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| 2 | Converted into procedure form - Limosa added - SAP nos. Added - Rules on reporting of accidents - Environmental rules adapted |  |
| 03 | Addition of independent inspection of mechanical consignments PREV code added Worksite school added Adaptation of alarm signals Section 7.4 Nuclear emergency plan removed Adaptation of annexes |  |
| 04 | Complete adaptation to the content of BUG regulations |  |
| 05 | Adjusting external distributionChange hyperlink. Adjusting alarms. |  |
| 06 | Work supervisor to be replaced by head of works  Add 4.3.5. fire permit |  |
| 07 | Add BA4/5 skill requirements |  |
| 08 | Training nuclear safety culture  Reference to asbest inventory | OK |
| 09 | Completion of paragraph 5.1.1 “General provisions” |  |
| 10 | Management Expectations replaced by Site Fundamentals  replace icons | OK |
| 11 | Reference to Site Fundamentals website Engie | OK |
| 12 | Confidentiality adjusted from internal to public to be published on the EBL website. | OK |

\* Carrying out of a complete verification as stipulated in “10000739058/000 – Verification of quality documents”.  
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# purpose

These regulations constitute a **supplement** to the “General Safety, Health and Environmental regulations for contractors performing jobs for Electrabel Production”. (10010044563 - HSE regulations for contractors)

It describes the **specific** safety, health and environmental measures for the Doel zone.

The Doel zone also includes the Scaldis buildings in Kallo.

This information must always be supplemented with specific information which will depend on the works to be performed.

The **Site Fundamentals** (10000004875 – Site Fundamentals) form an important source of practical information for this.

They are given to each contractor who has taken the Nuclear safety culture training course (worksite school).

They can also be consulted on the Electrabel website for contractors.

# APPLICABLE LEGISLATION AND STANDARDISATION

## health and Safety aspects

### General provisions

Royal Decree of 20 July 2001: “General regulations on the protection of the population, employees and the environment against the danger of ionising radiations” (Belgian Official Gazette: 30/08/2001)

### Smoking ban

An absolute smoking ban applies throughout the site. Smoking is only allowed in the smoking zones which are specifically provided and indicated for this purpose.

### Temps and students

Temporary employees may not be employed in the technical installations. Exceptions to this rule can only be authorised after thorough examination and with the consent of the head of department.

### Working hours

The working hours may never exceed 11 hours per day and 50 hours per week.

### Management system

KCD has an OHSAS 18000 certificate. Contractor Firms prefer to have an equivalent certificate (VCA, Besac ...)

### Harassment and Unwanted Intimacies

Given that every man or woman has the right to be treated with dignity, the employers and employees are obliged to refrain from any acts of violence, harassment or unwanted sexual behaviour at work.

Any employee who should become the victim thereof can turn to the ´specialised Prevention advisor´, or ombudspersons designated for this purpose within the company.

## environmental aspects

### General provisions

No specific KCD requirements

### Management system

KCD owns a ISI14001 and EMAS certificate

# responsibilities of contractor

Already at the time of the request for tenders, the candidate contractors are referred to information on the specific risks entailed in the job, the KCD safety regulations.

During the kick-off work meeting, specific agreements are reached about the risk analysis, the control measures and the qualifications of those who will be performing the work.

These agreements must be established in the “Safety, Environment and Quality Agreement for contractors performing jobs for the Doel Nuclear Power Plant - KCD”.

In the technical perimeter is a BA4 attestation of competence according to AREI art. 47.required. The requirements are included in "skill requirements BA4/5 for external partners" 10010383597/000/00.

In the technical perimeter is a certificate of nuclear safety culture training contractors is required. Registration reference found on the website: <https://www.engie-electrabel.be/nl/leveranciers/voorwaarden/production> and on [www.nvc-kcd.be](file:///C:\Documents%20and%20Settings\IIB560\Local%20Settings\Application%20Data\SAP\SAP%20GUI\tmp\www.nvc-kcd.be)

# organisation of the job

## Information DUTY

No specific KCD requirements

## INSPECTION duty

A test of the knowledge of the specific risks and control measures is performed for access to the site

These specific risks and preventive measures  are described  in the presentation Safe2Start via website: <https://www.engie-electrabel.be/nl/leveranciers/voorwaarden/production>

## Identification, access and work permit

### Identification of contractor and employee

All information about access to the site may be consulted on the website:

<https://www.engie-electrabel.be/nl/leveranciers/voorwaarden/production>

### Access

See 4.3.1

### Photographing – Filming – Mobile phone…

See 4.3.1

### Work permit

No works may be performed in KCD without an accompanying work permit. This is an authorisation from your KCD work leader to begin the works.

