Neptune Energy shall comply with this policy and be proactive in the pursuit of our zero accident goal.

## Together, we will:

1. **Take care of our people** (including contractors and stakeholders) in all work related activities through risk identification, assessment and management.
2. **Integrate HSE** in decision making and in the management and execution of all activities.
3. **Ensure that safety takes precedence over production**, cost and schedule.
4. **Achieve the highest level of HSE performance** by demonstrating professional conduct and compliance to all applicable laws and regulations.
5. **Facilitate a no blame culture** that encourages our people to share experiences and insights in order to learn from incidents and near incidents.
6. **Intervene when unsafe situations occur.**
7. **Prevent major accidents** by suitable and effective implementation of Global Operating Integrity Management Standard (GOIMS) and HSE management systems.
8. **Minimise our impact** on the environment through pollution prevention, reduction of natural resource consumption and emissions, and the reduction and recycling of waste.
9. **Communicate openly** with our stakeholders and ensure an understanding of our HSE Policy, our standards and performance.
10. **Continuously improve our HSE performances** by monitoring the suitability and effectiveness of our management standards and systems, and learning from industry best practice.

James L. House,  
Chief Executive Officer  
Neptune Energy



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# 1. SCOPE, PRELIMINARY REMARKS

- 1.1 These safety regulations apply for contractors and their sub-contractors at workplaces operated within the sphere of responsibility of Neptune Energy Deutschland GmbH (Neptune Energy Deutschland GmbH). Any exceptions to this ruling are to be settled in a contract.

In the following, the term "workplaces operated within the sphere of responsibility of Neptune Energy Deutschland GmbH" will be referred to in short as the "area of Neptune Energy Deutschland GmbH".

- 1.2 Strict compliance with the general safety regulations for contractors in the area of Neptune Energy Deutschland GmbH is a key element of all contracts under which contractors render work/services for Neptune Energy Deutschland GmbH. A violation or non-observance thereof will be deemed to be a breach of contract.

The contractor assumes the full responsibility and liability for the safety of his employees. He must instruct his employees of the possible risks and about any measures for their avoidance before starting work in the area of Neptune Energy Deutschland GmbH. This instruction is to be repeated at appropriate intervals, though at least once a year. Written records must be kept of this instruction and these must be presented to the client on request.

The contractor's responsible person working on site must report to the client's responsible person before the start of work and obtain their consent to begin work. The contractor shall provide the necessary personal protective equipment for his employees.

- 1.3 Neptune Energy Deutschland GmbH as the client reserves the right to warn the contractor in writing or orally if the statutory or contractually agreed safety regulations are ignored, and to terminate the contract without notice notwithstanding any other claims if the safety regulations are repeatedly violated. Neptune Energy Deutschland GmbH is also entitled to an extraordinary termination of the contract if a contractor violates the safety regulations for the first time to such a degree that there is a risk to the safety, environment and order at the respective facility of Neptune Energy Deutschland GmbH as well as to the health of employees.

Contractors are responsible for any sub-contractors they commission and will incur their blame as if it were their own. Employees of any contractors or sub-contractors who seriously or repeatedly violate the accident prevention and safety regulations can be expelled from the premises by the client or by personnel commissioned by the client for this purpose if this is necessary to maintain health, safety and environmental protection at the workplace.

- 1.4 Apart from the safety regulations set out in these instructions, contractors working within or near an existing facility will be charged with reading up on and observing the special Neptune Energy Deutschland GmbH safety regulations that apply for this specific area.
- 1.5 The contractor shall bear the costs of replacement for any items that are borrowed from Neptune Energy Deutschland GmbH and not returned to them.
- 1.6 The interests of occupational safety, health, environmental, radiation, gas, fire and explosion protection must be strictly observed during all activities in the area of Neptune Energy Deutschland GmbH. The pertinent responsible persons at Neptune Energy Deutschland GmbH should be consulted in the event of any ambiguities.
- 1.7 All of the Neptune Energy Deutschland GmbH facilities are under the supervision of the local mining authorities (*Bergaufsicht* – Mining Control Authority).

- 1.8 Exceptions: the pump station in Brögbern and the headquarters in Lingen are under the supervision of the factory inspectorate.

## 2. HSE REGULATIONS, APPOINTMENT PROCEDURE

### 2.1 HSE REGULATIONS

In addition to the German Federal Mining Act (*Bundesberggesetz*, BBergG) and the general German federal mining ordinance (*Allgemeine Bergverordnung*, ABergV), the following essentially apply for occupational health and safety as well as environmental and health protection (HSE):

- The deep drilling ordinances enacted by the local mining authorities including their Appendices (BVOT – state-specific)
- Mining ordinance for electrical equipment (*Elektro-Bergverordnung*, ElBergV – state-specific)
- Mining ordinance for health protection (*Gesundheitsschutz-Bergverordnung*, GesBergV)
- State ordinances on occupational safety and company medical officer services (BVOASi).
- Regulations of the German Employer's Liability Insurance Association (*Berufsgenossenschaften*), standards (incl. DIN EN ISO), rules and standards of the DVGW (German Technical & Scientific Association for Gas & Water), directives of the DVS (German Association for Welding & Related Methods), specifications of the VDE (Association for Electrical, Electronic & Information Technologies), notices of the VdTÜV (Association of Technical Monitoring Associations), directives of the VDI (German Engineering Association), recommendations of the Afk (Corrosion Issues Study Group, notices/directives of the WEG (Trade Association for Oil & Gas Production), etc.
- Product safety act (*Produktsicherheitsgesetz*, ProdSG) and ordinances (*Verordnungen zum Produktsicherheitsgesetz*, ProdSV)
- Ordinance on industrial health and safety (*Betriebssicherheitsverordnung*, BetrSichV) with its technical rules (*Technische Regeln für Betriebssicherheit*, TRBS)
- Ordinance on hazardous substances (*Gefahrstoff-Verordnung*, GefStoffV), the technical rules for hazardous substances (*Technische Regeln für Gefahrstoffe*, TRGS) as well as the technical rules for hazardous working substances (*Technische Regeln für gefährliche Arbeitsstoffe*, TRGA)
- Workplaces ordinance (*Arbeitsstätten-Verordnung*, ArbStättV) as well as the workplaces guidelines (*Arbeitsstätten-Richtlinien*, ASR)
- Environmental legislation such as the Federal Immission Control Act (*Bundes-Immissions-Schutzgesetz*, BImSchG) including the ordinances and administrative regulations such as the TA-Luft (Technical Instructions on Air Quality Control) and TA-Lärm (Technical Instructions on Noise Quality Control),
- Hazardous goods ordinances road/rail (*Gefahrgut-Verordnungen*, GGVSEB / ADR), the risk prevention officer ordinance (*Gefahrgutbeauftragten-Verordnung*, GbV)
- Act for Promoting Closed Substance Cycle Waste Management (*Kreislaufwirtschaftsgesetz*, KrWG)
- Water Management Act (*Wasserhaushaltsgesetz*, WHG) [countrywide]
- Ordinance on installations handling materials hazardous to water (*Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen*, VAWS) in the respective state-specific version (soon AwSV -countrywide-)

