

SAFETY GUIDELINES FOR THOSE WORKING IN THE POWER PLANT AREA

VUOSAARI POWER PLANTS

April 2022



Safety observations
with the QR code

Vuosaari power plants
Käärmeniementie 8
00980 Helsinki



Identifying hazards in the work area. Also available in Quentic

Area: _____

Author and date: _____

Working

Safe method
of working

Permits to work and entries

Protective equipment, clothing

Correct tools and working devices

Does not
apply to
this area

In order

Not in order, reason:

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Order and tidiness

Access routes, floors

Waste containers

Safe movement

Structure of access ways and floors

Scaffolding, step stools, ladders

Limits of work area

Fall protection

Exit routes

Contact details

General emergency number from all telephones112

Helen Ltd telephone switchboard.....09 6171
Occupational Safety and Health Representative09 6171
Anton Laari, Occupational Safety and Health Manager.. 050 535 4760

Guard stations / main gates

Vuosaari.....050 387 5635
Hanasaari.....050 387 5634
Salmisaari (24/7)050 387 5633

Before you start

The occupational safety and health courses must be completed.

Always start the tasks in the work area by identifying the hazards and carrying out a risk assessment. Before starting work, also become acquainted with the permit to work procedures for your work area, the reporting obligations at the start and end of the task, the emergency exits, weak corners of the boilers and, e.g. risks related to remotely operated devices.

Lifting accessories inspection colours

In-service inspection, i.e. so-called daily inspection is carried out always before a lifting accessory is taken into use. It is carried out by a person who attaches the lifting accessory to the load.

Green 2022
Orange 2023
Blue 2024
Yellow 2025
White 2026

What to do in the event of a fire or accident

 **SOITA / CALL 112**



1. **Rescue**
2. **Alert:**
 - A. Call the emergency number 112 (works from all telephones). In the event of a fire, you can alert the emergency services with the red **fire alarm** button.
 - B. Call the power plant control room:
Vuosaari VuB, 3rd floor. tel. 09 617 3270
 - C. In the process facility, press the power plant's emergency alarm button.
3. **Extinguish**
4. **Restrict**
5. **Guide**

In the power plant area, always report to the control room if you encounter an accident situation in the power plant area.

Before you start work

When working in the power plant area, take care of **protective equipment** and **permits to work**.

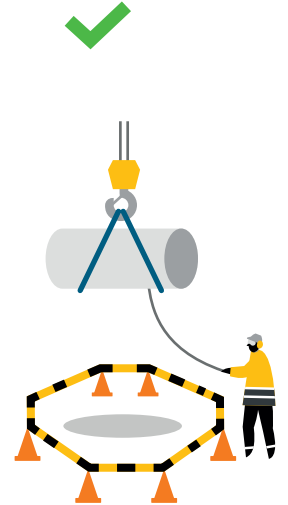
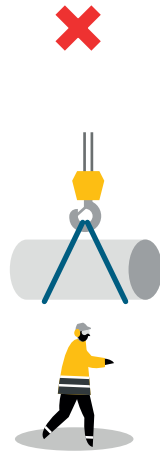
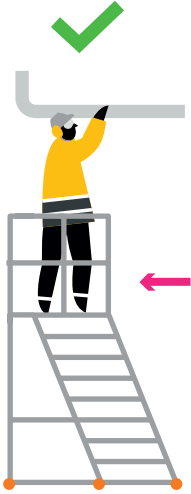
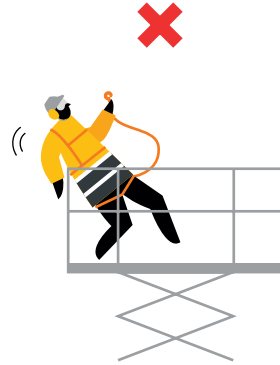
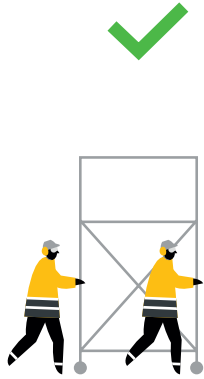
Everyone must have an **ID badge** with a photo, including, e.g. the **name of the person** and **the company** and a **tax number**. The name of the contractors must be clearly displayed.