Always discuss the content of the work with your head of works.

Carefully read the execution parameters, apply them and wear the prescribed personal protective equipment while working.

Before beginning the work, a last minute risk analysis must be performed at the workplace. For this the checklist (LMRA) on the back of the work permit must be completed.

### Fire permit

For operations involving flames or rises in temperature in excess of 400°C or above, a fire permit is required.

In all cases, contact your head of works.

## coordination of the activities

### General provisions

Before the start of the works and later in respect of progress, the workplace manager of the contractor and/or the KCD head of works will hold a **pre-job briefing** with his employees.

At regular intervals, the workplace manager conducts **workplace inspections** in order to improve the working methods, the proper use of work equipment and safety behaviour.

During overhauls and major works, **contractor meetings** are held regularly in which an overview of the planning is given and the safety priorities are established for the coming works.

The workplace manager of the contractor(s) is required to attend these meetings. The **circulation of information** to those performing the work on the work floor is a fundamental aspect of this.

During and after execution, the work performed is inspected and evaluated by the KCD head of works. The results of these evaluations are discussed with the parties involved and the necessary lessons for improvement are drawn.

The contractors are evaluated at the end of major works and at the end of each calendar year.

### Temporary or mobile construction sites

No specific KCD requirements

### Language

No specific KCD requirements

# RULEs concerning work equipment and Products with hazardous characteristics

## Choice and use of work equipment

### General provisions

Absolutely no worksite installation (worksite, office containers, etc.) is allowed in the operations zone without the authorisation of the KCD head of works and after consultation with the Security service.

Gas bottles for temporary use may only be present in the installations while the works are being performed. The gas bottles are delivered equipped with a tear-off label. The user must notify the Fire Safety service before the start of the work and fill in the above-mentioned label (see info on the details to be included in this label). After completion of the works, the gas bottles are brought to the MOB.

A green release certificate at the entrance of the confined space indicates that it has been released for access.

Upon entering an enclosed space, at least one of the workers will wear an oxygen meter.

During the works, a supervisor must be present at the entrance off the confined space´ at all times.

Drivers of cranes, vehicles, lifting machines, etc. who are declared competent by their employer are identified by a sticker placed on their helmet.

The sticker can be obtained from the KCD works foreman, in accordance with the “Attribution of helmet certification stickers 10010376914” procedure.

### Working in spaces with explosion risk

No specific KCD requirements unless the works involve a fire hazard a fire permit is required in all cases. Contact your head of works.

### Working on river water circuits

No specific KCD requirements

### Scaffolding

The installation of scaffolding near enclosures, perimeters or perimeter entries must also be done in consultation with the Security service.

## Use by contractors of work equipment

In consultation with the KCD work manager, agreements are reached concerning the use of work equipment in the controlled zone.

## Collective Protection Equipment

No specific KCD requirements

## Personal protective equipment

In the ´controlled zones´, the specific work and protective clothing and the ´personal protective equipment´ against radioactive radiation and contamination are provided by the radiation protection service.

## Choice and use of hazardous products

The list of approved products is available to be consulted on the website.

On request an extract of the asbest inventory can be requested through the responsible workplace manager   
Working on asbest is prohibited for all workers except the authorized asbestremover.

# hygiene

## Cafeterias – Meals – Break rooms

At KCD, meals may be consumed in the cafeterias only while wearing clean work clothing and exclusively during the opening hours. ´Break rooms´ are located:

* CGA - 4th floor;
* CGB - 2nd floor;

# environmental rULES

## ENVIRONMENTAL RuleS

No specific KCD requirements

## Waste and excess materials

The waste poster and scenario give you the necessary information concerning the proper sorting method, the storage possibilities, disposal on and from the site. Sorting and waste points are:

* Central container park for non-hazardous inert waste: industrial waste, construction waste, metal waste (iron, tin, aluminium, etc.), stainless steel waste, wood waste, sandblasting grit, activated carbon, green waste, etc.
* Environmental shed for hazardous waste and non-hazardous inert waste: solvents, oils, fluorescent lamps, batteries, aerosol cans, condensers, oil-absorbing cloths, chemical waste, acid-resistant waste, paper, cardboard.

## Environmental incidents

Report every accident immediately via the emergency number: **4444.**

## Protection of soil and water

No specific KCD requirements

# practical guidelines in the event of industrial accidents

## ACCIDENTS

Report any accident immediately via the emergency number: **4444.**

## Near-accidents

Report any accident immediately via the emergency number: **4444.**

## FIRST AID

Always have your injuries tended to by:

* the nurse during working hours, on the 2nd floor of the entrance building.
* the nearest industrial first-aider outside of working hours, in the consignment rooms or entry to controlled zones.

