

NOTICE 708 OF 2012**DEPARTMENT OF ENERGY****NUCLEAR ENERGY ACT, 1999****INVITATION TO COMMENT ON REGULATIONS REGARDING NUCLEAR NON-
PROLIFERATION**

The Minister of Energy in terms of section 54(4), hereby publishes for comment the proposed Regulations to be made under section 54(1) read with sections 33(3)(a)(b)(c)(d)(e)(f)(h) and (i), 34(2) and 35(2) of the Nuclear Energy Act, 1999 (Act 46 of 1999), as set out in the Schedule.

All interested persons and organizations are hereby invited to comment in writing on the proposed Regulations to Director: Nuclear Non-Proliferation by –

- (a) Post to: Department of Energy
Private Bag X 96
Pretoria, 0001;
- (b) Hand delivery to: Department of Energy
192 Visagie Street,
Corner Paul Kruger and Visagie Streets
Pretoria, 0001
- (c) email to: nonproliferation@energy.gov.za.

Kindly provide the name, address, telephone number, fax number and email address of the person or organisation submitting the comments. Comments on the draft regulations must be submitted not later than 30 calendar days from the date of publication of this Notice. Comments received after the closing date may not be considered.

SCHEDULE

Definitions

1. In these Regulations any word or expression to which a meaning has been assigned in the Act, has the meaning so assigned and, unless the context indicates otherwise -

“customs code” means a code number issued to a person by the South African Revenue Services upon registration in terms section 59A of the Customs and Excise Act, 1964 (Act No. 91 of 1964), to participate in import or export activities regulated by that Act;

“destructive analysis” means the determination of nuclear material content and, if required, of isotopic composition of chemical elements present in the sample;

“facility” means a reactor, critical facility, conversion plant, fabrication plant, reprocessing plant, an isotopic separation plant or a separate storage installation, or any location where nuclear material in amounts greater than one effective kg is customarily used;

“non-destructive assay” means a measurement of the nuclear material content or of the element of isotopic concentration of an item without producing significant physical or chemical changes in the item;

“nuclear event” means any event associated with the use, possession, handling, processing, storage or transport of nuclear material including the loss of nuclear material, capable of giving rise to the release of radiation that may jeopardise the health and safety of any person or the environment;

“nuclear material” includes the material declared by the Minister in terms of section 2(a),(b),(c) and (f) of the Act in Government Notice No. 207 of 27 February 2009;

“planned activity” means any activity associated with the use of nuclear material, including the nuclear fuel cycle research and development, design, procurement, construction, commissioning, operation, decommissioning, dismantling, storage, disposal, and any other activity related to nuclear material; and

“the Act” means the Nuclear Energy Act, 1999 (Act No. 46 of 1999).

Keeping of records

2. (1) The records to be kept by any person in possession of, using, handling or processing nuclear material in terms of section 33(3)(a) of the Act are -

- (a) an updated nuclear material inventory indicating actual quantities and form of nuclear material present in the facility;
- (b) operating data which is used to establish changes in the quantities and composition in the inventory of nuclear material in the facility at any time; and
- (c) measuring control programmes and measurement results used to compile the physical inventory of nuclear material, including calibration, sampling and analysis.

(2) The record contemplated in sub-regulation (1) must be kept permanently and made available to an inspector on request.

Reports to Minister

3. (1) The reports that must be submitted to the Minister in terms section 33(3)(b) of the Act by any person in possession of, using, handling or processing nuclear material are -

- (a) an initial report detailing the whole nuclear material inventory at the facility, within three months of commencement of these Regulations;
- (b) an annual report of the records contemplated in regulation 2(1), on or before 31 March of each year ; and

- (c) in case of a nuclear event, a report notifying the Minister of the nuclear event within two hours of its occurrence and, within seven days of the nuclear event, a detailed report containing –
 - (i) a brief explanation and cause of the event;
 - (ii) the results of any internal investigation and any remedial action taken;
 - (iii) a description of the nuclear material involved in the event, including the type of material; the isotopic content of the material; the quantity of the material; the chemical and physical description of the material; and the application of the material;
 - (iv) the particulars of all persons involved in the occurrence of the event;
 - (v) a description of the damage to the facility, institution or organisation concerned or to the environment;
 - (vi) a list of persons who have been informed of the event;
 - (vii) the persons, institutions or organisations linked to the origin or destination of the nuclear material;
 - (viii) a description of the actions taken in order to ascertain the cause and magnitude of any accidental or unmeasured loss of nuclear material that might occur;
 - (ix) measures that may have been taken to prevent the occurrence of the event;
 - (x) measures proposed to prevent a recurrence of the event; and
 - (xi) any other relevant information.

