

Working at OKG

– *What you need to know*



At OKG we have self-instructional automated external **defibrillators** at the following locations:

- The entrance building (BVB), just inside the biometric verification
- O1/O2, entrance
- O1/O2, radiation protection office
- O2, the north electricity building (NEB) entrance
- O2, the control room
- O2 E6.04, the control and relay room
- O3, entrance
- O3, transport passage, non-controlled area N2.01A
- O3 P1.237, the radiation protection office
- The central service workshop (CSV), entrance
- The central service workshop (CSV), the radiation protection office, active area
- Restaurant Simpan, entrance, cloakroom
- The training facilities (UBH), entrance



In case of a serious personal injury or accident, it is vital to act quickly. You should therefore know as much as possible about first aid, so that that you can step in and help a person in need. The significant actions are to call the alarm number, open and keep free the breathing passage, stop any bleeding, and prevent the person from going into a state of shock.



Alert/alarm number
+46 (0)491 78 66 66

In case of fire:

SAVE - WARN
ALERT - EXTINGUISH



Symbol for **assembly point**, in case of fire, evacuate the building.

List of Contents

INTRODUCTION	4
STARK	5
PHYSICAL PROTECTION – SECURITY	6
WORK ENVIRONMENT	10
VICTIMIZATION IN THE WORKPLACE	12
RADIATION PROTECTION	14
ORDERLINESS	18
FME AND CLEAN SYSTEM	20
CHEMICAL PRODUCTS	22
FIRE PREVENTION	23
ENVIRONMENTAL PROTECTION	24
LEISURE TIME	25
OBSERVATIONS	26
AREA MAP	31

This publication

provides only a general summary of the important aspects that you, who are performing work at OKG, should be aware of. Additionally, in consultation with your designated contact person, you are obligated to inform yourself about what further instructions and regulations that apply to your specific assignments.

Great efforts for the future

Welcome to contribute to an operating season without any interruptions at OKG! That is in fact how we can summarize our common goal. The work we perform during this year's outage is intended to provide the best conditions possible for delivering climate efficient electricity as expected by the surrounding world. This goal also entails that all the measures taken during the outage are completed without any accidents or incidents occurring, and with a high quality.

We will reach our goal by promoting continuous improvements under safe conditions. That means that we always put safety first, both nuclear- and personal safety. This year we all have a special responsibility to follow OKG's guidelines in regards to the ongoing pandemic.

We ask you, who will now work at OKG, to always stay informed about what rules and regulations apply for the tasks at hand and to prevent potential risks. You have the right to stop performing a specific task if it seems unsafe – safety always comes first, not the schedule. In order to prevent fault recurrence, we kindly ask you to report any risks and incidents through our OKG-app. This is an important step in a positive spiral of improvements.

Unit Oskarshamn 3 is one of the largest BWRs in the world, and is of great importance to the power supply in the Nordic countries. The ambition is that the unit shall have the potential required to be a support to this system for many years to come, and one condition for that is that our common efforts during the annual outages are successful.

We trust you in doing your best in order to help us get the very best out of our production capacity. Thus, the surrounding world can be confident that Oskarshamn 3 will provide the greatest possible benefit to society and the environment!

Method for self-checking:



Stop

Improve the overall view, increase attention to details.



Think

Go through the task and the anticipated results.



Act

Perform the carefully prepared task.



Reflect

Compare the actual results to the anticipated results.



Communicate

Tell your colleagues that the task is completed and how the work went.

An aid as well as an important step in professional behaviour is to apply the concept of Stark. This in order to allow scope for a critical questioning attitude to the work task that lies ahead.

Prior to performing all kinds of measures in the facilities, a work permit must be issued. Furthermore, Pre Job Briefing (PJB), a kind of task review, shall also be conducted. This is done in order to provide the work leaders and the executing personnel with the requisite conditions to perform the planned work. PJB shall be conducted by the person responsible for organising the assigned tasks. All executing personnel must participate in this PJB. You should request from your supervisor that this is conducted before the work starts!



