

**VATTENFALL** 

## **Contents**

What are controlled areas?	3
Preparations for work	4
Routines for access	7
Medical examination	8
Training	11
Performing work	12
Equipment	14
Chemical products	17
Handling of goods	18
Safety measures	20
Warning signals and assembly points	22
Regulations concerning alcohol and narcotics	23
Environment	24
Accommodation and leisure	26
Map of Forsmark and surrounding area	27

### **Undertaking work at Forsmarks Kraftgrupp AB**

These guidelines apply to suppliers undertaking work at Forsmarks Kraftgrupp AB (FKA). Suppliers are responsible for ensuring that their employees are fully conversant with these guidelines.

This compilation of all applicable instructions, regulations and procedures aims to facilitate for suppliers to follow FKA regulations. In addition to this, the supplier is obliged to consult with the assigned contact person to learn of any other instructions and regulations that may be applicable to the assignment.

Your assigned contact person or the Site Access Administration at FKA will be available to clarify any point that is not readily understood.

# What are controlled areas?

A nuclear power plant is divided into controlled and uncontrolled areas in consideration of the level of radioactivity in the respective areas.

Changing rooms and administrative buildings are examples of uncontrolled areas. Controlled areas are demarcated by fences and shoe removal areas and require a change of clothes for access.

When leaving the premises, you will undergo a two-step contamination check in order to detect any possible contamination and to stop it from spreading outside the controlled area.

Controlled areas are divided into three zones: blue, yellow and red:

Areas marked in blue have low levels of radiation. There are no access limitations.

Areas marked in yellow have higher radiation levels and are locked. The Health Physics Office must provide directions on how to enter.

Areas marked in red have the highest level of radiation and contamination. Red areas are locked. The Health Physics Office must provide directions on how to enter.

#### Blue

Low radiation level. There are no access limitations to these areas for radiation reasons.

#### **Yellow**

Higher radiation and contamination level. These areas must be kept locked. The Health Physics Office must provide directions on how to enter.

#### Red

Highest radiation and contamination level. These areas must be kept locked. The Health Physics Office must provide directions on how to enter.

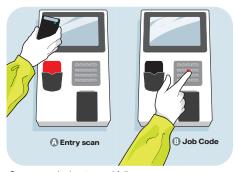
#### **ENTRY ACCESS**



Collect your safety instructions, containing dose code from the Radiation Protection Office.



Pick up a dosimeter.



Scan your dosimeter and follow the instructions on the screen.



At the turnstile, touch in your dosimeter to the assigned spot and pass through.

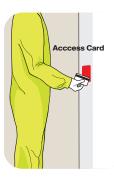
#### **LEAVING**



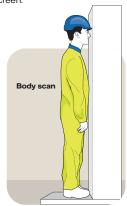
Leave through the turnstile without touching in the dosimeter.



Scan the dosimeter and follow the instructions on the screen.

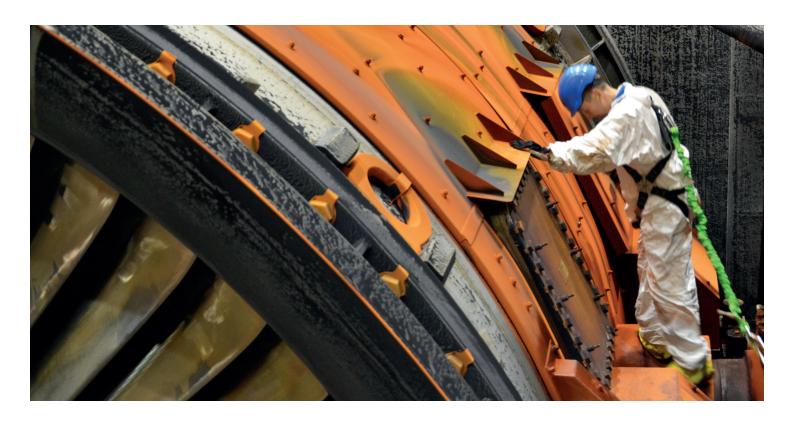


Identify yourself with your access card on the card



Leave the area after standard body scan.





## Preparations for work

FKA buildings are protected civilian objects, and therefore special regulations apply for access to the sites. These regulations are based on laws, decrees and provisions that are to be followed in order for the plant to operate. Certain information about you and your company is required before access to the site can be permitted. Provided that we obtain the necessary information in due time, passage and access will run simply and smoothly.

Please refer to our homepage www.vattenfall.se/forsmark under the heading Contractors and Consultants for applicable forms and to learn more of what you need to consider and arrange prior to commencing work at FKA. It is the responsibility of the supplier to ensure that submitted information is valid and up to date.

NOTE! You must account for any chemical products you may need to use in your assignment in advance - please refer to the applicable section on page 15.

If you have any questions about access: Call our service telephone +46 (0)173 829 16 or send an e-mail to

tilltradesfunktionen-gi@forsmark.vattenfall.se

#### Security clearance

In order to access FKA areas unescorted, you must have security clearance and have undergone a drug test.

Completed security clearance forms ('Certificate of completed security assessment', 'Consent to criminal record checks' and 'Application for a criminal records check') must be submitted to FKA Site Access Administration at least six weeks before access is required. Note that the 'Application for a criminal records check' form may not be completed by hand. You must include an extract from the Swedish Tax Agency's 'Census Data' in your application.

#### Foreign personnel

In addition to the above, foreign citizens must submit an individual Security Clearance certificate and extract from their native country's criminal record data to FKA Site Access Administration. The company must issue the certificate to FKA. This certificate is submitted in place of the summation certificate ('Security checks completion certificate') that Swedish citizens submit. The certificate becomes invalid after one year, and has to be renewed and presented to FKA again.

An extract from the home country's criminal record data that is no older than six months must also be submitted. The extract from the home country's criminal record data must be resubmitted within one year for continued access.

For permanent resident foreign citizens, verification from the Swedish Tax Agency confirming how long the person has lived in Sweden must be submitted. If the person has lived in Sweden continuously for five years, a check in the Swedish register will suffice.

#### **Drug test**

Each individual must undergo a drug test, the results of which must be sent to Forsmark's Site Access Administration from the medical establishment. The test results must be submitted at least four weeks prior to arrival. The supplier is personally responsible that the drug test is performed by a suitable institution. The test must check for benzodiazepines, amphetamines, cannabinoids, opiates and cocaine. A negative test is valid for three years, after which a new test must be performed and the results must be submitted to FKA.