- Federal Soil Protection Act (*Bundesbodenschutzgesetz, BBodSchG*)
- Federal Nature Conservation Act (*Bundesnaturschutzgesetz, BNatSchG*) and nature conservation acts of the states and nature conservation act ordinances
- EU Conservation of wild birds directive 79/409/EEC
- Flora-Fauna-Habitats Directive (FHH Directive, 92/43/EEC)
- Occupational Health and Safety Act (*Arbeitsschutzgesetz, ArbSchG*)
- Working Time Act (*Arbeitszeitgesetz, ArbZG*)
- Ordinance on high-pressure gas lines (*Verordnung über Gashochdruckleitungen, GasH-DrLtgV*)
- Young Persons Protection of Employment Act (*Jugendarbeitsschutzgesetz, JuSchG*)
- Protection of Mothers Law (*Mutterschutzgesetz, MuSchG*)
- Product Liability Act (*Produkthaftungsgesetz, ProdHaftG*)
- Radiation Protection Ordinance (*Strahlenschutzverordnung, StrlSchV*)
- Regulation for computer workplaces (*Bildschirmarbeitsverordnung, BildScharbV*)
- Written instructions for specific operations (e.g. operating instructions, work procedures)
- “Life-saving rules” of Neptune Energy (see 2.1.1 & Annex 6)

The latest versions of the listed regulations (acts, ordinances, standards, directives, etc.) are to be applied by the contractor according to the work to be performed and must be made accessible to his employees.

Every appointed responsible person must be familiar with and apply the appropriate regulations for his field of responsibility. The regulations must be easily accessible at the place of work (pursuant to the service level agreement).

### **2.1.1 LIFE-SAVING RULES**

The HSE regulations listed under 2.1 include, in particular, the nine life-saving rules of Neptune Energy (see Annex 6), i.e.:

1. I never walk under suspended loads. I never stand still under suspended loads.
2. I keep away from routes taken by vehicles.
3. I always wear my safety harness when working at heights.
4. I only descend into pits or ditches if they have been secured against burying.
5. Before entering confined spaces I make sure that the atmosphere is measured and checked during the entire period of work.
6. Before starting any hot work I make sure that there is no risk of fire or explosions.
7. Before starting work I disconnect the facility or machine from all kinds of energy (e.g. mechanical, chemical, electrical energy or pressurised fluids/gases).
8. When driving vehicles I do not use mobile phones or any other means of communication.
9. I do not drive any vehicle when under the influence of alcohol or drugs.

These nine life-saving rules correspond to the nine situations which, in the opinion of Neptune Energy, entail the risk of a fatal accident for all natural persons working in the building site in various capacities.

The contractor ensures that all of his subordinate employees, which include his own employees and those of any sub-contractors, are familiar with the life-saving rules and have been informed of the consequences of their non-observance.

The contractor will take all measures necessary to comply with the life-saving rules and will inform Neptune Energy Deutschland GmbH of these.

## **2.2 APPOINTMENT PROCEDURE**

Contractors who are working on behalf of Neptune Energy Deutschland GmbH at workplaces that are under the supervision of the local mining authorities must be appointed by Neptune Energy Deutschland GmbH in accordance with mining law, namely §§ 58 to 62 BBergG. This appointment transfers duties and powers to the persons appointed by the contractor.

The appointed person is responsible, amongst other things, for the following:

- compliance with the applicable statutory principles, in particular the life-saving rules of Neptune Energy Deutschland GmbH
- compliance with the operating plans relevant for the work to be performed
- supervision of the works pursuant to the scope of the appointment
- observation of these safety regulations
- the qualification of the relevant employees
- the suitability and proper working order of the equipment and aids used
- the professional performance of the work

Neptune Energy Deutschland GmbH normally appoints the contractor's managing director with the proviso that further responsible persons in his company can be appointed or recalled. The appointment and recall must be in writing.

Only a person who has the necessary reliability, expertise and physical fitness to exercise his or her duties and powers may be appointed a responsible person (§ 59 BBergG). The text of the appointment must list the duties and powers clearly and completely.

Whenever the responsible person works in the area of Neptune Energy Deutschland GmbH, they must carry a copy of their appointment with them and present this to the responsible person of Neptune Energy Deutschland GmbH on request.

The pertinent local mining authority must be immediately notified of the names of the appointed responsible parties with details of their duties, powers and qualifications.

The authorities must also be informed of any changes.

If the contractor employs a sub-contractor with the approval of Neptune Energy Deutschland GmbH, the contractor must ensure that the employees of the sub-contractor are also supervised by an appointed responsible person and that the sub-contractor can produce the necessary personal and material requirements as well as the necessary certificates to prove their corresponding suitability.

Irrespective of the delegation of certain duties and powers, the responsible person of Neptune Energy Deutschland GmbH remains responsible for the correct management of the facility in the relevant operational area.



### 3. PEGASUS STOP-CARD-SYSTEM

All personnel working on behalf of Neptune Energy Deutschland GmbH shall comply with the HSE-policy and be proactive in safeguarding HSE for herself/himself and for others.

Insecure conditions, precarious actions and near accidents in the daily routine lead to critical situations. For any number of reasons in the past those situations remained in secrecy.

With the Stop-Card those critical situations are revealed and intercepted. By consistent recording, reporting and editing inevitable measures intercepting the critical situations can be derived; the intention of the Stop-Card is an increasing number of reports on critical situations in the area of Neptune Energy Deutschland GmbH.

An ongoing focusing of the issue HSE and a raising of the employees' awareness shall come along with pursuing that goal.

The Stop-Card shall contribute communicating commendable actions or conditions, so-called "Best Practices".

Overall the Stop-Card system is an element of the Neptune Energy Deutschland GmbH safety work's continuous improvement process.

Remark: The bonuses are subject to income tax and social insurance contribution. The amount of money is paid to the tax office by the contractor.

## **4. GENERAL OCCUPATIONAL SAFETY AND ENVIRONMENTAL PROTECTION**

4.1 The contractor is obliged to inform his personnel working in the area of Neptune Energy Deutschland GmbH of the "General safety regulations for contractors" through documented instruction before the start of the execution of the contract. One copy of the safety regulations remains at the place of work.

His foreign-language employees must understand the safety regulations. The contractor has to provide a translation into the foreign language if necessary.

If persons with different native languages are employed, one common language of communication must be specified.

Employees may only be entrusted with independent work if they understand the instructions given in the common language correctly and can make themselves clearly understood in this language.

Of those persons present on site, at least one of the responsible persons or persons authorised to issue instructions must be proficient in the common language and be able to speak, read and write German.

4.2 Safety instructions and protective measures must be strictly adhered to.

4.3 The contractor must perform regular checks to monitor occupational health and safety and the conduct of his employees so that sources of risk, violations of the safety regulations and unsafe practices are identified and corrected in due time.

4.4 The workplaces must be kept clean and tidy. Service and operating aisles as well as escape and access routes, etc. are to be kept clear at all times. The warehouse must be managed in accordance with regulations depending on the goods in stock.

4.5 Rest rooms, changing rooms and sanitary facilities are to be kept hygienically clean at all times.

4.6 Flammable substances may not be stored within the danger zone of operational facilities. Equipment or vehicles may only be parked at those locations approved by the client's responsible person.