Remember:



**Safety first through
professional behaviour**



Psychical protection – Security

OKG is a civilian protected object and the authorities impose demands on the physical protection of the premises. This means for instance that:

- The power plant is guarded by specially appointed security personnel
- The power plant is monitored by the use of technical systems
- Every individual, and all goods and vehicles, are checked with regard to prohibited objects before entering the monitored area
- Doors are locked and have alarms installed, to areas where only authorized personnel have access
- Completed security clearance is required in order to have access to the monitored area without an escort

A security check is conducted at the check-point in the Central entrance, and consists of for instance scanning by the use of metal detectors and luggage X-ray. Random additional security checks are also performed, consisting of explosives (material) detector and exhalation sample. The requirements imposed also state that admission to the site must take place by secure identification. This is done by biometric reading, either by fingerprint reading or by vein scanning.

Drug policy

OKG does not accept anyone coming to work under the influence of drugs or alcohol. It is prohibited to bring any alcohol and drugs into the site. Random tests are conducted.

Personnel being under the influence of alcohol or drugs will be immediately suspended.



Prohibited items

Below are given examples of items that may not be brought into the site:

- Items that can, or appear to, fire a projectile or cause damage.
- Camera (cell phone cameras and cameras in laptops are allowed, but requires a sticker on the cell phone/computer. You receive this in the reception at the Central entrance)*.
- Inflammable substances, chemicals, acids and bases, gases, sprays, and pressurized containers (such items are handled via OKG's goods receiving station).

You contribute to OKG being a continuously safe workplace by:

- Wearing your ID key card visibly, it is personal and must not be lent to anyone.
- Complying with the security routines in force.
- Obeying the security guards' directions. The security guards have the right to conduct an authorization check.
- Taking care of your belongings.
- Reporting any deficiencies or deviations within security to the management in charge or to the security personnel.
- Not revealing any classified information.

* For OKG employees, special regulations apply concerning cameras. OKG employees can bring cell phone camera and laptop cameras to a monitored area without a sticker, if they present their ID key card.

ID key card

You must wear your ID key card visibly at all times!



What you need to know



Work environment

At OKG, personal safety has top priority! Dangerous work must always be discontinued. The right/obligation to do so applies to everyone.

At work being performed at the facilities, many risks prevail. We work actively with preventing for instance risks such as fall from heights, risks at lifting and electricity work, injuries caused by cuts or crushing, and risks at the handling of tools and machines. Make sure that you are aware of the risks in your work and how you may protect yourself by actively obtain instructions from your management. Additional information is provided via pre-job briefing, work order, safety permit, information sheets etc.

At OKG there is general regulations concerning the use of safety boots, helmets, protective goggles and protective gloves for all work done at OKG. Local signs may be displayed and must be complied with at all times. For work in the controlled area, OKG provides all the protective clothing and protective equipment required. For work in the non-controlled area and outer areas, OKG does not provide any protective clothing or protective equipment, these must be provided by the respective employers.

Make sure that you know where the emergency exits, first aid kits and fire extinguishing equipment are when you move around in the facilities.

Do not take any unnecessary risks!

If you have any questions about the work environment, contact the management in charge, a working environment engineer/technician, or your trade union safety representative.

Ordering or executing work that entails a risk of a serious accident occurring may lead to suspension from OKG.

Safety inspection rounds Safety inspection rounds are conducted on a regular basis and include an overview of the status of the facility within the areas of work environment, fire prevention, external environment, chemistry, and housekeeping. If required, directed safety inspection rounds are also conducted.



Victimization in the workplace

The Swedish Work Environment Authority defines victimization as actions aimed at one or several employees in an offensive manner and which may lead to ill-health or that these individuals are excluded from the workplace community (AFS 2015:4).

Every day, we use terms such as bullying, psychological violence, social exclusion and harassment of various kinds to describe victimization in the workplace. Sexual harassment means any kind of sexual behaviour that is expressed in words or actions.

Examples of victimization in the workplace

- Deliberately insulting or excluding a colleague.
- Threatening someone.
- Obstructing someone's work.
- Persecuting (in its various forms).
- Slandering or maligning an individual or the individual's family.
- Discriminating on the grounds of gender, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation or age (Such forms of discrimination are also governed by the Swedish Discrimination Act).
- Making any kind of sexual contact.
- Making unwelcome remarks, comments or suggestions of a sexual nature.
- Making sexualized jokes.

How do I report harassment, victimization in the workplace and discrimination?