#### **Preregistration**

Anyone who needs access to FKA site must be preregistered. The form is used as a basis for issuing access cards.

Your assigned contact person or the Site Access Administration at FKA can give you more information. The completed form is to be sent to the FKA Site Access Administration at least four weeks prior to the requested date of access.

#### **Medical examination**

Suppliers are responsible for arranging that their personnel undergo a radiological examination well in advance of the commencement of work. Prior to commencing work, foreign personnel must provide an approved doctor's certificate in order to obtain access documentation. Foreign personnel from an EU member country must provide a radiation passport that details the current year's dosage as well as the dosage from the past five years. Personnel from a country outside of the EU must provide a radiation passport or an extract from the national dose register.

At the end of the assignment, the measured dosage for the individual shall be entered into the dosage passport. Please notify the Dosimetry Department some days prior to your departure to allow time to register your dosage in your dosage passport.

#### **Contractors and hired staff**

The supervision of subcontracted labour is the responsibility of the contractor. The contracted assignment shall be conducted within the framework of FKA's management and quality system and in accordance with FKA's provisions and procedures. FKA will be responsible for any hired labour employed by FKA. A certificate of individual qualification is to be provided for anyone who is to work on an FKA site. The certificate, in the original, is to be sent to the FKA Site Access Administration for administration and review at least four weeks prior to arrival. At the suppliers' request, the certificate will be returned after the completion of the assignment.

The supplier's manager/supervisor shall be able to communicate in Swedish. This pertains to the supplier's own staff and any subcontractors for whom the supplier is responsible. Any information or instructions that the supplier submits to the purchaser must be in Swedish.

Clothing lockers are administered according to a set routine by ISS Service Centre.

Phone: +46 (0)173 817 90.

Normal working hours are from 7.15 am to 3.45 pm. Any other working time must be ordered by the nearest purchasing manager. Working hour regulations and applicable collective agreements must be followed.

If required by the parties, a time plan shall be drawn up if it is important for the coordination between purchaser and supplier.

#### Forms and information

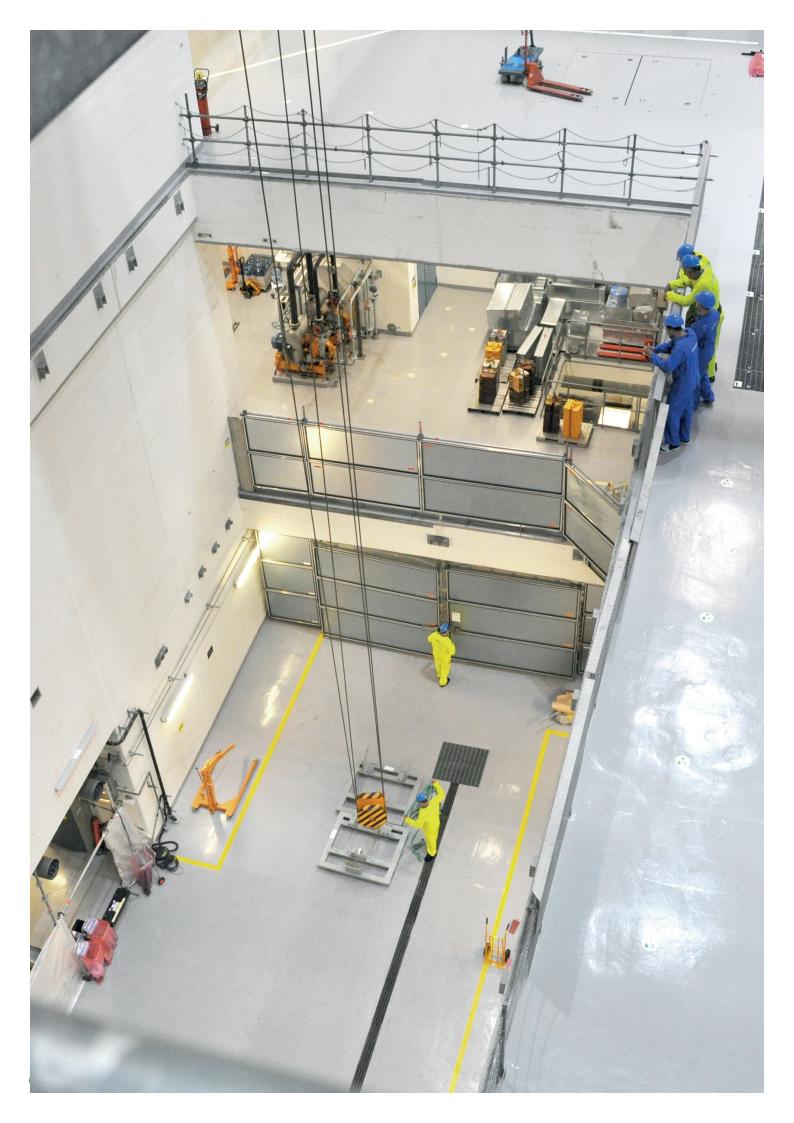
The tables below list a selection of forms and information that can be accessed on the www.vattenfall. se/forsmark homepage under the Contractors and Consultants heading.

#### Forms:

- · Application to training
- Request for criminal check according to the Protective Security Act
- Certificate of the completed security check Drug test certificate
- · Qualification certificate
- Radiological medical examination/health declaration
- · Consent to background check
- Security Clearance Certificate

#### Information:

- · Mandatory training
- · Review information
- · Vattenfall's Code of Conduct for Suppliers
- Handling of chemicals at Forsmarks Kraftgrupp AB
- Instructions for drug testing of externally hired personnel
- Instructions for security vetting at Forsmarks kraftgrupp AB
- · Working safely at Forsmark
- Security vetting of hired staff and contractors
- Drug policy



## **Routines for access**

#### Access

En route to the Forsmark nuclear power plant, you will be stopped at the outermost vehicle checkpoint. Be prepared to present identification and to answer questions regarding the purpose of your visit to the nuclear power plant.

At the main entrance you will receive an access card with an individual code which functions as identification and access to areas within FKA. To gain access to controlled areas you will be subjected to a check for internal contamination using the Quick Scan monitor. The measurement, which takes about 40 seconds, is done at the main entrance upon arrival at FKA. At this time, you will also receive a personal dosimeter and a key to a locker.