(2) The reports contemplated in sub-regulation (1) must be kept permanently and must be submitted to the Minister as contemplated in regulation 12.

Measurements on nuclear material and maintaining measuring control programmes

4. (1) The measurements to be performed on nuclear material in terms of section 33(3)(c) of the Act by any person in possession of, using, handling or processing nuclear material are –

- (a) the verification of quantities of nuclear material received, processed, produced, shipped, lost or otherwise removed from the inventory; and
- (b) the measurement of the inventory based on sampling for destructive analysis or non-destructive assay;

(2) The measuring control programme to be maintained in terms of section 33(3)(c) of the Act must include -

- (a) measurement system approved by facility to verify material that has been declared;
- (b) a sampling system;
- (c) analysis and evaluation of results by suitably qualified persons;
- (d) an operator who introduces the measurement system into the operating system;
- (e) counting and item identification, or nuclear material transformation calculations, quantitative and qualitative non-destructive assay; and
- (f) a dedicated in-plant accounting and measurement system.

Provision of information on design of nuclear installation and site concerned and all changes effected to the design thereof

5. (1) The manner in which the Minister must be provided with information in terms of section 33(3)(d) of the Act, by any person in possession of, using, handling or processing nuclear material, is by way of a report containing –

- (a) the existing or proposed name, business address, and geographic location of the nuclear installation and site concerned;
- (b) a description of the nuclear installation and site concerned with reference to the type, location and flow of nuclear material, plant design capacity and the general layout of important process equipment which uses, produces or processes nuclear material;
- (c) a description of features of the nuclear installation and site concerned relating to security, control, containment and surveillance of nuclear material;
- (d) key measurement points to measure the flow of nuclear material;

- (e) a brief description of existing or proposed procedures at the nuclear installation and site concerned for nuclear material accounting and control, including a list of responsible persons; and
- (f) where changes are effected to the design of a nuclear installation and site concerned, a description of all changes, including –
 - (i) the reasons for effecting the changes; and
 - (ii) the expected dates of completion of the changes.

(2) The report contemplated in sub-regulation (1) must be submitted to the Minister as contemplated in regulation 12 –

- (a) within three months of commencement of these Regulations for all existing nuclear installations and sites concerned; or
- (b) within three months of-
 - (i) the design of any new nuclear installation or site concerned; or
 - (ii) any changes effected to the design of the nuclear installation or site contemplated in paragraph (a).

Physical stocktaking of nuclear material

6. The physical stocktaking that must be undertaken in terms of section 33(3)(e) of the Act, by any person in possession of, using, handling or processing nuclear material must be done within 30 days of the end of each calendar year, and shall be conducted in the following manner-

- (a) a physical inventory process must be determined;
- (b) a physical inventory listing must be generated;
- (c) the nuclear material balance must be measured; and
- (d) any discrepancies between nuclear material balance and book inventory record must be investigated and resolved.

Prior notification of importation and exportation of nuclear material and nuclear related equipment and material

7. The manner in which notice must be given in terms of section 33(3)(f) of the Act by a person who intends to import or export nuclear material and nuclear related equipment

and material, is that at least two weeks prior written notice must be submitted to the Department as contemplated in regulation 12, indicating-

- (a) the name of the importer or exporter and the country of import or export;
- (b) the description and quantity of the material or equipment contemplated in sub-regulation (1) to be imported or exported, including the gross mass of the consignment, batch number and material category;
- (c) the date of import or export;
- (d) proof of authorisation in terms of sections 34 or 35 of the Act, including the import or export authorisation number, the date of issue and the expiry date of the import or export authorisation;
- (e) in the case of import, the name of the port of import, the mode of transportation and the route from the port of import to the end user's site;
- (f) in the case of export, the mode of transportation and the route from the exporter's site to the port of export;
- (g) the end user of the import or export; and
- (h) any additional information regarding the nuclear material to be imported or exported, as the case may be.

Notification on any loss of nuclear material

8. Any loss of nuclear material in terms of section 33(3)(h) of the Act regardless of the quantity, concentration or density, must without delay be reported in terms of regulation 3(1)(c).

Schedules of planned activities

9. (1) The schedule of planned activities to be provided to the Minister in terms of section 33(3)(i) of the Act by any person in possession of, using, handling or processing nuclear material, must be submitted in a written report and must indicate –

- (a) the date of commencement and duration of the planned activity;
- (b) a general description of and information specifying the location of nuclear fuel cycle related to research and development activities;
- (c) a general description of planned activities and the identity of the person or entity carrying out such activities; and

(d) any additional information relevant to the planned activity.