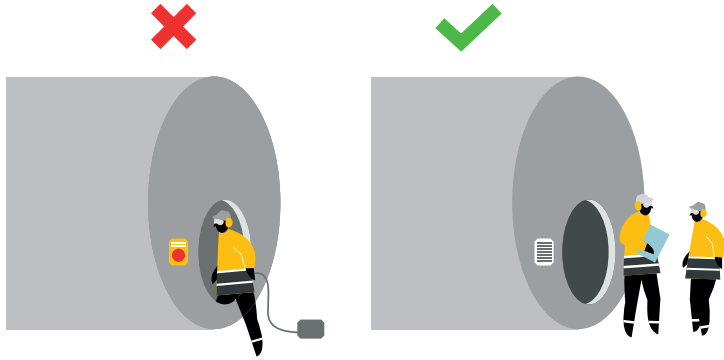
Think before taking action!

Familiarise yourself with safe working methods and procedures.

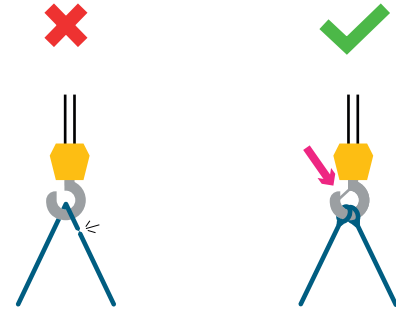




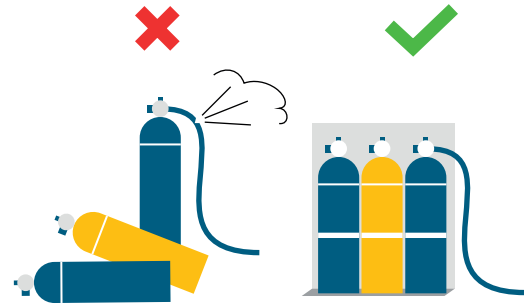
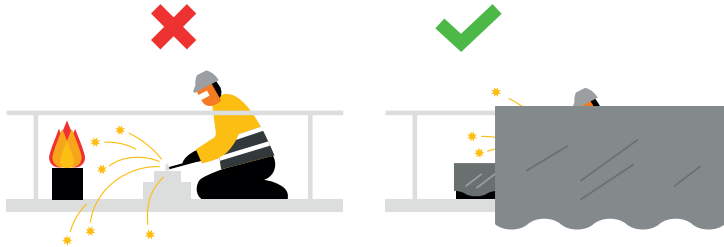
Before starting work, make sure that the permits to work are in order and familiarise yourself with the work instructions.