4.7 Working processes, working equipment as well as the working materials that are used must be state of the art and should be chosen and used in such a way that there are no nuisances and risks for health, occupational safety and the environment, or that these remain limited to a tolerable, justifiable and repairable minimum (acceptable residual risk).

4.8 Neptune Energy Deutschland GmbH is to be notified in due time of any work involving materials hazardous to water, with definitions as regards storage according to the water hazard class and protective measures, before the start of any work.

4.9 Equipment, vehicles, devices and tools may only be used for the purpose for which they are suitable and/or intended, i.e. the following is forbidden:

- unauthorised use
- travelling as a passenger on vehicles not designed for such usage, and
- the misuse of emergency, rescue and safety facilities

- 4.10 All working materials, pieces of equipment, etc., owned by the contractor and used in the area of Neptune Energy Deutschland GmbH must be in an operationally safe condition. Copies of proof of the successful performance of all necessary periodic inspections are to be carried at all times. All devices, etc. borrowed from Neptune Energy Deutschland GmbH are to be handled with care.

The responsibility for the safe condition of the contractor's devices lies within his due diligence. Neptune Energy Deutschland GmbH is entitled to convince itself of their proper and correct condition at all times.

- 4.11 The contractor must ensure that the electrical resources he uses are started, operated and checked in due form.
- 4.12 Any work on electrical installations and equipment may only be performed by qualified electricians.
- 4.13 The contractor's responsible person must satisfy himself of the design and construction of scaffolding in accordance with regulations and approve of these in writing (daily construction records or separate report).
- 4.14 It is forbidden to enter those areas of the facility that are not directly connected to the contractor's working area. Such areas may only be accessed in emergencies for escape purposes and to avert risks.
- 4.15 The contractor's personnel may not start, stop or incorrectly operate any safety equipment such as safety valves, shut-off valves, electrical and mechanical locks, protective equipment, electric switches or any other device on their own authority.
- 4.16 The use of facilities such as workshops, cranes, motor vehicles and storage devices by the contractor requires the express approval of Neptune Energy Deutschland GmbH.
- 4.17 Facilities or parts thereof that have been put out of operation may only be restarted with the express consent of Neptune Energy Deutschland GmbH's responsible person. Written approval must be issued for restarting and these must take into account all safety aspects as well as those related to occupational health and environmental, fire and explosion protection.
- 4.18 Any faults in Neptune Energy Deutschland GmbH facilities that are identifiable as such must be reported to the responsible person at Neptune Energy Deutschland GmbH immediately and/or pursuant to the Neptune Energy Deutschland GmbH alarm plan.
- 4.19 Smoking is prohibited in the workplaces of Neptune Energy Deutschland GmbH. Exceptions can be enquired from the responsible person; pay attention to the signs too.

The serving, possession or consumption of alcoholic beverages and drugs is prohibited at the workplaces. Persons under the influence of alcohol or drugs are not permitted to enter the workplaces.

- 4.20 Security pass

All of the contractor's employees working in workplaces under the supervision of the local mining authorities and the pump station in Brögbern must present a security pass on request. This security pass is a document in which all important information is to be entered that is related to the health (G-examinations), level of instruction and expertise of the employee.

#### 4.21 Work permit

The start of contractor work in the area of Neptune Energy Deutschland GmbH requires an oral/written work permit from the pertinent departmental head /operations manager or his representative (see section 5).

These safety regulations are recognised as an integral part of the contract.

#### 4.22 Access to parts of the facility / workplaces

Only authorised persons are allowed to access parts of the facility and workplaces of Neptune Energy Deutschland GmbH. The signs at the entrance to the area regulate the code of conduct.

The responsible person of Neptune Energy Deutschland GmbH must be sought out for the purpose of logging in and out unless a different arrangement has been agreed in writing in individual cases.

Logging in and out may have to be documented in specified report books or for specific facilities.

#### 4.23 Risk assessment

Contractors must present a risk assessment in accordance with statutory regulations for their work in Neptune Energy Deutschland GmbH.

The contractor must in every case check thoroughly before starting work whether the risk assessment incl. the protective measures for his personnel, in particular measures related to compliance with the life-saving rules, is appropriate for the planned work assignment at the location.

Appropriate measures have to be taken by arrangement with the responsible person of Neptune Energy Deutschland GmbH if this check proves negative.

## **5. REGULATIONS FOR BUILDING ACTIVITIES**

### **5.1 BUILDING AND SOCIAL AREAS**

The setting-up of a contractor's building site or the shared use of rest rooms, locker rooms and the sanitary facilities of Neptune Energy Deutschland GmbH are to be agreed with the facility. The statutory regulations must be observed when setting up storage areas, work-places and workshops.

Connections to public utilities such as electricity, telephone, water, sewers, etc. must be carried out by approved specialist companies. This also applies in particular for the erection of liquid gas installations.

Residential areas for the contractor's employees must be clearly separated from working areas.

The parking of caravans at and around building or drilling sites has to be approved by Neptune Energy Deutschland GmbH.

If it has been agreed that electricity will be supplied from Neptune Energy Deutschland GmbH the contractor must provide a building site main cabinet with fuses and meter that complies with VDE regulations. The connection in the area of Neptune Energy Deutschland GmbH and the connection to the contractor's building site main cabinet will be carried out by one of Neptune Energy Deutschland GmbH's qualified electricians. The electrical resources used must be checked regularly by the contractor pursuant to regulation BGV A 3 of the German Employer's Liability Insurance Association.

It is prohibited to stay overnight or reside within Neptune Energy Deutschland GmbH work-places without permission.

### **5.2 MACHINES AND ENGINES**

The contractor's earth-moving machinery, cranes, motor vehicles, industrial trucks, pump and emergency power units, etc. on the building site must be in a perfectly safe working condition.

Test books, vehicle registration certificates or other licences must be kept ready for inspection. The CE label (applies for machinery that has been brought onto the market after 1 January 1995, see EC machinery directive) must be attached to the devices at a clearly visible point. The devices are to be operated by employees with the corresponding permits and who have been instructed accordingly.

The safe storage of fuels and/or other operating resources in accordance with the Water Management Act (*Wasserhaushaltsgesetz, WHG*) must be guaranteed.

Biodegradable fillings are to be given preference for hydraulic systems on machines and engines. Neptune Energy Deutschland GmbH can make this an integral part of the contract in areas that are relevant for water management.

Neptune Energy Deutschland GmbH will reject all working materials that are not suitable for the performance of the building project.

### **5.3 LADDERS, STEPS, SCAFFOLDING, PLATFORMS FOR LIFTING PERSONS, TRANSPORT OF PERSONS WITH LIFTING AND HOISTING GEAR**

The aforementioned working materials will be provided and serviced by the contractor, unless otherwise agreed. In the case of personnel transport with lifting and hoisting gear, the pertinent German Employer's Liability Insurance Association has to be informed.

The contractor has the devices manufactured, tested and used according to regulations.