- Access cards must be worn visibly at all times while on FKA premises, both indoors and outdoors.
- Access cards are personal and may not be lent to others. In controlled areas, personal dosimeters are valid as a form of visible identification.
- When you have signed for your access card, you may enter the FKA industrial estate through one of the automatic access card check points.

To work inside one of the nuclear power plant units' perimeter protection areas, you will need to pass another checkpoint. Here, a careful identification check and a check for prohibited objects (e.g. weapons, explosives, unmarked chemical products) will be conducted. This check is done by X-ray, metal detector and, where appropriate, bodily search. You may also be randomly selected to undergo an automatic scan for explosives. When leaving the perimeter protection area, you will be subjected to an automatic detection to prevent prohibited export of nuclear materials and nuclear waste.

Access cards, dosimeters and keys shall voluntarily be returned at the main entrance at the end of the assignment and before finally leaving the plant. Failure to do so will result in financial compensation to FKA.

#### **Vehicles**

Vehicles not displaying an authorised access permit are not normally permitted to pass through the fenced-off perimeter. A temporary access permit can be issued to transportation vehicles for the delivery and collection of materials.

All vehicles and loads entering and leaving the plant are subject to inspection. Drivers must work to facilitate this inspection.

#### Guards

As FKA is a protected civilian object, the site is guarded. Guards have the authority of a police officer within and in the vicinity of the protected civilian object and instructions from guards must be followed. Failing to comply with every aspect of the rules for undertaking work at FKA may result in the revocation of access permission.

#### Reporting

Anyone who has been granted access to an FKA plant is obligated to report accidents and incidents regarding physical and safety protection. If possible, make your report using the 'Incidentrapportering fysiskt skydd' form (found on the FKA intranet 'Canalen' under Forms). Otherwise, report to the nearest manager. For emergency incidents, report directly to the Central Alarm Station (+46 (0)173 812 22).

#### Information security

When signing for access documentation in the main entrance, you will also sign a confidentiality agreement that entails that you may not share information obtained while working at FKA to unauthorized persons

## In order to gain access to classified information, you must:

- Be considered as beinwg worthy of the information.
- Be in need of the information for the assignment.
- Understand how confidential information is to be handled.

#### If you find an unattended classified document:

- Take possession of the document.
- Place the document in a sealed envelope. Make a note on the envelope regarding where the document was taken into possession and by whom.
- Immediately hand the envelope over to the nearest security guard.

## **Medical examination**

All personnel working in FKA controlled areas are classified as belonging to category A in accordance with regulation SSMFS 2008:51 chapter 4 by the Swedish Radiation Safety Authority (SSM), which means that a radiological medical examination is required.

Suppliers are responsible for ensuring that their personnel undergo a radiological medical examination or a periodical check before commencing work of this type.

The 'Doctor's certificate for work with ionizing radiation' certificate, signed by the doctor, is to be handed over upon arrival at FKA.

Medical certificates issued following a medical examination remain valid for a maximum period of three years from the date of issue provided that periodic checks are carried out in the intermediary years. Medical certificates issued following a periodic check remain valid for a maximum period of one year from the date of issue.

Suppliers are responsible for ensuring that medical examinations are repeated at three-year intervals for those personnel who continue to work in controlled areas. Access to controlled areas cannot be granted without a valid medical certificate.

For a periodical check, fill out and submit the 'Health declaration for work with ionizing radiation' form to your occupational health department or to the medical service that carried out the medical examination. Following the doctor's evaluation, you will receive a new 'Doctor's certificate for work with ionizing radiation'. This certificate is to be handed over upon arrival at FKA.

The medical examination or a periodical check can result in an 'Approved', 'Approved – with reservations' or 'Not approved' status. An 'Approved' result qualifies the person concerned to undertake any form of work in a radiological environment.

The medical examination can be done by a general practitioner or doctor engaged in either industrial health care or specialist internal medicine units.

The examination costs shall be borne by the suppliers. FKA will not pay any form of compensation for delays resulting from failure to meet the requirements concerning medical examination.

The 'Doctor's certificate/Health declaration for work with ionizing radiation' form shall be used. Forms and instructions are available on the homepage of The Swedish Radiation Safety Authority (links below). Information regarding this is also available from the Dosimetry Department, phone +46 (0)173 811 90.

