

Safety Regulations and Rules of Conduct

For contractors and consultants when conducting work at or visiting Göteborg Energi's production plants for district heating, cooling, gas and electricity.

Welcome to Göteborg Energi

Production business area

Göteborg Energi's Production business area is responsible for administration, operation and maintenance of all of the company's production plants and pump stations. Our plants include wind farms, heat and power plants powered by biofuel, gas and oil, wastewater heat pumps, smaller district heating plants, compressor and absorption chillers, digestion and gasification plants and pump stations for district heating and district cooling. The majority of the plants are run and monitored from the Control Centre (in Swedish Ledningscentralen, LC) which is based at the Sävenäs plant and staffed 24/7.

In this brochure, we summarise the basic Safety Regulations and Rules of Conduct that apply in the Production business area's offices and plants. Our rules are "minimum" rules for all work carried out at the plants, unless otherwise is agreed. For employees of companies where security requirements are more stringent than these rules, of course these more stringent requirements also apply when working with us. Many of the plants have unique requirements and a number of plants are sited at the premises of our customers and suppliers, and at the Port of Gothenburg. The customer's/supplier's/port's own procedures and rules are applicable at these plants in addition to our local rules. Your purchaser/contact person at Göteborg Energi can provide more information on the specific conditions that apply to your particular assignment.

By complying with the rules and procedures applicable at our plants, we can work together to create a safe workplace where the risk of accidents and incidents is kept to a minimum. Anyone failing to comply with applicable laws, rules, procedures and the terms and conditions set out in the permits they have received may be ejected from the workplace.

The Safety Regulations and Rules of Conduct presented on the following pages provide a brief summary of the full regulatory framework that applies to Production business area's offices and plants. In addition to Göteborg Energi's rules and procedures, laws, regulations and various regulatory approvals also regulate operations. Everyone who is visiting or working at a plant or office is responsible for acquiring the necessary knowledge of the current regulations for the workplace and the work to be performed.



Protected objects and confidentiality

Several of the plants are classified as protected objects or are situated within security-classified areas. For these plants, the Protection Act (2010: 305) applies in addition to Göteborg Energi's rules. Some plants have restrictions involving special safety requirements for personnel in accordance with the Security Protection Act (1996:627).

A number of our plants are equipped with camera surveillance systems concerning both process and field monitoring. It is prohibited to take photographs at all of our plants. Information about the plants and Göteborg Energi's operations must never be misused or passed on.

Access to the plants

To access the plants and offices an access card and/or key is required. The administration of access cards and keys takes place mainly at the reception desk at the Sävenäs plant.

All external personnel who are performing work or independently visiting a plant must have completed and passed the health and safety courses SSG Entre Basic course and SSG Entre Göteborg Energi. Passed and valid SSG Entre courses are therefore a requirement to get permission to enter the plants, except for offices, workshops and warehouses. Access to electricity control rooms also requires approval from VO Production's Electrical Officer. Exceptions to the SSG Entre requirement apply to routine transports of materials, fuel, ash, and waste as well as routine property maintenance, where the Safety Regulations and Rules of Conduct must be read and signed instead. The access card is generally a personalised SSG Access Card with a photo but other solutions may exist.

Anyone who is going to independently visit or perform work in a plant should have individual authorisation to enter the plants. People who do not have authorisation to enter the plants can be accompanied during site visits by a visitor attendant but are not allowed to visit independently or perform work. The visitor attendant must have sufficient expertise and plant knowledge to be responsible for the visitors. It is not permitted to bring someone who does not have their own access authorisation into the plant, except for visits where you are the visitor attendant.

Anyone visiting and working at a plant must sign in and out in accordance with the systems of the current plant. If work begins or ends outside normal daytime hours, they should also contact the Control Centre upon arrival/departure. At the plants, work outside normal daytime hours may only occur with the agreement of the plant's Coordination Officer.

Normal daytime hours are weekdays between 7 am and 4 pm, except for work in offices and the workshop and warehouse at the Sävenäs plant where the current times are weekdays between 6 am and 7 pm.

For weekend work, notice must be given at least two weeks in advance, unless otherwise agreed.