### **5.4 WORKING AT HEIGHTS, FALL PROTECTION DEVICES**

Employees are to be secured against falling from heights. If permanent safety devices such as stages, scaffolding, fixed railings, platforms, etc. are not possible for operational reasons, personal protective equipment to prevent falls and the risks of falls are to be used.

Any work at heights that requires physical exertion may not be performed from steps, simple straight ladders or mechanical ladders without additional fall protection devices.

### **5.5 TOOLS**

It is agreed that the contractor will provide the tools that are needed to complete the building project. These include, if necessary, special tools for work in potentially explosive areas (non-sparking, cutting wheels or cold cutting devices etc.).

Tools provided by Neptune Energy Deutschland GmbH must be handled with care. Any loss or loss of use must be reported immediately (see also section 1.5).

## 6. WORK PERMIT

### 6.1 ACCESS TO CONTAINERS AND CONFINED SPACES

Work in containers comprises any activity during which the employee works in a container. This includes cleaning and maintenance work, inspections and repairs.

Containers are understood as being areas surrounded by walls with a poor air exchange within which there are special risks, for example through hazardous substances, lack of oxygen, fittings, electric current or ionising radiation and whose access requires a written work/access permit from the operations manager or his representative. This specifies the scope of the activities, method of working, measurement and analysis technology, protective measures, names of the responsible person and the lookout person, the alarm and rescue chain, amongst other things.

These risks are grounded in the particular spatial confinement or in the substances and/or facilities within the container. Containers include, for example, tanks, strippers, boilers, shafts, probe basement, machinery or pipelines.

The company must specify the procedure for work in containers. Pay attention to the following points before starting work:

The possible risks in specific individual cases have to be identified and assessed.

The resulting technical, organisational and personal protective measures including emergency and rescue measures are to be summarised in a written work permit. Consequently, work in containers **is only allowed with a written** licence.

- All necessary safety measures must be taken.
- Rescue activities must be trained.
- All commissioned persons must have been instructed about the risks and protective measures. The commissioned persons must confirm that they are aware of the specified measures by signing the access permit. If the activity is periodic the persons involved must be instructed at least every six months.
- An authorised supervisory person must be appointed.
- During certain work in containers at least one lookout person must be present who is in constant contact with the person working in the container (e.g. within sight, calling distance etc.). The lookout person must be able to get help without leaving his post.
- The measures must be discussed with the coordinating responsible person before starting work.
- The protective measures taken such as disconnecting lead-ins, connections to other channels, pits and ditches, etc. are to be produced safely through blanking plates, blind flanges, dismantling devices and their efficacy must be checked.
- The persons performing the work must be secured by means of a rescue harness and rescue line before entering the container.
- Any electrical devices that are used may only be operated with safety extra-low voltage (SELV) or with protective separation. Make sure that they are approved for work in potentially explosive areas.
- When working in containers and in the event of a higher electrical risk within confined spaces, only electric and MIG welding equipment which is approved for such work and which has been labelled accordingly may be used.

- Before starting work and when working in parts of the facility, the contractor must ensure by means of ventilation and aeration measures or suitable clearance measurements that no atmosphere that is harmful to health exists or can arise.

Further information: DGUV-I 213-001 *Arbeiten in engen Räumen* (Working in confined spaces), DGUV-R 113-004 *Arbeiten in Behältern, Silos und engen Räumen* (Working in containers, silos and confined spaces); GUV-R 500 chapter 2.26 *Schweißen, Schneiden und verwandte Verfahren* (Welding, cutting and related methods).

The responsible person for supervision named in the work permit checks the efficacy of the alarm chain together with the lookout person.

The telephone/rescue and alarm plan of Neptune Energy Deutschland GmbH applies when reporting unusual incidents.

## 6.2 WORK PERMIT IN SPECIAL CASES

The contractor's responsible person must obtain the express consent of Neptune Energy Deutschland GmbH's responsible person for the work listed below where a risk can arise to persons and the environment as well as facilities:

- Welding, cutting and hot work outside the workshops intended for such activities
- Work in containers and confined spaces
- Work on pressurised systems
- Civil engineering work, especially where there is a risk of dispersing the potentially explosive area
- Erection of construction scaffolding that requires a structural analysis
- Personnel transport with lifting gear
- Working in potentially explosive areas
- Work on H<sub>2</sub>S systems
- Crane work
- Work that entails a risk of falling from a height
- Work on live electrical installations
- Connecting/disconnecting of electrical supplies
- Work with radioactive sources and radioactive waste
- Work on contaminated equipment and in contaminated areas
- Work with explosives
- Demolition work



## **6.3 HOT WORK (WELDING, CUTTING AND SIMILAR PROCESSES)**

Persons appointed by the contractor to carry out welding work in the meaning of regulation GUV-R 500 section 2.26 of the German Employer's Liability Insurance Association must be at least 18 years old and be able to provide verifiable evidence of their familiarity with the equipment and methods involved.

### **6.3.1 CHECKING THE NECESSITY, ALTERNATIVES**

Despite all precautionary measures, hot work always involves some risks. It must be checked whether hot work is absolutely necessary. Otherwise, all those involved are obliged to avoid hot work, even if this involves considerable additional work.

### **6.3.2 PERMIT FOR HOT WORK, SUPERVISION**

Hot work requires the written permission of the operations manager or his representative. The permit covers only the activities described. Hot work must be supervised by the Neptune Energy Deutschland GmbH person responsible named in the permit.

### **6.3.3 PREPARING THE WORK, COORDINATION**

The operations manager or an appointed Neptune Energy Deutschland GmbH person shall be responsible for coordinating the preparation and execution of hot work. The contractor and Neptune Energy Deutschland GmbH shall together plan the procedure and the work.

### **6.3.4 PROGRAMME OF MEASUREMENTS, INSPECTIONS DURING THE WORK**

The hot permit shall specify the number and scope of measurements of dangerous substances at the start of and during the work. The measurements may only be carried out by persons who are familiar with the use of the measuring equipment and have been instructed accordingly.

Hot work in areas at risk of fire and explosion require special supervision. Hot work is prohibited where it is not possible to eliminate the risk of explosion!

### **6.3.5 FOLLOW-UP INSPECTION**

The workplace is to be inspected several times after completion of the hot work. The times are specified in the hot work permit. Permits shall be filed with consecutive numbers by Neptune Energy Deutschland GmbH for inspection by the mining authority or the trade inspectorate (*Gewerbeaufsicht*).

## **6.4 EXCAVATIONS**

All kinds of excavations in the area of Neptune Energy Deutschland GmbH and within the safety zone of Neptune Energy Deutschland GmbH facilities require express consent. The work must be reported to Neptune Energy Deutschland GmbH in due time, i.e. 2 weeks before the planned start of the building work at the latest.

The pertinent statutory regulations, directives, technical rules such as DIN-EN-ISO standards, DVGW rules and standards, TRbF, TRGS, TRBS, AfK recommendations, BGV and Neptune Energy Deutschland GmbH instructions must be observed during work within the safety zone.

In order to protect Neptune Energy Deutschland GmbH installations, only hand excavations are allowed within their narrower range, in the case of pipes and cables this means 3 m either side of these installations.

In order to rule out any risks for installations through possible changes in position the contractor is obliged to make sure of their position and depth through suitable locating measures.