- If you have experienced or witnessed any harassment, victimization in the workplace and discrimination, please contact OKG's HSE Coordinator or HR Business Partner in Department H. All cases are treated confidentially.
- For security reasons, these types of observations or incidents should not be reported in the "Safe Tool".
- Department H collects and monitors developments in these issues through various forums such as the Voice employee survey, emerging cases and so on. The collected data is depersonalised to ensure that no person is excluded.

What happens to what is reported?

- Deviations related to harassment (including sexual harassment), victimization in the workplace, discrimination and bullying shall be investigated in accordance with Swedish law.
- OKG will, through the HSE coordinator and HR Business Partner, initiate a collection of facts and then take action.
- The expertise of the occupational health service may be used in an investigation.
- An investigation is initiated by a formal notification from the individual or by an action that is not consistent with what OKG expects, whether or not a notification has been received.

Guidelines against victimization in the workplace

OKG will provide a workplace with a good working environment where employees interact with one another on a basis of respect. This promotes the health, job satisfaction and opportunities for professional development for all employees. No employee or job seeker at OKG shall be subjected to victimization or discrimination.

Radiation protection

Radiation protection area classification

Within nuclear facilities such as OKG, there is a specially controlled area, in which activities involving ionizing radiation are performed. This area has special regulations in force and is divided into zones.

BLUE

In the blue areas the radiation and contamination levels are low. No access restrictions to the area where you will work.

YELLOW

Yellow areas have higher levels of radiation and contamination than the blue areas. The area must be locked. In order to have access to the area you need permission from the radiation protection group.

RED

Red areas have the highest levels of radiation and contamination. The area must be locked. In order to have access to the area you need permission from the radiation protection group.

In order to have access to the controlled area, it is required that you change into our protective overalls, helmet and protective shoes. You must also wear two different dosimeters, one that measures your individual radiation dose (TLD) and a direct-reading dosimeter (EPD) that emits an alarm signal at too high radiation levels and too high radiation doses.



Radiation dose

You can and you shall minimize your radiation dose by applying time-distance-shielding. The shorter the period of time you work at a radiating object, or in a yellow or red zone, the less radiation dose you absorb. By keeping your distance to any radiating objects you can also reduce your dose. Radiating objects can also be shielded by for instance lead blankets, which is done by radiation protection personnel.


By carefully planning your work beforehand, and by choosing the right working methods, tools and aids, you can reduce the radiation doses for yourself and your colleagues. Do not forget that you are responsible for your own radiation protection. Cancel work that seems unsafe!



Your TLD dosimeter shall be stored in the dosimeter rack placed in the entrance building when not in use.

Note! Smoking is only permitted outside in specially designated areas. Smoking, taking snuff, and every kind of consumption is prohibited in the controlled area because of the risk of internal contamination!





**INCREASED
RADIATION LEVELS**

Surface dose ratemSv/h
 Dose rate 1 mmSv/h
 Date
 Misc.

 Signature

Warning signs

Within the controlled area there are various warning signs posted, such as regarding increased radiation level, stating that the radiation level (dose rate) by a component or a process system is higher than in the surrounding area. Before work on such components or systems may start, or in areas with increased radiation risks, you must contact the radiation protection personnel. If a warning sign is posted on a roped off area, this shall be regarded as a locked door.



Radiation scanning monitors

Upon leaving the controlled area, radiation scanning is performed in monitors. Only personal items such as cellphones, keys, and ID key card must be scanned in the intended space in the monitor. Any other material brought must be exempted from radiological classification and must therefore be scanned and assessed by radiation protection personnel.

Observe!

Please observe that you are required to wash your hands before leaving the controlled area.



Orderliness

Make sure that you keep your workplace clean and tidy by limiting the amount of equipment, tools and material kept at the workplace. Conduct a general cleaning every day before the work is finished for the day or before a new shift team starts their work. By general cleaning is meant cleaning of waste such as residue from electric cables, pipes, plate, and construction residue, cloths and packaging. You must also gather cables, tools and spare parts together before the work stops for change of shift team or lunch. Leave your workplace in good order.



Reduce the fire load density

By keeping your workplace clean and tidy, and by removing unnecessary packaging, you contribute to minimizing the fire load density.

Waste management

All kinds of waste that is generated at OKG must be sorted.