When work is completed

When an assignment is completed the purchaser/contact person at Göteborg Energi must approve the work. A certificate stating that work is complete and the facility is ready for operation along with all work permits must be handed in. Unless otherwise agreed, the work area must be cleaned and restored, waste and chemicals must be removed from the site and borrowed equipment must be returned.

Waste report and final documentation must be submitted to the purchaser/contact at Göteborg Energi.

General rules

For everyone's comfort and safety, the general Rules of Conduct must be followed during visits and work at plants and offices:

- Smoking is prohibited at all plants and offices, except where there are specially marked or designated places.
- It is strictly prohibited to be under the influence of alcohol or drugs when visiting or working at plants and offices. The use of medication that affects attention can also lead to restrictions.
- Doors and external doors should be kept closed and locked. Open/unlocked doors should be kept under continuous surveillance.
- Storage of materials/bulky equipment may only occur in consultation with the plants Coordination Officer and must not impede business, cause a risk of accident or fire or block escape routes. A receiver must always be present during deliveries.
- Setting up site huts or similar must be notified in advance and approved. At some plants, there are staff areas that can be used by external staff.
- Staying overnight at plants and offices is not allowed, whether it is on Göteborg Energi's premises, in installed huts or caravans or similar outdoors on the plant site.
- During all work, there should always be at least one Swedish-speaking person on site unless otherwise agreed.
- An identification document should always be worn visible unless it is unsuitable for the task.
- Valid ID06 cards and registration at the workplace is also required for work covered by the National Tax Agency's requirements on electronic staff record.
- Parking on the plant site must be in marked spaces, unless otherwise agreed.
- At plants without speed information, speed is limited to 15 km/h.
- Work clothes must have a visible company name/logo.

Personal and plant safety

To ensure a safe, secure workplace, all tasks must be carried out proficiently and with an awareness of the risks involved, using the right methods and equipment.

Plant knowledge

Those who are going to work or visit a plant independently should have good knowledge of the plant and their assignment, such as:

- Who the purchaser/contact person at Göteborg Energi is.
- What the assignment includes.
- Where work should be performed and the conditions that apply to the work area.
- Who the contact person at the plant is.
- What local environmental and safety rules apply at the plant.
- The risk that is involved in the task and the risks that exist at the plant.
- What personal protective equipment is required at the plant and for the assignment.
- Where fire and environmental protection equipment, medical equipment, evacuation routes and assembly points are located.

Permission to work

Work permits must always be collected before starting work. For hot work, work in confined spaces and work at heights (e.g. on a mast or chimney) a work permit with additional authorisations relating to the work is required. The permits are handed out by the permits Officer at the plant. The permit specifies the conditions that apply when performing the task.

In addition to a work permit, some work also require special permits, for example, for gas installation, excavation, turning off the fire alarm and visiting tunnels and caverns. These permits complement the work permit and shall be obtained from the relevant permit issuers.

Permits that have already been issued may be withdrawn if something happens that affects security, if conditions change or if the current rules or defined conditions of work are not followed. In case of emergency alert, all of the permits are no longer valid.

Personal protective equipment

Personal protective equipment must always be worn when working or visiting the plants. When working in a plant area the basic requirement is a helmet equipped with a chin strap, protective shoes with steel toe caps and penetration protection, as well as complete flame retardant, high visibility clothing (class 1). When visiting the plant without working the basic requirements are a helmet and shoes as above, as well as a long-sleeved, flame retardant, high visibility top and long trousers. For visits to switchgears, the top must also contain electric arc protection. At some plants and assignments, higher basic requirements for both protection and visibility apply.

Protective equipment should always be adapted to the plant's requirements, and the risks the job entails. Other protective equipment such as safety glasses, gloves, ear defenders, fall protection, respiratory protection and shoes with protection against electrostatic charges must be used where required.

Safety when working

To maintain the safety of people and the plant quality requirements exist for the planning, preparation and implementation of the work performed at the plants.

Skills

Anyone who performs work at a plant must have training and experience of the work performed and the equipment used. Permission in the form of permits, licenses and certificates must be presented when requested.