The use or movement of construction machinery in safety zones is only allowed after prior instruction and under the supervision of a responsible person of Neptune Energy Deutschland GmbH.

Pipe driving and drilling work, the driving in (ramming) of posts, sheet piles or walls, water jetting of filters etc. also has to be coordinated with Neptune Energy Deutschland GmbH in advance if this work takes place in safety zones and may only be performed under the supervision of a responsible person of Neptune Energy Deutschland GmbH.

In the event of a convergence, a clearance of at least 0.40 m must be observed between a newly laid line and the existing Neptune Energy Deutschland GmbH installation.

If crossing a Neptune Energy Deutschland GmbH installation, this may be exposed over a length of 3 m by hand excavation.

Exposed installations must be protected against any kind of damage (including freezing) and secured professionally against any change in position. Supports may not be dug under or exposed.

An excavation pit/pipe ditch must be reinforced by hand in the area of Neptune Energy Deutschland GmbH installations with suitable filling material in layers of 30 cm each.

Filling may only begin in the presence of a responsible person from Neptune Energy Deutschland GmbH.

The Neptune Energy Deutschland GmbH installations must remain accessible during the construction period. A 2 m wide strip must be kept free and accessible on both sides of the Neptune Energy Deutschland GmbH installation.

No structures may be built on the safety zones of pipes and cables.

Where Neptune Energy Deutschland GmbH installations include cathodic protection against corrosion, measurement contacts are to be welded on and measuring poles installed in the proximity of the planned installation. The welding of the measurement contacts and the installation of the measuring poles is "solely the responsibility" of Neptune Energy Deutschland GmbH.

Joint interference measurements are to be carried out once the construction work has been completed.

Multicore buried cables normally run alongside or above Neptune Energy Deutschland GmbH lines. The necessary measures to protect these cables must be carried out by the contractor in accordance with the pertinent technical rules, in particular the VDE regulations and AfK recommendations.

Parallel lines must always be laid outside the safety zone of the Neptune Energy Deutschland GmbH installations at a safe distance so as to rule out any mutual hazardous interference to safety, taking into account the medium to be conveyed.

Cable ducts and manholes, fittings and other equipment must be built outside the safety zone of Neptune Energy Deutschland GmbH installations.

## **7. TRAFFIC SAFETY MEASURES**

### **7.1 MOTOR VEHICLES IN THE FACILITY**

Private and contractor company vehicles may not normally enter the Neptune Energy Deutschland GmbH workplaces unless separate parking spaces have been marked for such vehicles or they have been expressly assigned by the pertinent responsible person of Neptune Energy Deutschland GmbH.

Exceptions for special vehicles such as suction vehicles, mobile workshops, assembly cranes, etc. are to be regulated by the operations manager or a person appointed by Neptune Energy Deutschland GmbH

The German Road Traffic Act (*Straßenverkehrsordnung, StVO*) applies on the premises. Unless otherwise indicated, the maximum travelling speed is walking pace.

Motor vehicles may not obstruct access roads and entrances to the operational facilities.

All vehicles must be parked in the escape direction.

### **7.2 PROTECTIVE EQUIPMENT AT WORKPLACES**

The safety of all persons and building site equipment calls for traffic restrictions and prohibitions. Traffic signs and safety devices in accordance with StVO must always be kept in perfect order, easily visible and intact.

### **7.3 INVOLVEMENT OF THIRD PARTIES**

The contractor must inform the pertinent authorities of any work on public traffic spaces. The road traffic authority is responsible in accordance with § 45 StVO and is authorised to issue instructions.

### **7.4 TRAFFIC SIGNS, RULES PLAN**

A traffic sign plan does not have to be applied for in the case of building measures that are only for a limited period or of a limited scope and have no major effect on traffic.

Examples of construction site safety facilities can be found in the "Guidelines for securing workplaces on roads" (*Richtlinien für die Sicherung von Arbeitsstellen an Straßen, RSA*). Unless otherwise agreed in the contract, the contractor is the plan author, submitter and party responsible for maintenance.

### **7.5 PROTECTIVE MEASURES FOR FACILITIES AND PERSONS**

All persons are obliged to wear warning clothing in public traffic areas. The building sites are to be secured and marked (e.g. fence).

## 7.6 WORKING EQUIPMENT

When vehicles such as excavators, loaders, Unimog trucks, etc. are to be used on building sites in public areas that are not secured on all sides, then these are to be equipped as special vehicles according to StVO § 35 para. 6, with red/white corner markers, red/white warning signs and a rotating flashing beacon.

Additional lookout persons increase safety.

## 8. PERSONAL PROTECTIVE EQUIPMENT

8.1.1 The personal protective equipment (PPE) must be safe and suitable for the relevant work. It shall be worn and used correctly by the employees to protect them against risks to their health and safety.

8.1.2 In order to avoid injuries during visits to or work at Neptune Energy operating sites, production facilities, building sites or workshops, all employees of companies commissioned by Neptune Energy Deutschland GmbH must always wear basic protective equipment.

8.1.3 Risks must be avoided at all times. If a risk cannot be avoided, an attempt must be made through technical or organisational measures to rule out the risk of an accident or to the health of persons. In the event that such a risk cannot be ruled out completely, suitable personal protective equipment must be provided, the employees must be instructed in its correct use and its actual use and application must be checked. The employees must use the PPE provided and take part in the appropriate instruction.

8.1.4 The following PPE in particular must be provided:

### Protective clothing (outerwear)

Wherever one has to reckon with dangerous external influences that lead to skin injuries as well as in the event of risks from flames and heat, hazardous substances, fault arcs or cuts.

### Working clothing (workwear)

Wherever one has to reckon with dangerous external influences that can lead to skin injuries. The working clothing is worn in place of or in addition to private clothing to protect this.

### Headgear

Wherever one has to reckon with head injuries through knocks or from swinging, falling, toppling or flying objects as well as through the trapping (rotating parts) of open, long hair.

#### Foot and hand protection (incl. protection against contact)

Wherever one has to reckon with foot or hand injuries through impacts, pinching, toppling, falling or rolling objects, through stepping on or reaching into pointed or sharp objects, work on live parts or from hot substances, hot or caustic / leach-like fluids.

#### Eye and face protection

Wherever one has to reckon with eye or face injuries from flying parts, splashes of fluids or from hazardous substances.

#### Ear protection

Wherever one has to reckon with noise above the set limits, e.g. through parts of the facility or tools.

#### Breathing protection

Wherever employees may be exposed to harmful, in particular toxic, caustic or irritant gases, vapours, mists or dusts or if a lack of oxygen can occur.

#### Fall protection

Wherever the risk of falling from a height cannot be ruled out by other measures.

### 8.1.5 Instruction

Every employee must be instructed in the use of PPE, at the latest before they start work. Practical instruction in the use of the PPE will be provided if necessary. The instruction must be documented; it may be entered in the security pass and repeated at set intervals, though at least once a year.

The direct superior and/or the relevant responsible person is in charge of checking and carrying out the necessary instruction. The employee is entitled to demand instruction.