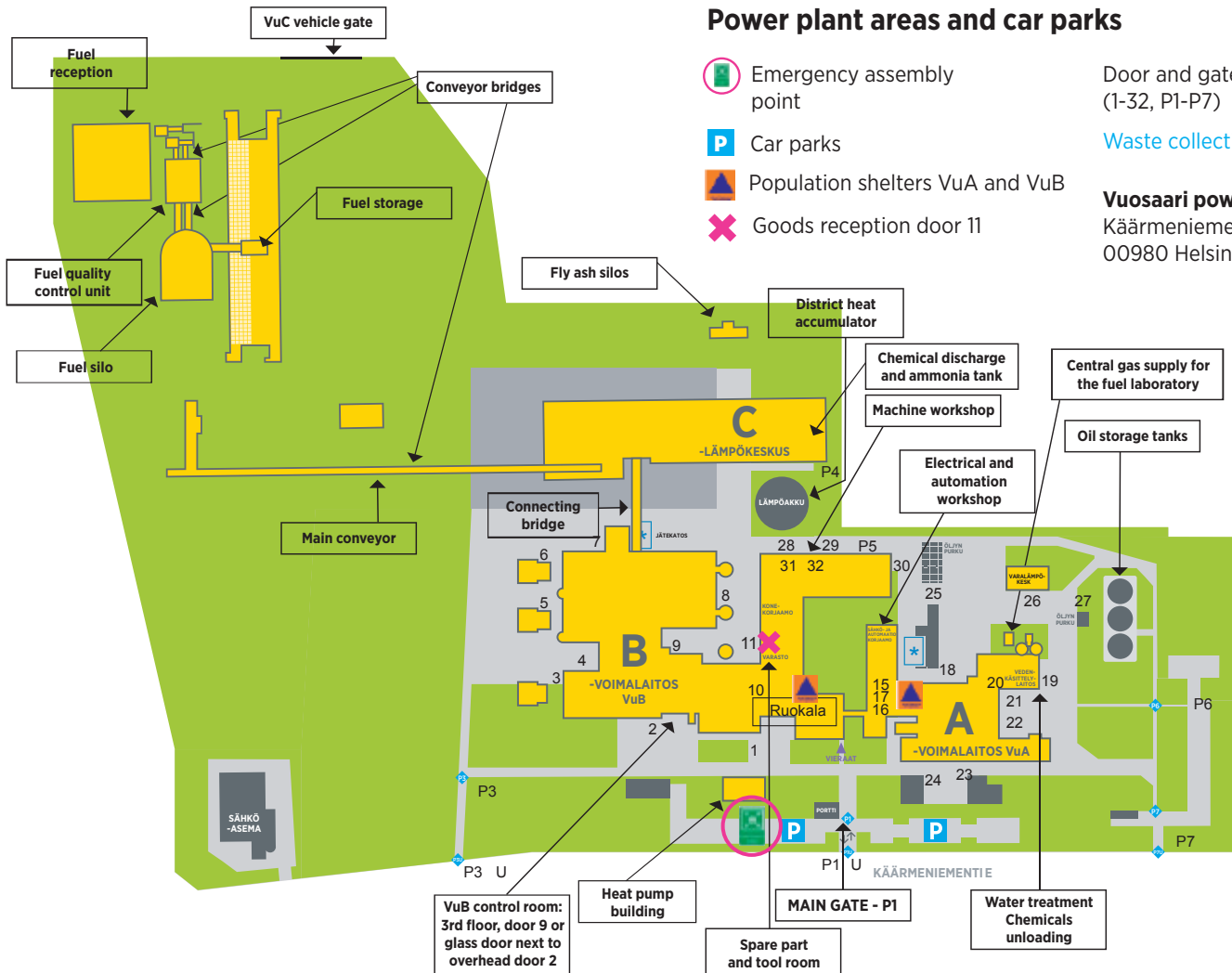


Only use the correct, undamaged tools and accessories, and also make sure that they are stored in an appropriate way.

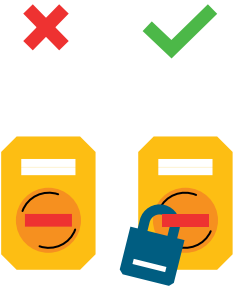
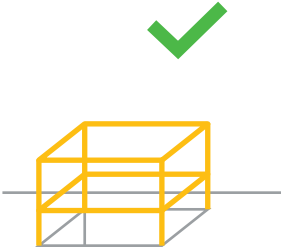
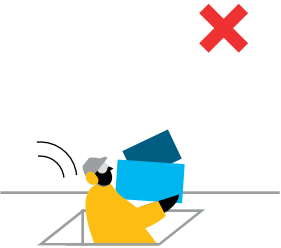


Protect the work area and use the necessary protective equipment.





Keep the work area safe and make sure it is clean and tidy.



Qualifications and permits to work

A valid Occupational **Safety Card** and, depending on the task, a **hot work card** are required at the power plant.

In addition to the Finnish Occupational Safety Card, the following international cards are also accepted:

- BasicElements of Safety SCC
- ECITB/CCNS Safety Passport Scheme
- SSG Entre
- FAS Safe Pass
- OSHA Outreach Training Program
- CSCS Construction Skills Certification Scheme