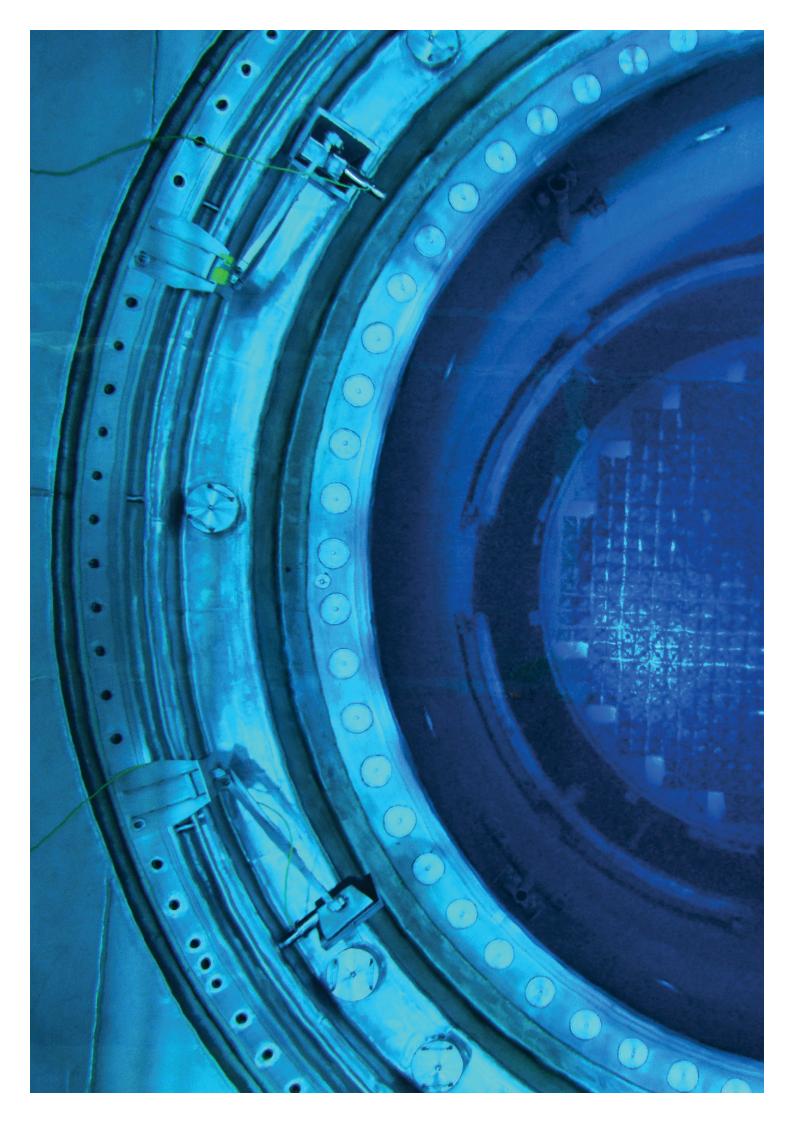
#### **Medical certificate**

https://www.stralsakerhetsmyndigheten.se/contentasse ts/605446931b2a4600aa8cd5cd4ba21e74/lakarintyg-arbete-med-joniserande-stralning

#### Periodic check (health declaration)

https://www.stralsakerhetsmyndigheten.se/contentassets/9232b949b92048a9b9d9f533c882b7bc/halsodeklaration--arbete-med-joniserande-stralning

The original certificate or a copy confirming that the requirements for medical examination or periodic check have been met is to be submitted to the FKA Site Access Administration before commencing work or when signing access documentation. The information will be entered into the central dosage register.





# **Training**

Certain training will be provided by Forsmark. On our homepage, you will find information about available training courses, when they will be held, the form for notification of training needs, as well as information about if, or to what extent, costs for the respective training will be compensated. Some online interactive training, available on the homepage, can be done without applying.

Applications must be sent to the FKA Course Administration in good time. Applications must be sent for all teacher-led training.

Your contact person will evaluate whether the training needs you have registered are relevant to your assignment.

If deemed relevant you will receive an invitation from the Course Administration. If not deemed relevant you will receive a message from your contact person.

#### **Access to Forsmark**

To gain access and work at a nuclear power plant, you must attend and pass the online Security and safety (45235) training. This training encompasses fire protection, working environment, environment, breakdown, radiation protection and surveillance. The date for passed Security and Safety training may not exceed three years.

#### Access to controlled areas

Those needing access to controlled areas must also attend the teacher-led Practical Radiation Protection training (100397), to be renewed every three years.

Renewal of Practical Radiation Protection consists of two parts: Practical Radiation Protection – computer (134568) and Practical Radiation Protection – teacher-led (130279). For those who have had access to controlled areas, the Practical Radiation Protection training and Security and Safety training can be renewed at the same time.

The dates on which you passed the Security and Safety training and the Practical Radiation Protection training are entered into the common dosage register for the nuclear power plants.

#### More information

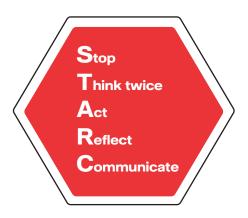
For schedules, application procedures and contact information, see the Competence Development/Access Training heading on the Forsmark intranet Canalen.

Corresponding information can be found on the www.forsmark.com external homepage under http://corporate.vattenfall.se/om-oss/var-verksamhet/var-elproduktion/forsmark/entreprenor-och-konsult/utbildning/

#### Note

Ensure that you have completed the online access training prior to your arrival

The training is available in English or Swedish. Specify which language you prefer by contacting your FKA contact person in good time. For other languages, your company (the supplier) must provide an interpreter for the training. Please apply 8 weeks prior to your arrival as interpreter training must be arranged separately.



At Forsmark we work according to the STARC principle. Take time to question and scrutinise. Resolve the task and make sure it was done properly. Share your experiences with your supervisor.



# Performing work

Work shall be undertaken in accordance with approved work preparations, instructions and procedures. For complicated work, Pre-Job Briefings (PJBs) shall be used. In PJBs, work is reviewed and discussed before it is carried out. The purpose is to increase task focus, contribute to proactive thinking and to predict problems. In the case that work cannot be conducted according to the above, discontinue working and inform your nearest superior.

#### Genera

The regulations for performing work at FKA must always to be observed. Failure to comply with instructions given by FKA personnel regarding these rules may result in the revocation of access permission.

FKA is an equal opportunities workplace. Behaviour that deviates from this may result in the revocation of access permission.

#### Work permits/verification

For work to be permitted in our plants, work permits or verifications are normally required. To obtain a work permit/verification, you are required to undergo general supervisor/manager training or other training in which you are informed of our local safety instructions for electrical and mechanical work – SAFEM. Radiation Protection Technology training is also required. Work supervisors are to be approved by the

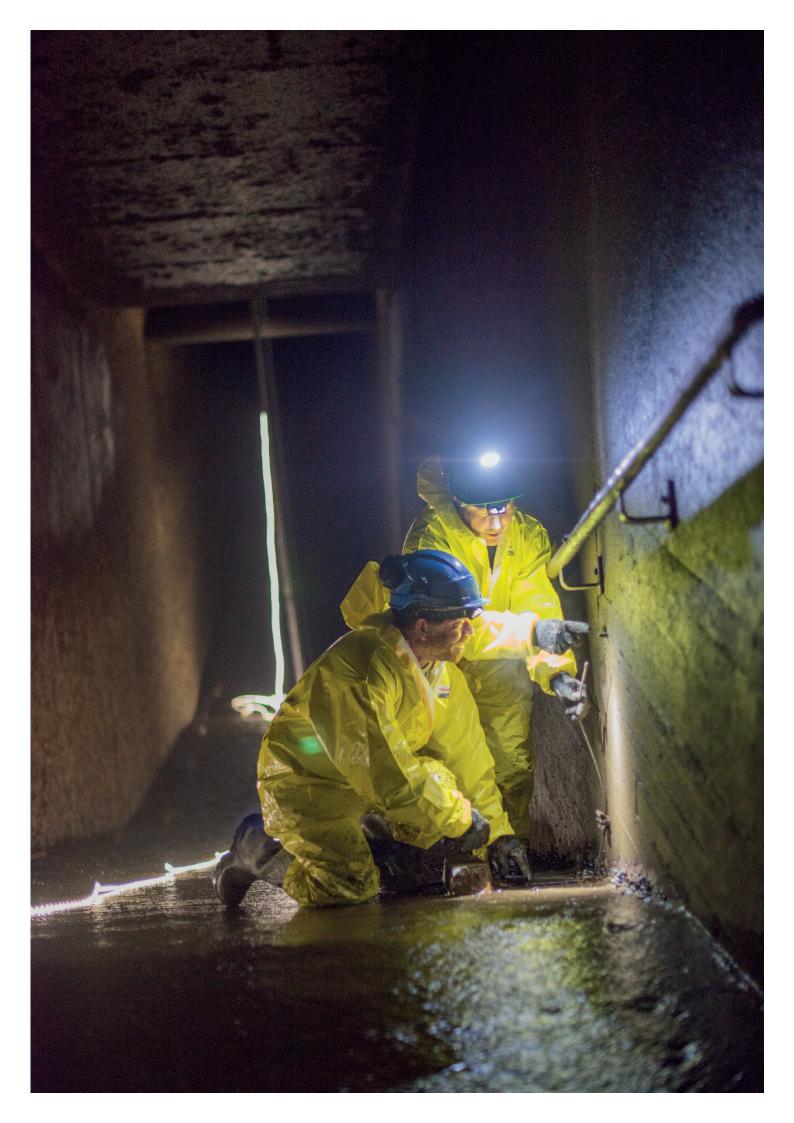
section managers of the purchasing maintenance department. Personnel responsible for the work are to be approved by the immediate work supervisor.