Risk assessment

Those who are going to work or visit a plant should have good knowledge of the risks that may exist. Before work begins, a risk assessment should be carried out and the necessary protective measures should be taken. For some tasks, a work environment plan is required. The risk assessment should be reported when the work permit is collected.

Tools, equipment and materials

Work should always be performed with the right equipment, tools and materials. All equipment must be designed for and adapted to the current work and, where appropriate, tested/inspected according to current legislation and industrial practice. Any inspection documents must be kept readily available on request.

Barriers and signs

Work areas should be cordoned off and marked so that accidents can be prevented. The person who is performing work is responsible for ensuring that the barriers are sufficient. Plastic straps may not be used as fall protection. Dismantling the floor grating, stairs and railings should be done in consultation with the Coordination Officer. If a task involves blocking an escape route, an alternative escape route must be marked in consultation with the Coordination Officer. Respect barriers, signs and warnings at the plant!

Safe shutdown

Anyone who is going to perform work on the plant's equipment must ensure that the equipment is shut down for the work in question. This is done by exchanging a work certificate on a shutdown request form and when a work permit is issued. If possible, the shutdown should be checked on site. Care should be taken when the equipment is opened.

Scaffolding, ladders and mobile platforms

Scaffolding may only be constructed, modified and dismantled by certified scaffolders. Scaffolding must be designed and dimensioned for the specific task and should only be used once it is marked as being clear for use. Ladders may normally only be used for simple, short-term and temporary jobs where the drop is less than 2 metres, and must be approved and marked with the company name. Mobile work platforms, scissor lifts or aerial platforms may only be used for short operations or where scaffolding is inappropriate. For all tasks using mobile equipment personal fall protection equipment must be used.

Working at height

Working at height (over 2 metres) must always take place on approved work platforms or the equivalent. Equipment and materials must be secured so that there is no risk of them falling.

Hot work

During hot work the surrounding area must be protected against damage using a suitable method. The required fire protection equipment must be brought and a trained safety monitor (fire monitor) must be on site. The safety monitor must wear a specially marked vest which is provided when the permit is issued. Before welding work is carried out on pressurised parts or structural components in steel structures approved welding processes must be established and reported.

Fire safety

Fire alarm installations are either automatic alarms connected to the emergency services or the Control Centre or site alarms. Before hot work it should be checked whether it is necessary to turn off the fire alarm. If fire fighting equipment is used the Coordination Officer must be informed immediately so that the equipment can be replaced. Fire doors must never be held open or blocked.

Flammable products

The admittance of flammable products at a plant may only be authorised by Flammable products Officer at the plant. Flammable liquids, glues, solvents and gas cylinders must be warehoused at a location designated by the Coordination Officer.

Gas safety

Gas installations in plants must be carried out according to EGN for line pressure ≤ 4 bar, for higher pressure NGSA must be followed. All work requires permission from the Gas Safety Officer or an authorised Gas Installation Manager. The admittance and placing of gas cylinders requires consultation with the person responsible for flammable materials at the plant.

EX-classified areas

When working or visiting a potentially explosive atmosphere, knowledge of the existing explosion protection documents and the current hazardous area classification plans is required. Equipment, supplies and working methods should be risk assessed and appropriate for the conditions.

Electrical safety

All electrical work must be carried out according to ESA. In addition to these, there are additional rules for electrical work at the plants. For all electrical work, Production business Electrical Officer must be contacted in fair time before the work begins.

Confined spaces

When working or visiting confined spaces, an evacuation plan must be compiled and communicated to everyone involved and the required rescue equipment must be in place. A gas-free declaration, forced ventilation and/or personal gas/oxygen meter may be required. Safety monitor (entry monitor) must be present on site and wear a specially marked vest which is provided when the

permit is issued. Special rules for the use of electrical devices apply.

Tunnels and caverns

For all visits to tunnel systems and caverns, special rules apply. It is strictly forbidden to enter tunnels and caverns without taking note of these rules.