### 8.1.6 Applicable standards

- Safety helmet pursuant to DIN EN 397,
- Protective goggles pursuant to DIN EN 166,
- Safety shoes (covering the ankles) pursuant to EN ISO 20 345 and
- Antistatic / flame-retardant protective clothing pursuant to DIN EN 1149-5 / DIN EN ISO 14116 or 11612 (old DIN EN 533 or 531)

## **8.2 BASIC PPE ON Neptune Energy Deutschland GmbH PREMISES**

In order to avoid injuries during visits to or work at Neptune Energy Deutschland GmbH operating sites, production facilities or on building sites, visitors and employees of companies commissioned by Neptune Energy Deutschland GmbH also have to wear basic protective equipment (PPE).

The table on the following page shows which PPE is required for which group of persons:

Basic equipment	Safety shoes (covering the ankle)	Safety helmet	Outerwear antistatic / flame-retardant	Street clothes	Working or labora- tory clothing	Protective goggles	Reflective vest
<b>Generally:</b>							
<b>Basic equipment in facilities and workplaces including the corresponding outdoor facilities (e.g. building sites, drilling facilities, hazardous substance store)</b>	X	X	X	-	-	X	X <sup>4</sup>
<b>Permissible deviations:</b>							
<b>To offices and staff facilities, as well as measuring stations and electronic test rooms with an office character</b> from parking spaces by a direct route, provided no special PPE is required according to the markings. <b>Drilling and workover facilities:</b> Parking areas including the direct route to the office and staff containers	-	-	-	X	-	-	-
<b>Representatives of authorities, German Employer's Liability Insurance Associations, organisations, Neptune Energy employees etc.,</b> who are outside working areas with risks.	X <sup>1.1</sup>	X	-	-	X	X	-
<b>Visitors</b> accompanied by Neptune Energy Deutschland GmbH employees or contractors during inspections of ground level areas but outside working areas and parts of the facility as well as areas with risks.	X <sup>1</sup>	X	-	X <sup>2</sup>	-	X	-
<b>Laboratories (TTC, TRU-L):</b> Osterwald and Steinitz <b>Sample testing rooms:</b> districts	X <sup>1.1</sup>	-	-	-	X	X	-
<b>Headquarters Lingen (TTC):</b> Core storage facility, activities in aisles when using a fork-lift truck	X <sup>1.1/1.2</sup>	X <sup>5</sup>	-	-	X	-	-
<b>Headquarters Lingen (KIO):</b> All tradesman activities on the premises incl. contractor	X <sup>1.1/1.2</sup>	X <sup>3</sup>	-	-	X	X	X <sup>4</sup>

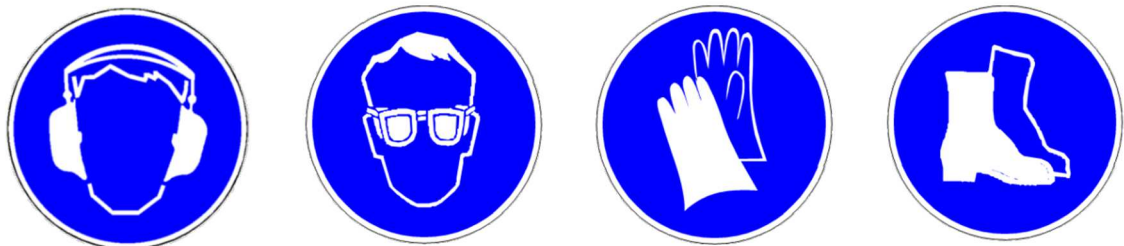
X = Absolutely imperative

- Dash means: not necessary

- <sup>1</sup> Closed, sturdy shoes  
<sup>1.1.2</sup> Safety shoes – <sup>1.1</sup>Safety shoes closed / <sup>1.2</sup>Safety shoes with holes  
<sup>2</sup> Legs and upper part of the body covered  
<sup>3</sup> Helmets must be worn on building sites  
<sup>4</sup> Reflective vest during loading and building site work  
<sup>5</sup> Overhead work

### 8.2.1 Safety instructions

The obligation to wear personal protective equipment is signposted in all facilities and workplaces with additional mandatory signs (examples):



## 8.2.2 Exceptions, restrictions on PPE basic equipment

Neptune Energy Deutschland GmbH employees and contractors must wear long-armed outerwear. Temporary exceptions from this rule may be approved by the relevant Neptune Energy Deutschland GmbH supervisor for certain work (e.g. very hot). A risk assessment (ASA / JSA) has to be carried out to determine those operations and procedures that entail no risks which necessitate the wearing of corresponding PPE.

## 8.3 PROTECTIVE GOGGLES

### 8.3.1 Wearing protective goggles

In order to avoid eye injuries, all employees of the companies commissioned by Neptune Energy Deutschland GmbH as well as visitors to Neptune Energy Deutschland GmbH operating sites, production facilities, building sites or workshops have to wear protective goggles with side protection at all times. Persons who require corrective lenses for their work either have to wear protective goggles with corrective lenses and side protection or corresponding protective goggles over their normal glasses. Private glasses are not allowed since they do not satisfy the requirements of protective goggles.

### 8.3.2 Exceptions to the mandatory wearing of protective goggles

Protective goggles do not have to be worn in the following areas:

- Offices and staff facilities
- Signposted traffic routes to offices, measuring stations or staff facilities
- Electronic test rooms with an office character and no risk to the eyes
- Vehicles and machinery (e.g. cranes) with a closed cabin
- Individual operations where it is not sensible to wear protective goggles for quality reasons (e.g. endoscope of a container or machine) and there is no risk to the eyes according to a work-safety analysis (ASA / JSA).

### 8.3.3 Further requirements

Appropriate further eye protection, i.e. tightly fitting protective goggles, must be worn during work where one has to reckon with a risk to eyes from caustic or hot substances (splashes, vapours, mists, smoke) or where a risk has been identified within the scope of a work-safety analysis.

8.3.3.1 During work such as the manual ignition of combustion chambers or high-pressure cleaning work, tightly fitting protective goggles must be worn since one always has to reckon with a mechanical risk to the eyes. During overhead work too, care must be taken to ensure that no falling particles can enter the eyes. In individual cases, tightly fitting protective goggles have to be worn here too.

8.3.3.2 During work with caustic and bleach-like hazardous substances such as decanting hazardous substances as well as during cementing work, tightly fitting protective goggles must also be used. The German Employer's Liability Insurance Associations' regulations also have to be observed.

8.3.3.3 Appropriate eye protection must also be worn when handling live parts or during welding. Welding work may only be carried out with specially tinted protective goggles or screens. Special electrician's protective shields must be worn if there is a risk of electric arcs, e.g. when changing fuses.

## 8.4 SAFETY SHOES

Safety shoes or boots – at least category S3 – must be worn at operating sites and workplaces, storage facilities for operating supplies as well as during outdoor work. If safety boots are worn, only laced boots are allowed to ensure adequate support around the ankles.

In order to protect the ankle area of the foot as well as avoid injuries from sprained ankles as far as possible, safety shoes or laced boots should always be worn.

**Safety boots without laces may not be worn.**

In areas that may get wet, e.g. building sites, sections of lines, category S5 wellington boots may be worn since these have a puncture-resistant sole.