Work supervisors are responsible for obtaining copies of the safety/fire protection instructions for work that requires it.

#### Time reporting

Suppliers working on an hourly basis must keep a time report on the 'Tidrapport' form. Ensure that you enter the correct order number on the form. Time reports are to be submitted weekly and obtain approval of the FKA contact person. The original time reports are to be enclosed with the supplier invoices.

In case of shift work, suppliers undertake to follow the schedule that was drawn up by FKA and approved by the supplier.



# **Equipment**

#### Work equipment

The tools and equipment brought in and out must be kept to a minimum. Equipment and tools used in controlled areas are normally provided by FKA. These can be borrowed at one of our active stores. You are personally responsible for returning them. Tools that are not returned will be charged to the supplier.

Electrical and mechanical equipment owned by suppliers

Tooling and equipment belonging to a supplier shall be clearly marked with the name of the supplier and shall be handled so as to avoid unnecessary contamination. Cables may need to be covered in plastic and fan-driven equipment may need to be fitted with a filter.

An inventory of the equipment shall be drawn up in duplicate and one copy sent to the Site Access Administration at FKA in good time before commencing work. FKA is very restrictive when it comes to bringing in equipment owned by suppliers.

If equipment/tools contain chemicals (oils, cooling/hydraulic fluids, etc.) these are to be specified and accounted for – see also the section about 'Chemical products' on page 15. This statement is to be attached to the inventory.

Suppliers making use of their own electrical equipment are also responsible for testing the equipment both before and during use. Our contact person will notify of additional requirements regarding the testing of such equipment.

Electrical and mechanical equipment to be used in FKA must be inspected before entering the plant.

#### Mobile telephones/radio equipment

Mobile telephones and radio equipment are prohibited in certain areas within the plant. These areas are clearly marked.

Photography/filming are strictly prohibited in all parts of the protected civilian object. Violating the photography ban is a serious offence and may lead to prosecution and revocation of access rights to FKA plants.

Contractors may bring mobile phones into controlled areas provided that the phone is supplied with an adhesive label, indicating that the contractor has understood and accepted the photography ban. The label is placed on the phone at the main entrance or at the F12 and F3 points of entry.

The general flight ban over the Forsmark plant also applies to drones.

#### Gas cylinders

Gases are chemical products and should therefore be reported/accounted for - see the section about 'Chemicals' on page 15.

Gas cylinders shall always be stored securely and be stored in such a way that they can be removed quickly and easily in the case of incident.

The number of gas cylinders in a work area shall not exceed the total number of cylinders required to complete the assignment. The handling is regulated in the instructions regarding fire protection. Speak with your contact person for more information.

#### Personnel areas, etc.

If agreed, the purchaser may provide the following during the assignment: personnel areas, office areas, open and covered storage areas, telephone, fax, hoisting equipment, compressed air, water, electric power, scaffolding and internal transportation.

#### Work clothes and protective equipment

Protective clothing is provided by FKA when working in controlled areas. Work clothes for other areas are not provided by FKA.

Please do not unnecessarily send overalls and shoes for washing. FKA can save considerably on washing costs.

Protective equipment, e.g. helmets, ear protection etc., is provided by FKA as, and when, necessary. All personnel are required to wear regulation protective clothing.

#### Helmets must be worn:

- In controlled areas. Exceptions are marked.
- In engineering and utility service rooms in uncontrolled areas, with the exception of control rooms.
  Other exceptions are marked.
- Outside where a need is identified. Such working areas are delimited and marked.

#### Compensation for replacing equipment

The costs for replacement of contaminated or misplaced tools and equipment will only be considered in those cases where the required procedure for inventory and marking of items has been followed and regulated by the FKA contact person. Compensation for contaminated shoes and clothing will be made where approved by FKA.







The use of all chemical products must be approved by FKA and they must be marked with process classifications.

# **Chemical products**

'Chemical products' entails cleaning agents, penetrant fluids, lubricants, paint products, cutting and polishing discs, sealants, tape, marking pens and more. Please check with your FKA contact person which rules apply to your products. These are normally provided by FKA.

The use of all chemical products must be approved by FKA and they must be marked with process classifications.

Do you need to use chemicals that are not supplied by FKA? If this is the case, a new application has to be submitted in iChemistry as a laboratory analysis may have to be carried out. The approval process for new chemical products can take four weeks. See F-0019039 for more information.

Chemical products must be stored in approved storage areas/chemical cabinets. Liquid chemical products must be covered. Substances that can react with each other, such as strong acids and bases, must be stored separately from each other. Check with your contact person at FKA if you are unsure.

No work using chemical products may commence before a risk assessment has been performed, signed and communicated to the employees.

Approved chemical products are marked by the Central Goods Receiving.

#### **iChemistry**

https://ichemistry.intersolia.com/~master/application.aspx

The following is a list of the process classifications/ markings of chemical products:



The product may come into contact with all types of process systems and process media, and may therefore be used on the inside of the systems. Residues need not be disposed of.