# emergency situations

## emergency number

For all accidents, sudden illness, fire and other emergencies.

Immediately call the **general emergency number 4444**

Direct contact with the emergency services is not permitted.

## Alarms

### Warning

|  |  |
| --- | --- |
|  | **No action required**   * Is used to alert the services involved and mobilise e.g. the internal fire brigade or internal nuclear emergency plan. |

### Evacuation

|  |  |
| --- | --- |
|  | **Evacuation of the building involved**   * Follow the green arrows * Go to the assembly point outside |

### Assembly

|  |  |
| --- | --- |
|  | **Assembly of all personnel indoors**   * Close all windows and doors, go as soon as possible to the nearest assembly room * Follow the blue arrows “Assembly rooms – Emergency plan” |

### End of Alarm

|  |  |
| --- | --- |
|  | **Resume work** |

## Fire protection

### Fire doors

No specific KCD requirements

### Prevention

The opening of **fire-resistant feed-throughs** must be discussed in advance with the head of works.

The management of **fire load** in KCD must satisfy the strict rules described in the “Site Fundamantals".

### Fire permit

The fire permit is drawn up by the head of works and discussed with the workplace manager.

At all times, one person needs to be present at the workstation to guard the works posing a fire hazard and who is in possession of a ‘Qualified User of Emergency Response Fire Extinguishers’ certificate. The validity of such a certificate is not permitted to be older than one year. During the work 2 persons should always be present.

### Fire-fighting

No specific KCD requirements

### Guidelines in the event of evacuation

General instructions are given via the PA system:

* Close the doors and windows of offices and rooms
* Do not run; take the normal exit routes, as indicated by the prescribed pictograms
* Do not use lifts
* Leave the exits of the building unblocked
* If the evacuation alarm sounds, go to the assembly points outside
* If the assembly alarm sounds, go to the assembly rooms inside
* Await further instructions

# IONISING RADIATIONS

## Controlled zone

The controlled zone is the zone in the technical installation where radioactive contamination and/or radiation can occur and where special access and conduct rules apply.

Everyone in the controlled zone wears his identification badge, his Thermoluminescent Dosimeter (TLD) and an electronic dosimeter in his white zone overall.

## Pregnant women

Pregnant women or women who are breastfeeding are not permitted to work in, or even to visit, the controlled zone.

As soon as a woman knows for certain that she is pregnant, she is legally obliged to inform her employer in writing via a medical certificate.

## Working with Radioactive Sources

Prior written agreement of the radiation protection service is required in order to bring in radioactive sources. Contact your work leader for the specific procedures.

## A.L.A.R.A. principle

Keeping the individual and collective dose as low as reasonably possible is the objective of “As Low As Reasonably Achievable”.

The basic rules are:

* Limit exposure time;
* Place protection around the source;
* Keep a distance from the source.

For all important tasks in the controlled zone the proposed individual and collective radiation doses are evaluated as well as the methods by which they can be reduced.

These agreements between the KCD work leader, the radiation protection service and those performing the works are necessary and are established in the ´ALARA file´.

Consult with the radiation protection agent present before starting the work.

## Dose limits

The operational dose limit in KCD amounts to 18 mSv for 12 sliding months. .

The limit of the dose incurred in KCD amounts to 10 mSv per 12 sliding months.

## Bringing material into the controlled zone

Bring as little material as possible into the controlled zone.

Prohibited are:

* Unpainted wood
* Excess packaging material
* Porous, difficult to decontaminate materials

## TAKing material out of the controlled zone

Upon leaving the controlled zone, every object must be submitted to the radiation protection service for the measurement of contamination.

## Radioactive waste in the controlled zone

The objective is to generate as little waste as possible.

Therefore, don´t bring anything into the controlled zone that does not have to be there.

It is strictly prohibited to take waste out of the controlled zone.

# REFERENCES

|  |  |
| --- | --- |
| Heeft als bijhorend document (Has Part): |  |
| 10010044563/000/ HSE regulations for contractors | |

|  |  |
| --- | --- |
| Heeft als referentiedocument (References): |  |
| 10000004875/000/05: Site Fundamentals  10000713129/000/17: Safety agreement contractors KCD  10001453653/000/03: Obtaining access certificates KCD  10010383597/000/00: Skill requirements BA4/5 for external partners" | |

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