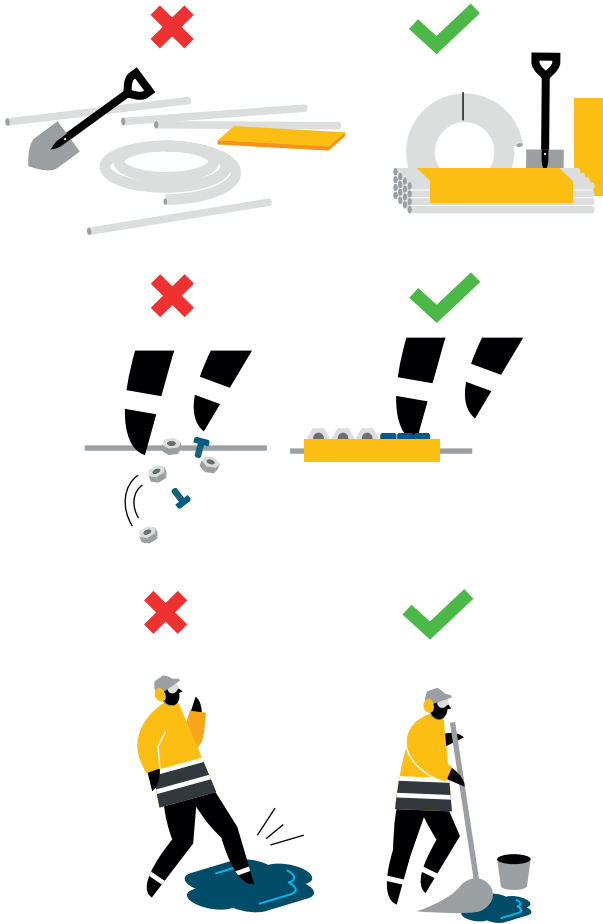
Permits to work used at the power plant:

Permission to start work

Report at the control room at the start and end of every shift and when completing a task. You must **always** obtain a permission to start the task from the contact person or corresponding supervisor.

At the start of the task, the following are reported to the control room: The task, the device to be repaired, working time, number of persons, and contact details.

When working at the heating and cooling plants on a work order, the permit to work is issued by the operating team of the heating plants or the maintenance supervisor responsible for the task.



If you do not recognise the hazards and risks related to your own task, ask your supervisor for further instructions.

In hot work

carried out in the power plant areas, Helen's hot work plan is complied with, and there must also be a written hot work permit. **Discuss the hot work with your supervisor before applying for the permit.**

ATEX permit

Working in an environment with an explosive atmosphere requires an ATEX permit.

After the safety of the area has been ensured with the permit to work procedures, it will be possible to work there in the same way as in any unclassified area. If the safety of the area cannot be ensured, ex-classified tools and equipment suitable for the area in question must be used during the task.

Container work permit

A container work permit is required when entering containers, ducts or similar spaces. There must be constant supervision (safety person) when working inside these facilities. The sign at the opening of the container must be in the "Access permitted" position and signed (name and date).

General safety instructions

Scaffolding and the railings of temporary openings must display a valid **scaffolding card** with:

- an entry of the weekly inspection
- the name and telephone number of the supervisor concerned.

Report any shortcomings to the supervisor responsible for the area in question.

A crane may only be operated by a person with an operating licence for the crane in question.

Vuosaari contact persons and instructions

Control room, VuB, on call 24/709 617 3270
Shift supervisor040 127 1903
Vu Guard / Main gate 050 387 5635

Production and Asset Management

Maintenance Manager

Juha Vilppula 050 559 2725

Mechanical Maintenance Supervisor

Toni Korpikoski040 679 8553

Automation and electrical maintenance engineer

Mikko Kurko.....040 575 2002

Person in charge of fire alarms

Markku Partanen.....050 364 1886

Scaffolding work

Jarmo Hokkinen 040 170 4662

Real estate maintenance, on-call HVAC.....050 559 2701

Smoke exhaust systems

Presto / Tero Haapaniemi.....010 387 7251

Regional safety persons

Safety Manager

Jyrki Hanioja.....050 559 2206

deputy Jan-Peter Leppälähti040 352 2786)

Rescue operations coordinator

Markku Partanen.....050 364 1886

Persons granting the permits

Permission to start work

VuB control room, shift supervisor.....09 617 3270
Chief laboratory technician or plant manager for
the water treatment plant.

Natural gas permit to work

Operations supervisor (OS) Jyrki Hanioja.....050 559 2206
OS's deputy Jan-Peter Leppälähti.....040 352 2786
OS's deputy Jukka Itänen.....050 364 2067

Hot work permit

A supervisor of Helen Ltd who knows the site.

Container work permit

ATEX permit

Production expert Jukka Itänen.....050 364 2067
deputy Jan-Peter Leppälähti040 352 2786)

Permits to work for chemical containers and pipes

Jan-Peter Leppälähti (fuel oil storage)040 352 2786
Jari Heljander
(water treatment and laboratory chemicals)050 559 2766

What to do in the event of a natural gas leak

1. Report the incident to the power plant control room
VuB control room 09 617 3270
2. The control room staff will switch off the required main
stop valve and notify the operations supervisor.
3. Check there are no people in the danger area.
4. Prevent outsiders from entering the danger area.
5. Take care of ventilation.