Wellington boots should also be worn when handling certain hazardous substances (chemicals).

Safety shoes from category S1 / S3 are allowed in laboratories, measuring stations and store-rooms with installations.

- **S1**- Satisfies all basic requirements of EN ISO 20345, but is also equipped with important safety-relevant functions such as energy absorbers in the heel, a closed heel area and antistatic features for the sole. Not suitable for work with hazardous substances.
- **S3**- Based on the S1 safety shoes, these models also have a nail-puncture-resistant midsole. A special hydrophobed leather offers protection against damp. This type of shoe has a fuel-resistant sole.
- **S5**-Like S3 for the wellington boot and is 100 % waterproof.

All shoes are fitted with toecaps whose protective effect has been tested with a test energy of 200 joules, for high loads.

## 8.5 EAR PROTECTION

Contractors and visitors must be informed of the noise areas that require monitoring, of the machinery that produces noise that is harmful to health and of the appropriate hearing protection, and must be provided with this.

Noise registers are provided for information in the different areas and noise areas are marked.

Very noisy locations are identified by the appropriate signs on site wherever necessary. Wear the appropriate ear protection if working in or visiting the signposted areas.

The following applies in general:

- Ear protection must be provided at noise levels > 80 dB (A).



- Simple ear protection must be worn at noise levels  $\geq 85$ dB (A).
- Double ear protection is required at noise levels  $\geq 100$  dB (A). If the areas are only entered for short checks etc. (2 \* 15 minutes per shift) the protection offered by the simple ear protection is deemed to satisfy the limit.
- If a noise level of 110 dB (A) is exceeded the exposure time must also be taken into account in addition to the double ear protection.

## **8.6 OTHER OR FURTHER PERSONAL PROTECTIVE EQUIPMENT**

The rules and regulations of the German Employer's Liability Insurance Associations (BGVR) also apply.

Appropriate other or further personal protective equipment such as protective clothing against chemicals, breathing protection, eye and face protection, gloves etc. are set out in operating instructions for certain areas or certain activities (e.g. handling chemicals) and may be specified following a risk assessment in the course of the work approval process.

## **9. WHAT TO DO IN CASE OF ACCIDENTS AND NON-STANDARD SITUATIONS**

### **9.1 FIRST AID, OCCUPATIONAL SAFETY AND COMPANY MEDICAL OFFICER CARE**

- 9.1.1 The contractor is obliged to train an adequate number of employees as first-aiders. This training must be repeated according to the regulations.
- 9.1.2 Persons involved in electrical work must also be trained in "First aid after electrical accidents".
- 9.1.3 The locations of the first-aid materials are to be indicated with emergency signs within sight of the workplaces.
- 9.1.4 All first-aid that is provided must be documented in the first-aid log. Neptune Energy Deutschland GmbH must be allowed to inspect the records.
- 9.1.5 It can be agreed that the emergency facilities such as the first-aid boxes of Neptune Energy Deutschland GmbH can also be used by the contractor.
- 9.1.6 During industrial health and safety inspections by Neptune Energy Deutschland GmbH the condition of the equipment, devices, protective and safety facilities as well as the conduct of the employees will be checked.
- 9.1.7 The contractor must have any necessary occupational health employment, screening, fitness for work and follow-up examinations performed at his own responsibility and cost in accordance with the principles of the German Employer's Liability Insurance Associations.
- 9.1.8 Persons who require occupational health and safety screening examinations may only be employed if there are no medical objections to the nature of the intended work based on the results of this examination and this is confirmed by a medical certificate with details of a fitness group.
- 9.1.9 The initial examinations must be performed before the start of work. They may not be carried out more than three months before the commencement of the employment. Persons who are exposed to adverse effects on their health through the nature of their work or technical operations must undergo an initial examination. Sentences 1 to 4 do not apply for persons who were not employed for longer than three months within a calendar year.

### **9.2 REPORTING UNUSUAL EVENTS**

- 9.2.1 Unusual events such as the escape of gases or fluids from parts of the facilities, the dangerous, unsafe conduct of employees, fires, deflagrations, explosions, accidents during work with hazardous substances etc. must be reported to Neptune Energy Deutschland GmbH immediately in accordance with the alarm plan. The endangered areas must be evacuated immediately; any arriving persons must be warned.

Special rules apply for H<sub>2</sub>S risks (see section 11).

- 9.2.2 In the event of injuries, near misses as well as any kind of industrial accident and way-to-work accidents, deviations – even those with a low actual risk potential – from normal procedures, the operations manager or the pertinent responsible person of Neptune Energy Deutschland GmbH is to be informed immediately with an exact description of the facts.

Accident analyses that have to be performed by the contractor must be reported to Neptune Energy Deutschland GmbH and a (carbon) copy of the report handed over.

- 9.2.3 Irrespective of the immediate report of any incident, all accidents, including way-to-work accidents, that result in an incapacity to work, must be reported to the pertinent operations manager or responsible person at Neptune Energy Deutschland GmbH in the form of an accident report after 3 working days at the latest for information and statistics purposes. The time lost due to the accident and the duration of the light duty work (restricted work) is to be reported in writing to Neptune Energy Deutschland GmbH, TSU in calendar days.

The pertinent local mining authority must also be sent a copy of the accident report by the contractor.

Neptune Energy Deutschland GmbH reserves the right to perform its own accident analyses or to have these carried out on its behalf.

### **9.3 RECORDING THE CONTRACTOR'S WORKING HOURS**

- 9.3.1 All contractors must report the total sum of working hours performed by their employees in the area of Neptune Energy Deutschland GmbH to the responsible department or facility by the fifth of the following month for statistical accident and incident analyses. (see Annex 2)

- 9.3.2 Contractors who engage sub-contractors also have to record and report their hours. Exceptions can be made by agreement with Neptune Energy Deutschland GmbH for those sub-contractors who also work directly for Neptune Energy Deutschland GmbH as contractors on the basis of framework agreements with Neptune Energy Deutschland GmbH.

Any divergent settlements can be agreed between the contractor and the pertinent departmental head /operations manager.

## **10. FIRE AND EXPLOSION PROTECTION**

### **10.1 POTENTIALLY EXPLOSIVE AREAS, SITE PLAN**

Neptune Energy Deutschland GmbH provides the contractor with a plan of potentially explosive areas and a fire brigade plan with potentially explosive areas for the duration of the building project so that he can instruct his employees, or will put this on general display.

The instruction must include, amongst other things, the WEG collection of examples to define potentially explosive areas, e.g. piping, drilling and workover facilities, containers for crude oil and other liquids, with the meanings of the zones 0, 1, and 2 and the current plan of potentially explosive areas.

### **10.2 FLAMMABLE LIQUIDS AND GASES**

The contractor's employees must be explained the risk potentials of the flammable liquids, in particular if they are mixed, as well as the dissipation of gases and their ignition risks.

The production, collection and conduction of explosive mixtures is of great importance here.

### **10.3 SOURCES OF IGNITION**

Sources of ignition may include:

- Smoking
- Naked flames
- Tools that produce sparks
- Electrical resources with no explosion protection
- Electrostatic charges
- Lightning / thunderstorms
- Hot surfaces
- Chemical reactions
- Cathodic protective systems incl. pipelines with cathodic corrosion protection etc.