The product may come into contact with all types of process systems and process media. It may therefore be used on the inside of the systems. Residues on the inside of the systems must be disposed of. No outside residues need be disposed of.



The product may come into contact with the outside of process systems. Residues must, however, be disposed of.



The product may not be used in or on process systems.



The product may not be used in controlled areas.



Operation/bulk chemicals, laboratory chemicals and paint products in accordance with TBY. May only be used in process environments in line with established requirement specifications and in laboratories.

# Handling of goods

Incoming goods to FKA must be delivered to the main stores or alternatively Strandförrådet stores and reported to the respective store's goods reception. This also includes goods which arrive from suppliers following repair work, as well as direct deliveries to external suppliers.

Deliveries to external contractors must be registered on arrival and the recipient of the goods must be contacted for agreement on delivery/collection.

Goods/Material NOT collected/delivered within 30 days will be returned to the sender at the purchaser's expense. Goods reception is to take place no later than the working day after reception at the stores.

Large deliveries that are not suited for intermediate handling (such as bulk consignments) and that have delivery consent, can be delivered directly to the end user. The recipient is always responsible for reporting the goods for registration. Contact: Tel. +46 (0)173 814 54

Goods that are to be transported inside the nuclear power plant units shall be reloaded to a EUR-pallet. The goods are then transported to the vehicle inspection building at Forsmark 3 for additional checks before further transportation inside the nuclear power plant units.

Bulky goods, which cannot be reloaded to a pallet, are to be transported directly to the vehicle inspection building at Forsmark 3. There, a thorough vehicle and load check is done before permission to enter the perimeter protection is granted.

The Radiation Protection and Safety Department shall be informed in all cases concerning the dispatch and receipt of radioactive items. They are also responsible for handling the documentation for a radioactive consignment. Radiation classification of goods and packing materials is a time-consuming process. Therefore, applications for the transportation of radioactive items must be made well in advance of the desired delivery time.

Hazardous goods, chemical products class 1-6 and class 8-9, must be marked for transportation with an FKA process class and have the required transport cards attached. When coordinating transportation, the information on the safety data sheet is to be followed.

The goods shall primarily be placed in the applicable location marked in yellow.

Goods may not be placed in areas marked with an X.

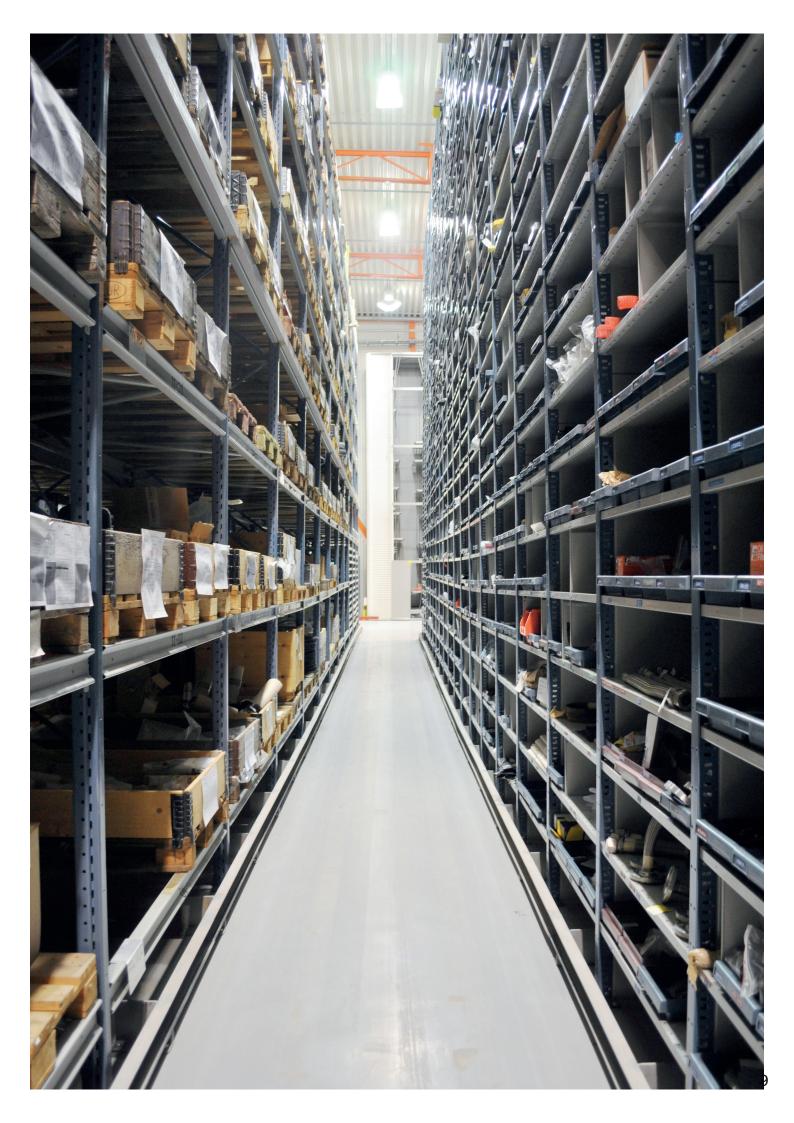
The packaging shall be removed from goods that are to be taken into a controlled area. The goods must be clean and clearly marked with sender and receiver.

Specific instructions apply for transportation of hazardous goods and to ingoing and outgoing transportation of equipment. Gate openings for incoming and outgoing deliveries from the units are requested from the Logistic group at ISS, telephone

+46 (0)173 829 00. Fixed times for gate openings are posted on notice boards at the gates. Requests to open the operation gate are directed to the Central Alarm Station (+46 (0)173 811 22).

Equipment to be removed from a controlled area must first be inspected by safety personnel. In the case of contamination, it must first undergo decontamination before it can be removed.

- Goods may not be placed in areas marked with an X
- The Radiation Protection and Safety Department must be notified of any radioactive goods.
- Chemical products must be marked with an FKA process classification





# Safety measures

#### **Working Environment**

Instructions are applied to FKA so as to minimise the risk of accidents and breakdown that could result in personal injury and damage to the plant.

The Work Environment Act states that employers are responsible for the working environment. This means that employers are required to ensure that the working environment is as safe as possible. Employers must therefore take all reasonable precautions to prevent accidents and to protect the health of their employees.

FKA is responsible for consulting with contractors who will jointly undertake work in the same area to ensure cooperation regarding working conditions.