Lifting

In order to perform lifting training in safe lifting is required. Training certificates must be presented when requested. The person performing the lifting is responsible for safety and barriers. If necessary, a safety monitor should be present. Safety monitors must wear a specially marked vest, which is provided when the permit is issued. Open doors and lifting shafts should be cordoned off. For complicated or risky lifting, a lifting plan must be prepared and presented when collecting the permit.

Working alone

The basic rule is that working alone may only occur if it does not present a greater risk than when working together with someone. The risk assessment for the work should take into account the potential risks of working alone. The person performing the work alone must have the ability to contact others via e.g. telephone or radio. The work permit may specify special conditions for working alone.

Safety inspections

Companies that have an assignment at a plant must participate in any safety inspections and safety meetings that the purchaser/coordination Officer requests. For major jobs, companies may themselves be responsible for carrying out safety inspections. The purchaser and the plant's coordination Officer must always be asked to attend these safety inspections.

Alerts and emergencies

Whenever an emergency alarm is activated or evacuation is ordered via the speaker work must stop immediately, the workplace must be evacuated and all staff must gather at the plant assembly point. The same applies if a fire or other emergency that carries a risk of personal injury occurs without the alarm sounding. Other staff in the building must then be warned promptly.

The worksite may not be left in such a condition that there is a risk of injury, fire or other hazards. When the alarm is raised to the emergency services, police or ambulance, the Control Centre must be informed immediately. For establishments located within the Port of Gothenburg, special rules apply. Additional local rules may also apply.

Accidents, incidents and risk observations

Accidents and incidents should be reported promptly to your supervisor and to the assignment's contact person at Göteborg Energi. Also report any risk observations to your contact.

When emergency events affect or are likely to affect the environment, protective measures must be taken immediately. Environmental incidents should be reported promptly to the assignment's contact at Göteborg Energi and responsible Plant Engineer. Outside normal daytime hours, contact the Control Centre.

Chemical handling

Chemical products with mandatory labelling that have not been approved for use on the site in question must be notified in advance to the person responsible for chemicals at Göteborg Energi and be approved by them before they are allowed to be used. Phase-out substances should be avoided and always be replaced with alternative products where available. If phase-out substances cannot be replaced, an application for authorisation of the use of the substance must be submitted to the person responsible for chemicals at Göteborg Energi.

Anyone who uses chemicals in their work should have knowledge of how to handle them and ensure that chemicals are not available to others or put others at risk and that the environmental impact is minimised. All chemical products should be warehoused in suitable containers labelled according to current legislation, in the place designated by the Coordination Officer. A safety data sheet must be available. Appropriate preventive protection measures must be taken and leftover chemicals must be disposed after the assignment.

Major emissions, emissions of dangerous elements (e.g. biocides) and discharges reaching sewage or storm water should be managed as an environmental incident. Chemical waste must be disposed immediately. Equipment for handling spills should be on site.

The environment

Equipment, materials and working methods should be chosen with the environment in mind. Anyone who performs work should always act in such a way that damage to the environment is avoided. There are environmental permits regulating operations for most plants. Local conditions and requirements for environmental considerations must also be taken into account when planning and implementing a task.

On Göteborg Energi's website www.goteborgenergi.se there is a brochure titled "Environmental regulations for contractors and consultants working at Göteborg Energi AB" available to read or download.

Water protection areas

Several plants are located in or adjacent to water protection areas or waterways with special restrictions. For these plants, special rules apply to the activities and tasks carried out.

Contaminated soil

Some plants are located in areas with contaminated soil and/or contamination protection measures. Excavation may never be started without the authorisation of the Plant Engineer and the required notification to the authorities.

If suspected contaminated sites are discovered during excavation, work must be stopped immediately and this must be notified. Contact the responsible Plant Engineer.

Waste

All work must be performed in such a way that waste is minimised. Where appropriate, materials and equipment should be reused. Anything that cannot be reused must be sorted and transported to the appropriate facilities for disposal in an environmentally responsible manner. Small quantities of waste may, by agreement, be left at the plant's environmental stations.

Hazardous waste should be sorted, labelled, provided with a waste declaration and then removed from the site by a transporter authorised to transport hazardous waste. The waste recipient must be approved for hazardous waste.

Waste accounting must be provided to the purchaser/contact at Göteborg Energi.



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