Collection points for sorting of waste are found both outside and inside the facilities. All kinds of waste that is generated at OKG must be sorted. We distinguish between conventional, active and dangerous waste. For the sorting of conventional waste there are collection points both outside and inside the facilities. Active waste is handled in accordance with special regulations – if you have any questions, contact the radiation protection personnel. Hazardous waste shall always be taken directly to the collection points for environmentally harmful waste placed inside the facilities.

Minimize the amount of waste in the controlled area

Packaging and similar must be removed and sorted before transportation of goods into the controlled area takes place.

FME (Foreign Material Exclusion) and Clean System

Foreign objects that enter process systems or chemical products that end up inside or on the outside of systems may cause major damage, such as fuel damage, corrosion or increased radiation dose to the personnel.

Having clean systems at a nuclear power plant is very important. If you are unlucky, remains of shavings not removed may cause damage to components as well as fuel cladding. A small metal wire of only a few millimetres may cause an operational interruption amounting to several million Swedish kronor.

You must therefore plan your work carefully before the work commences. Is there any risk that something may fall down into the system? Put any loose objects in closed pockets. Cover open systems. Use the aids available in the orange FME cabinets, such as drop safety devices for tools, sealing caps and plugs.

It is extremely important that you comply with the procedures in force during for instance cutting and welding of pipelines, stellite work, and grinding of for instance valve seats and pipes. You may only use chemical products approved by OKG. It is also important that you use approved protective gloves when working on stainless



safety classified systems, since your hands are covered with chlorides that may cause corrosion or material deterioration.

When the work is completed, you must check that the equipment used is in place. Use a flashlight to check inside the system to make sure that everything is as it should be. Perform a rough cleaning and cover the system until it is reclosed. The work leader or other subordinate personnel with assigned responsibility is responsible for making sure that the object/system in question is clean after work has been completed. If a camera inspection is required in order to ensure that the system is clean, contact a FME supervisor. Ordering such an inspection can be done by the use of form D266, found on the intranet Kärnan.



Issues to consider at the start and during the work:

- Have the conditions changed since the planning stage?
- Has the scope of the work changed, has any grinding work or other kind of machining been added which may involve increased risk of foreign material/objects entering the system?
- Is there work in progress nearby where waste material may accumulate and spread to the system which you are working on?

Training

Everyone who will have access to the controlled area must complete the training in Clean system/FME. The training takes approximately 45 minutes and provides basic knowledge on how you shall perform your work to prevent foreign objects from entering our process systems.








Chemical products

Chemical products brought into and used at OKG must be approved, technically marked, and registered in OKG's chemicals database.

Handling and Storage

All chemical products must be handled, transported and stored as to minimize the risk of spillage and leakage. The chemicals must be kept in an enclosed area and if stored outside, also protected from rain and snow.

Technical Labelling

-  The product may get into contact with all types of process systems and process media. May thus be used on the inside of the systems. Residues do not need to be removed.
-  The product may get into contact with all types of process systems and process media. May thus be used on the inside of the systems. Residues must be removed from the inside of the systems. On the outside residues do not need to be removed.
-  The product may get into contact with the outside of process systems. Residues must however be removed.
-  The product must not be used in or on process systems.
-  The product must not be used in process buildings.
-  Labelling of chemical products for operational purposes – includes oils, paints as well as chemical products used in laboratories.
-  A necessary product not fulfilling the requirement specifications must hold a registered exemption.

For more information, please contact
OKG Funktion Kemiska Produkter /ZKG.

Fire prevention

A fire occurring may lead to very serious consequences.

Doors in the facilities must be kept closed except during passage. Fire hydrants and fire extinguishers are placed in connection to staircases and must never be used for any other purpose than fire-fighting actions.

Gas cylinders that are not permanently fixed must be stored on a cart or trolley and secured by a chain or the like, in order for the personnel to be able to quickly bring these to safety in the event of fire. Gas containers must be marked with the name of the owner and information on the placement in the facility shall be given to a fire technician. Gas containers must when not in use or at the end of the working day be placed at a location indicated by a fire technician.

Evacuation routes must be kept clear from any obstacles. If work requires that evacuation lines are blocked, contact a fire technician. Safety permits for fire prevention are always required at "hot work" or if fire cell limits are breached, or if a fire-proof door must be temporarily kept open. Such permits are issued by the fire technician concerned.