CO₂ point protection is located in the VuA gas turbine halls, in the VuA oil pumping station and at the VuB steam turbine generator. When the warning lights and alarm of the system are activated, **leave the area immediately** (within 30 seconds)!

The heat pump building contains refrigerant R1234ze, which is heavier than air. In the event of a leak, the refrigerant replaces oxygen. A refrigerant leak sets off the alarm, which triggers the signal sound and light in the heat pump building and starts the emergency fan. When you hear the alarm signal, **leave the heat pump building immediately.**

Permission to start work can be given by the deputy to the natural gas operations supervisor with respect to normal maintenance works related to natural gas, such as changing of a filter or gasket. This also requires at least a written permission to start work.

In the handling of chemicals, instructions in the safety data sheets must be followed at all times. The safety data sheets are available in electronic format in the EcoOnline system or with the QR code at the chemicals store.

Environmental protection and waste management

Everyone is responsible to keep their work environment clean and tidy. The waste collection points are marked on the map, p. 12–13.

It is prohibited to bring your own waste or take waste for your own use! Report any exceptional situations! Do not pour any waste down the drain!
Persons responsible for waste / Hazardous waste

Warehouse services 040 712 5870
Sonja Åhlberg 040 682 2982

Wood waste, Mixed waste, Metal waste

Electrical and electronic waste (SER)

Paper and cardboard / Lubricating oils and greases

Warehouse services 040 712 5870

Hazardous waste is collected separately from other waste into its own containers and into the waste sorting centre.

Always contact the person responsible for hazardous waste before delivering hazardous waste into the waste container.

Drawing up a movement document

A movement document is drawn up by Helen.

Further information is available from the chemical expert

Camilla Rapp 040 334 6664

What to do in the event of a breach of occupational safety rules

1. Guidance.
2. Verbal caution.
3. Written warning.
4. Removal from the worksite and possible termination of employment.

The person's name and the situation are reported to

tyoturvallisuus@helen.fi

The caution and the warning are valid for 1 year.

First aid in the event of illness or accident

Act calmly. Don't hesitate to ask for help if you don't know what to do in the situation. Many Helen employees have passed a first-aid course. If the person has lost their consciousness, find out whether they can be revived: talk to them and shake them.

Call the emergency number 112. Turn on the speakerphone and continue to help according to the instructions you are given.

When you are at the power plant, report an accident or illness to the control room before calling 112 if you are alone in the situation. The control room will organise someone to accompany you to the gate and, if necessary, send a defibrillator to the scene.

The defibrillators are located:

At the control rooms of the power plants

- Vuosaari B control room, 3rd floor and downstairs lobby 1st floor.
- Hanasaari, A stairs 4th floor and HaH canteen 2nd floor
- Salmisaari A, canteen corridor 3rd floor.
- Salmisaari B, B stairs, 5th floor.



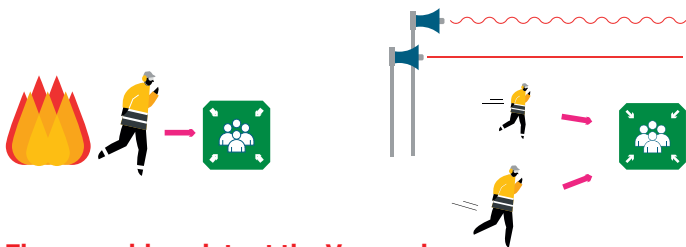
What to do when you hear the warning signal

A rising/falling alarm signal is the alarm for a hazardous situation. If you hear this signal, go to the designated **assembly point** and wait for further instructions.

A continuous alarm is an internal emergency notification for the power plant control room staff. You can carry on working, but make sure you are not in any danger. If you notice anything out of the ordinary, exit the building and go to the assembly point.

When you hear the fire bell, make sure you are not in any danger and go to the assembly point.

Do not use lifts!



The assembly points at the Vuosaari power plants in emergencies, see p. 12-13 on the map:



You must not leave the assembly points without first notifying your supervisor or the person responsible for the assembly point.