Measures must be taken against electrostatic charging, such as:

- The use of conductive materials
- Equipotential bonding or earthing of all operating resources and aids

Details of these measures must be determined with the operations manager and/or the responsible person at Neptune Energy Deutschland GmbH (see also BGR 132).

### **10.4 PROVISION OF TOOLS AND HAZARDOUS SUBSTANCES**

In order to reduce the sources of ignition, low-sparking tools, compressed-air drills, cold saws, hand-operated cutting wheels/saws, permanently resilient insulating materials etc. are to be provided by the contractor.

The hazardous substances ordinance must be observed when using and storing operating resources and/or hazardous substances, corresponding operating instructions must be kept with the resources/substances. The amount is to be limited to the stocks necessary for the immediate continuation of the work (risk minimisation). A hazardous substances index must

be kept. Only those hazardous substances that are needed to perform the work should be taken along.

Great care should be taken when working with substances that fall under the hazardous substances ordinance (decanting, storing, mixing, transporting, putting into circulation, etc.).

## **10.5 CATHODIC CORROSION PROTECTION**

Piping as well as parts of the facility made of metallic materials are cathodically protected against corrosion. If these are within the potentially explosive areas 0 or 1, all of their poles should be disconnected by a qualified electrician of Neptune Energy Deutschland GmbH and secured against restarting during any work as they constitute a possible source of ignition. Equipotential bonding should always be provided before disconnecting the pipeline. AfK recommendation no. 5 should be observed in detail.

Special reference is made to BGR 500 Chapter 2.33 "Facilities for handling gases" (*Anlagen für den Umgang mit Gasen*) and Chapter 2.31 "Working on gas lines" (*Arbeiten an Gasleitungen*).

## **10.6 PROVISION AND TESTING OF FIRE-FIGHTING EQUIPMENT**

The contractor is obliged to provide an adequate number of fire extinguishers (hand fire extinguishers, fire blankets, etc.) in accordance with the risk analysis for his work (e.g. hot work) according to regulations for the intended purpose. Fire extinguishers should be tested at least every 2 years.

## **10.7 TRAINING EMPLOYEES**

With reference to the mining directives and other pertinent regulations, an adequate number of employees must have been trained in operational and structural fire protection and in the use of hand fire extinguishers. The instruction and practical training must be carried out in accordance with the statutory regulations.

## **10.8 WHAT TO DO IN THE EVENT OF A FIRE**

In the event of a fire the contractor must alarm the fire brigade and Neptune Energy Deutschland GmbH immediately in accordance with the alarm plan. Fire fighting should begin immediately. All employees who are not involved in fighting the fire must evacuate the danger zone immediately unsolicited and gather at the defined assembly point or at the entrance to the facility (on safe ground) and follow the instructions of the person in charge of the operations. Roads and service aisles are to be kept clear.

Any instructions issued by the person in charge of the operations and/or the responsible person of Neptune Energy Deutschland GmbH must be followed.

## **11. GAS AND BREATHING PROTECTION**

- 11.1 Before starting work in the area of Neptune Energy Deutschland GmbH where there is a risk to employees from natural gas or hydrosulphuric gases, the contractor's employees must be instructed in accordance with the locally applicable deep drilling ordinance and/or the pertinent regulations. These instructions are to be repeated at least every six months.

Employees with beards (except neatly trimmed moustaches that end at the corners of the mouth) will not be allowed into facilities with hydrosulphuric gases (see also WEG notice "Hydrogen sulphide").

- 11.2 Special regulations apply on the whole for gas protection. The necessary measures to guarantee gas protection for the contractor's employees are to be coordinated and agreed in writing between the responsible persons of the contractor and the operations manager and/or gas protection officer of Neptune Energy Deutschland GmbH.
- 11.3 The contractor must ensure that his own employees have the necessary industrial breathing protection. The pertinent regulations, in particular BGR 190, must be observed.

## **12. ENVIRONMENTAL PROTECTION**

- 12.1 The statutory regulations, directives and rulings on protecting the environment must be observed during all activities. Subjects of protection include soil, groundwater, surface waters, air, flora, fauna as well as the undisturbed function of the ecological system.

- 12.2 Transportation of hazardous substances

Hazardous substances must be transported under the strict observance of all currently pertinent laws and directives.

The design, technical condition, equipment of the transport vehicles used as well as the qualification of the drivers must comply with the current level of legislation.

Particular incidents in connection with the transportation of hazardous substances that may lead to a risk or damage to the environment must be reported to the person responsible for transports at Neptune Energy Deutschland GmbH immediately.

Suitable measures to protect the environment and limit any damage must be taken immediately.

Any damage that occurs must be rectified immediately under the supervision of Neptune Energy Deutschland GmbH, possibly with the involvement and cooperation of the pertinent authorities.

- 12.3 If hazardous substances escape after an accident or failure of technical systems, suitable measures to protect the environment must be initiated immediately so as to limit any damage.
- 12.4 Waste must be disposed of in accordance the pertinent statutory rules and regulations by those disposal channels approved by the authorities. The disposal/recycling must be performed by a waste management company.

Wastes are to be disposed of by the contractor himself. Neptune Energy Deutschland GmbH has passed special provisions and regulations on the disposal of hazardous wastes. The contact person for the execution of the disposal of hazardous wastes in accordance with current legislation is the pertinent waste officer of Neptune Energy Deutschland GmbH.

- 12.5 Any work in the waste disposal sites of Neptune Energy Deutschland GmbH must be carried out with the greatest of care so that the stability of the site embankments, the seals in the basins and the general safety of the facilities is not endangered or damaged in any way.

If the facilities are damaged or are suspected of having been damaged, the responsible operations manager of Neptune Energy Deutschland GmbH must be informed directly.

Measures to protect the environment and to eliminate any damage that occurs are carried out under the overall control of the responsible operations manager and possibly with the involvement of the pertinent authorities.

### **13. FINAL PROVISION**

The safety rules and regulations for contractors in the working area of the Neptune Energy Deutschland GMBH as amended in July 2003 are herewith invalidated.

The revision service for this regulation lies with the department for occupational health, environmental protection, quality management (SQ).

### **14. HSE CONTACT FOR NEPTUNE ENERGY DEUTSCHLAND GMBH**

Department for occupational health, environmental protection, quality management (SQ)

**Mr Peter Hartmann**

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## 15. ANNEXES

**Annex 1:** 2 pages, leaflet for contractors and confirmation of receipt of the "General safety regulations" (distribution list: 1x commissioning facility/department, 1x TSU, 1x contractor).

**Annex 2:** Fax for contractors, to report the monthly hours worked within the sphere of responsibility of Neptune Energy Deutschland GmbH (see section 8.3).  
Annex 2 can be returned by fax or e-mail.

**Annex 3:** Declaration of the contractor's responsible person  
(distribution list: 1x commissioning facility/department, 1x contractor).

**Annex 4:** Work permit: Access permit, work permit, approval for welding, cutting and hot work.

**Annex 5:** Internal Incident/Accident Report

**Annex 6:** Life-saving rules of Neptune Energy