With regard to construction work, FKA may delegate coordination responsibility to the main contractor, who must ensure that suitable work environment plans are drawn up. In this case, the delegation will be made in writing and posted at the work site.

Responsibility lies with all contractors to take reasonable action to avoid the risk of injury to any of the personnel in the work area. Contractors are also directly responsible for the safety of their own employees. Contractors are also responsible for the personal protective equipment of their employees unless alternative arrangements have been made. FKA accepts responsibility for the equipment made available by FKA.

Contractors having more than five employees working at Forsmark may submit the names of one or more of their employees to act as authorised safety representatives on their preregistration form.

Contractors shall immediately inform FKA of accidents or near-accidents. Contractors are also responsible for reporting the incident electronically in ERFKA (Canalen/Säkerhet) or to submit a written report to the assigned FKA contact person.

#### Fire protection

Fire and ambulance emergency services are available to Forsmark on a 24 hour basis to assist in the event of an emergency.

If an accident should occur - phone alarm number +46 (0)173 822 22 (to the Central Alarm Station, BC) or 112 (to the SOS Alarm).

SOS Alarm always contacts the Central Alarm Station in case of alarms at Forsmark.

As part of general fire protection, all personnel on an FKA site are required to follow instructions and regulations for preventing the occurrence of fires.

Evacuation routes must be freely accessible at all times.

One of the most important security functions at a nuclear power plant is the barriers that prevent fire from spreading. Therefore it is important that fire doors, located in the boundaries of fire cells, are kept closed at all times. Other doors should be kept closed wherever possible to prevent the spreading of a fire.

Temporary cables shall be drawn through the wall aperture beside the door.

Contractors are responsible for cleaning and keeping the work area tidy. Rubbish and waste materials are to be sorted and placed in the receptacles provided.

Class 1 and Class 2A flammable liquids are to be stored and transported in explosion-proof containers (max. 5 litres/room, more than this requires fire safety instructions).

As much packing material as possible shall be removed before goods are transported into a building. The amount of flammable materials inside the plant must be kept at a minimum.

Temporary storage of material and equipment must be approved with regard to fire protection and evacuation. Cameras in the physical protection areas must not be blocked.

Personnel carrying out hot work, their supervisor, and the personnel attending to welding and general fire protection, must be in possession of valid Hot Work certificates.

Instructions regarding the handling and installation of welding equipment and other pressure vessels shall be duly observed.

If any form of handling is unclear with regards to fire protection, contact the fire prevention supervisor for clarification.

Special instructions apply for hot work on roof areas that present fire hazards.

#### **Radiation protection**

All work activity shall be planned and carried out in a manner that will ensure that the personnel are exposed to an absolute minimum of radiation. The specified regulations and instructions are to be observed by all personnel.

Personal dosimeters provide a means of checking and recording radiation dosages. The permissible dosage for

all personnel is: Max. 20 mSv/year. However, it is prohibited to plan to exceed a personal dosage of 10 mSv/year.

The special conditions detailed in SSMFS 2008:51 apply to women who are either pregnant or breast feeding a baby

- for more information contact the Radiation Protection and Safety Department.

In controlled areas, personnel shall always wear a TL type dosimeter on their chest. Dosimeters are evaluated once each month. Once a month, suppliers will receive a report from the central dosage register regarding the dosage of their employees.

When not in use (such as during non-working hours), dosimeters must be placed in their respective numbered location in the dosimeter rack. This facilitates the replacement of dosimeters at the end of each month.

Dosimeters with direct readings and alarms are also used to more quickly follow up on individual radiation dosages and to determine the collective doses of particular tasks. These are issued when accessing controlled areas and are to be worn alongside the TL dosimeter.

Immediately contact the Radiation Protection and Safety Department in case of alarm or if a problem arises with a dosimeter.

# Warning signals and assembly points

#### Warning signals

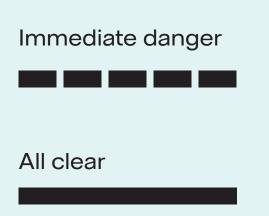
To attract attention in an emergency situation, the alarm system can send audible alarm or warning signals. Two signals are used in Forsmark, 'Immediate danger' and 'All clear'. Warning signals are tested at 3 pm on the first Monday in the months of March, June, September and December. The tests are always preceded by a loudspeaker message.

#### **Assembly points**

Information regarding an incident and the action you need to take will be announced at the earliest opportunity following arrival at the assembly point. At Forsmark, there are ten assembly points that are situated so that all personnel are close to an assembly point regardless of where they are on site.

- In the case of an accident, phone +46 (0)173 822 22 or 112.
- Evacuation routes must be freely accessible at all times.
- Fire doors located in the boundaries of fire cells must be kept closed at all times.







# Regulations concerning alcohol and narcotics

Alcohol consumption is strictly prohibited at Forsmark nuclear power plant. Please be advised that the alcohol restriction applies to the whole area, starting at the check point.

The purchaser reserves the right to perform random alcohol and narcotics tests on any personnel within the FKA site. Personnel providing a positive result will be immediately suspended from further work at Forsmark.

The refusal of an individual to undergo a test will be interpreted as a positive result.

Suppliers are responsible for taking corrective measures and providing rehabilitation of their own personnel.

Forsmark will reimburse suppliers for the costs concerning random narcotics and alcohol tests.

Suppliers bear the expenses for the alcohol and narcotics tests required before commencing work.

Maintenance at Forsmark is a vital element of technical safety operations. Keep in mind that performing work 'the day after' may pose a danger not only to the individual but also to their environment and that performance is impaired.



## **Environment**

The Environmental Management System employed by FKA has been certified in accordance with ISO 14001. Environmental work is presented in FKA's Annual and Environmental Report.

We are constantly striving to improve in our environmental efforts. For those intending to work at Forsmark, it is vital to be fully conversant with the regulations applicable to your work. Your assigned contact person will provide you with required information.

#### **Environmental policy of FKA**

- The generation of waste must be kept at a low level. When possible, recycling and/or reuse should always be considered.
- Operations must be conducted so as to minimise the environmental impact and to limit the risk of environmental accidents by means of preventative measures. The risk of breakdowns that can affect the surrounding environment must be eliminated to the greatest possible extent.
- Operations that have an environmental impact must be conducted with environmental impact and natural resource and energy consumption in mind.
- Understanding of the significance of global, regional and local environmental issues strengthens the position of nuclear power.