In the case of a fire

- Rescue** first people in immediate danger, without putting yourself at unnecessary risk.
- Warn** people at risk of the fire.
- Alert** the rescue services at phone no. **+46 (0)491-78 66 66**. Inform them briefly on where the fire is, if there are any people trapped, and your name.
- Extinguish** the fire if deemed possible. Otherwise, evacuate via the nearest evacuation route. Do not use the elevators. Go to the nearest outdoor assembly point and follow the instructions given at the assembly point.



Hot work Hot work refers to work such as welding, cutting using grinding wheels, soldering, open flame, heating.
Hot work shall be conducted by personnel who have received work permits and safety permits, and who have completed the training Hot Work.

Environmental Objectives at OKG

Everyone who works at OKG shall to the extent possible contribute to us achieving our set environmental objectives:

- Reduce the internal electricity consumption.
- Reduce the amount of chemical products used.
- Increase the level of separation and source separation of waste.
- Produce climate efficient electricity.

Environmental Impact

In accordance with section 6 in the Swedish Code of Statutes, Regulation 1998:901 on operator's self-monitoring; an activity shall immediately notify the regulatory authority if an abnormality or a similar event occurs in the activities which results in or could have resulted in a nuisance to people's health or the environment.

This shall be reported within 24 hours from the time of the detection of the abnormality. A report shall be made upon suspicion of that the abnormality may cause a risk to health or environment (the Precautionary Principle). Contact the working environment section, GM, during office hours and the Engineer on Duty outside office hours, that will contact the regulatory authority (The County Administrative Board).

Examples of environmental impact:

- Accidental releases to air, soil or water: oil spill/leak, overflow of pump pit, leaky containers with chemicals/oil.
- Fire or smoke formation.
- Abnormal noise.
- Loss of taprogge cleaning balls.
- Abnormal amounts of fish or jellyfish and seal in the sea water intake basin.
- Radiological events that are reported to SSM must also be reported to the County Administrative Board.

Leisure time

In Söråbyn, located in connection to OKG, a basic gym is available. In Oskarshamn, you find for instance the sports centre Arena Oskarshamn, which offers all kinds of sports such as ice-skating rink, leisure centre, swimming pool and café.



Restaurants

OKG's personnel restaurant Simpan serves meals at the site. Information on opening hours as well as the weekly menu is posted on notification boards in the facilities and in the restaurant. During outages, the restaurant is open every day. In order to buy meals during weekends when there is no ongoing outage, pre-order is required. In Figeholm you find a pizza place and in Fårbo you find a fast food place and a lunch restaurant. In Oskarshamn there are several restaurants, cafeterias and diners.



Bank, post office, pharmacy and grocery shops

In Figeholm, located 10 kilometres from OKG you find a grocery shop and a post office. Bank and pharmacy are found in Oskarshamn circa 30 kilometres from OKG.

Accommodation

If you have any questions regarding accommodation and lodging alternatives, start by contacting OKG's housing officer on phone no. +46 (0)491-78 61 91.

Bus connections

For timetables, see KLT's web page; www.klt.se

Tourist information office

The tourist agency is located at Hantverksgatan 3 in Oskarshamn, on the second floor of the shopping centre Flanaden. See also www.oskarshamn.se for more information about Oskarshamn.

Observations

It is important that you report any accidents, incidents and minor events as well as experiences after completed work, for us to be able to learn from such events and experiences in order to prevent accidents in the future. All kinds of observations must be reported!

Reporting of observations is done as follows:

- Notify your work leader.
- Use the intended form and put this in the designated mailbox.
- If you have a user login for the intranet Kärnan, you may also report any observations through the intranet.
- By the use of the OKG app.

N.B! In the event of accidents or incidents, the work leader shall also as soon as possible notify the working environment section.

Mailboxes used for reporting observations placed:

- in the entrance building
- in storage facility (CSV)
- in the entrances to O1/O2 and O3
- outside the service centre, in the active area floor 1 at O3.



In connection to the mailboxes you also find the report forms.

Your Observations

Have you made any observations today? Write down your observations on the following page, remove the page and put the it in the mailbox.