- Established environmental goals must be ensured through continuous improvement.
- The requirements of legislation and directives must be met with a wide margin.
- Suppliers and contractors shall apply the same environmental standards as those applied by FKA.
- Environmental data and areas of improvement within our operations must be disclosed publicly.
- Consideration for the environment must be an integral part of our operations and the responsibility for this lies with the line organisation.

#### **Cautious handling**

Hazardous waste materials, chemicals, oils, paints, etc. shall be handled with great care to ensure that they are not leaked out into drainage systems or onto open ground.

Chemicals shall be handled in such a manner that their containers are not damaged. Containers for chemicals and hazardous waste must be clearly marked and stored in a bund. Take care to not overdose and to minimise spilling any chemicals that can be hazardous to the environment.

#### Waste material/sorting of waste

The waste sorting process and recycling at environmental stations are important elements of Forsmark's environmental work. The amount of material taken into a controlled area shall be kept to an absolute minimum so as to reduce the amount of waste material produced. Leave unnecessary and unsuitable packing material outside the area.

Waste must be sorted at the nearest recycling station. Those producing the waste are responsible for sorting it.

Hazardous waste must be taken to a recycling station, sorted and labelled with a specific label. Examples of hazardous waste are chemicals, batteries, oil, paint, smoke alarms, smoke detectors and mercury switches. Chemical products must be left at the designated site for packaging (preferably the original container/packaging) marked with the name of the person who delivered the product, the name of the product and the applicable hazard symbol. Only empty packaging can be deposited at the recycling stations, while other waste must be handed into the active stores. It is prohibited to discharge chemical products and salt water into floor drains on the controlled side.

Chemical products must not be deposited at the recycling stations on the F1 and F2 controlled side, but must be taken directly to NPIF. This is the responsibility of the waste producer. Only empty aerosol cans may be deposited at these recycling stations.

If you have any questions about waste or the sorting of waste:

In uncontrolled areas - contact the Recycling Centre (KLC), telephone +46 (0)173 814 03.

In controlled areas - contact the NPIF Waste Group, telephone +46 (0)173 816 62,

The Liquid waste NPIH, +46 (0)173 811 65

Radiation Protection and Safety Department at NAOS, telephone +46 (0)173 811 45 (F1), +46 (0)173 812 45 (F2) or +46 (0)173 813 45 (F3).

#### **Reporting deficiencies**

Any findings of deficiencies or incidents are to be reported immediately to the nearest manager or work supervisor for further documentation in ERFKA. Reports can be made to your FKA contact person or to supervisors, designated environmental representatives and safety representatives employed by contractors who will have undergone special training to enable them to deal with such emergencies.

### Environmental, working environment and safety rounds

FKA makes environmental, working environment and safety rounds for the purpose of discovering deficiencies before incidents or accidents occur.

#### The residential area environment

All personnel must give due consideration to the environment even during leisure time in the interests of both the environment and the comfort of other people.





## Accommodation & leisure

#### **Accommodation**

Forsmark can provide accommodation in the form of a large number of single rooms, a limited number of double rooms and caravan and camper sites. Vehicles to be parked in the caravan site must be registered and inspected prior to arrival. An approved connection cable fitted with a 3 pin European plug must be used for connection to the power supply.

The host of the hotel is ISS and bookings are made at ISS Service Centre, telephone +46 (0)173 817 90. You will be charged for any room you have booked but not utilised. One week's notice of cancellation is required. Contractors are recommended to book accommodation well in advance of starting work. In case the accommodation in Forsmark should be fully booked, accommodation can be offered elsewhere according to instructions from ISS Service Centre.

#### **Food**

Meal times at the Forsmark personnel restaurants are displayed on the local notice boards.

A kiosk for the sale of cigarettes, tobacco, milk, etc. is located at ISS Service Centre.

#### Leisure facilities

The exercise and recreation facilities at Forsmark include:

- Gymnasium including table tennis facilities and saunas (men and women)
- Bookings are made at ISS Service Centre, telephone +46 (0)173 817 90
- You must be a member of Forsmarks IF to gain access to the weight training facility. See https://idrottonline.se/ForsmarksIF-Skidor/
- Bike rental Bookings are made at ISS Service Centre, telephone +46 (0)173 817 90
- Car rental Bookings are made at ISS Service Centre, telephone +46 (0)173 817 64
- Car care facility.
- Bookings are made at ISS Service Centre, telephone +46 (0)173 817 90
- Illuminated running track
- Bathing areas, sandy beaches, BBQ facilities and changing huts

More information about exercise and recreation facilities in the municipality of Östhammar is available at ISS Service Centre.

# Map of Forsmark and the surrounding area

### Hitta rätt på Forsmark

#### Area map

- 1. Forsmark 1
- 2. Forsmark 2
- 3. Forsmark 3
- 4. Huvudentré / Main entrance
- Reception, butik, biluthyrning och nyckelutlämning / Reception, kiosk, car rental and key administration
- Infocenter och vattentorn /Info center and watertower
- Restaurang / Restaurant
- Restaurang / Restaurant
- Personalboende Igelgrundet / Accomodation Igelgrundet
- 10. Konferens- och utbildningscenter / Conference and training center
- 11. Kärnkraftsäkerhet och utbildning / KSU Nuclear and safety training
- 12. Huvudförråd / Central store
- 13. NM-center / NM-center
- 14. Mekanisk verkstad / Mechanical workshops
- 15. Företagshälsovård / Health centre
- 16. Svensk Kärnbränslehantering AB +Vega I SKB Swedish nuclear fuel and waste management company + Vega
- 17. Bostadsområde / Accommodation
- 18. Sporthall / Sports facility
- 19. Uppställningsplats för husvagnar /
- 20. Administrationsbyggnad / Administration building
- 21. Brandstation / Fire station
- 22. Personalkontor / HR department
- 23. Biotestsjö / Biotest basin
- 24. Badplats / Bathing area



#### **Distances to Forsmark from:**

Miljöstation / Recycling center

Parkering / Car park

Östhammar 25 km

Uppsala 90 km (road 288) Uppsala 75 km (road 290)

Gävle 80 km 90 km Norrtälje

#### **Bus services**

Forsmark - Gävle 753 Forsmark - Uppsala 751/752 Forsmark - Öregrund 855 Forsmark - Östhammar 859/860

Additional bus connections and further information can be found at www.ul.se