Have you made any observations today?

Write down any observations made, remove the page
and put the page with the observation in the CAP mailbox.

Date Time

Name Phone no

Location of the observation

Description of the observation

.....

Have any measures been taken, if so, what measures?

.....

Remove the page and put it in the mailbox!

Have you made any observations today?

Write down any observations made, remove the page
and put the page with the observation in the CAP mailbox.

Date Time

Name Phone no

Location of the observation

Description of the observation

.....

Have any measures been taken, if so, what measures?

.....

Remove the page and put it in the mailbox!

Have you made any observations today?

Write down any observations made, remove the page
and put the page with the observation in the CAP mailbox.

Date Time

Name Phone no

Location of the observation

Description of the observation

.....

Have any measures been taken, if so, what measures?

.....

Remove the page and put it in the mailbox!

Have you made any observations today?

Write down any observations made, remove the page
and put the page with the observation in the CAP mailbox.

Date Time

Name Phone no

Location of the observation

Description of the observation

.....

Have any measures been taken, if so, what measures?

.....

Remove the page and put it in the mailbox!

Have you made any observations today?

Write down any observations made, remove the page
and put the page with the observation in the CAP mailbox.

Date Time

Name Phone no

Location of the observation

Description of the observation

.....

Have any measures been taken, if so, what measures?

.....

Remove the page and put it in the mailbox!

Have you made any observations today?

Write down any observations made, remove the page
and put the page with the observation in the CAP mailbox.

Date Time

Name Phone no

Location of the observation

Description of the observation

.....

Have any measures been taken, if so, what measures?

.....

Remove the page and put it in the mailbox!

Have you made any observations today?

Write down any observations made, remove the page
and put the page with the observation in the CAP mailbox.

Date Time

Name Phone no

Location of the observation

Description of the observation

.....

Have any measures been taken, if so, what measures?

.....

Remove the page and put it in the mailbox!

Have you made any observations today?

Write down any observations made, remove the page
and put the page with the observation in the CAP mailbox.

Date Time

Name Phone no

Location of the observation

Description of the observation

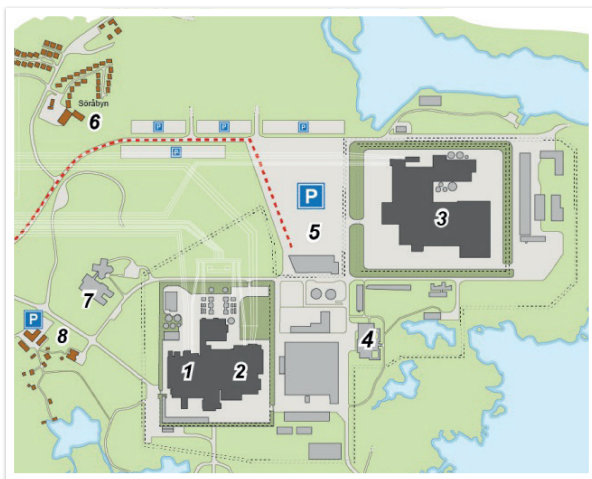
.....

Have any measures been taken, if so, what measures?

.....

Remove the page and put it in the mailbox!

Area map



- | | | |
|-------|----------------------|-----------------------------|
| 1. O1 | 4. Restaurant Simpan | 7. Training facilities, UBH |
| 2. O2 | 5. Central entrance | 8. Hotel Oscar |
| 3. O3 | 6. Söråbyn | |

No other phone service provider than Telia can be used in the machine stations, control rooms and other important spaces/areas since other operators may interfere with the electronic equipment.



IN CASE OF ALARM

Immediate danger

0.5 second of rapidly pulsating sounds during up to 60 seconds.

Immediately go to the nearest assembly point and await further instructions.

Important public message

Seven (7) seconds of typhoon signal interrupted by 14 seconds.

The signals address first of all the general public: Stay indoors, listen to the local radio broadcast.

The danger is over

Signal during 30 seconds.

The signal is given under stable conditions when the danger is deemed to be over.

You must return your personal work items upon finishing your work at OKG. Personal work items are your ID key card, dosimeter and any keys signed for.

Welcome back!

OKG AB

SE 572 83 Oskarshamn, phone no. +46 491 78 60 00