(2) The report contemplated in sub-regulation (1) must be submitted to the Minister in accordance with regulation 12 within three months of commencement of these Regulations and thereafter annually on or before 15 February of each year.

(3) The Minister must immediately be informed of any amendment to the report submitted in terms of subregulation (2).

Application for authorisation for acquisition, possession of, import and certain activities relating to nuclear material, restricted material and nuclear related equipment and material.

10. A person applying for an authorisation in terms of section 34(2) of the Act must complete the relevant form DE18 (Application to possess, acquire, use or transport of, any activities related to nuclear material and equipment) or DE20 (Import and transport nuclear material and equipment) contained in Annexure 1, and must lodge the application with Minister as contemplated in regulation 12.

Application for authorisation for exportation of source material, special nuclear material, restricted material and nuclear related equipment and material.

11. A person applying for an authorisation in terms of section 35(2) of the Act must complete the form DE19 (Transport and export nuclear material and equipment) contained in Annexure 2, and must lodge the application with Minister as contemplated in regulation 12.

General

12. Any application, notice, schedule or report that must be submitted to the Minister or Department in terms of these Regulations, must be submitted for the attention of the Director: Nuclear Non-Proliferation –

(a) by registered post to the following postal address:

Department of Energy

Private Bag X 96

Pretoria, 0001, or

- (b) by hand delivery to the following physical address:

Department of Energy

192 Visagie Street

Corner Paul Kruger and Visagie Streets

Pretoria, 0001.

Offences and penalties (Section 54 (2))

13. Any person who knowingly provides false information in respect of any matter concerning which he or she is required to give information in terms of these Regulations commits an offence and is liable on conviction to a fine or imprisonment not exceeding 12 months.

Short title and commencement

14. These regulations are called the Nuclear Non-Proliferation Regulations, 2012, and shall come into operation on the date of publication in the Gazette.

ANNEXURE 1

Application forms in terms of section 34 of the Act (Regulation 10)

Application form DE18 (Application to possess, acquire, use or transport of, any activities related to nuclear material and equipment);

or

Application form DE20 (Application to Import and transport nuclear material and equipment).

ANNEXURE 2

Application forms in terms of section 35 of the Act (Regulation 11)

Application form DE19 (Application to Transport and export nuclear material and equipment).

DE 18

**energy**

Department:
Energy
REPUBLIC OF SOUTH AFRICA

**APPLICATION TO POSSESS, ACQUIRE, USE OR TRANSPORT OF, ANY
ACTIVITIES RELATING TO NUCLEAR MATERIAL AND EQUIPMENT**

NOTE:

1. Please read the attached Annexure A before completing this form.

1. APPLICANT DETAILS

Name of Company			
Tel No		Fax No	
Physical Address			
		Code	
Postal Address			
		Code	
Country			
Nature of Business			

Have you previously applied to possess, acquire, use or transport of, any activities relating
to nuclear material and equipment? YES ☐ NO ☐

If **yes**, provide previous
authorisation number

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DE 18

2. END USER DETAILS

Name of Company			
Tel No		Fax No	
Physical Address			
		Code	
Postal Address			
		Code	
Country			
Nature of Business			

3. DESCRIPTION OF NUCLEAR MATERIAL OR EQUIPMENT

Items No	Description (including Isotopic Composition)	Mass and Quantity

DE 18

4. DETAILS OF THE ORIGIN OF THE MATERIAL OR EQUIPMENT (WHERE APPLICABLE)

Name of Company			
Tel No		Fax No	
Physical Address			
		Code	
Postal Address			
		Code	

5. INDICATE THE INTENDED USE OF THE MATERIAL OR EQUIPMENT

Is the material/equipment intended or likely to be used in the development or production of nuclear, biological, or chemical weapons or in systems capable of delivering such weapons? YES ☐ NO ☐

If **yes**, what is the possible usage of the material/equipment for non-peaceful purpose?

6. DETAILS OF CONTACT PERSON

Full name(s)			
Surname			
Tel No		Fax No	
Email			

7. AFFIDAVIT IN TERMS OF NUCLEAR ENERGY ACT

In terms of Section 34 of the Nuclear Energy Act, 1999 (Act 46 of 1999)

I,

hereby apply for authorisation to possess, acquire, use or transport of, any activities related to nuclear material and equipment and declare that all the information furnished is correct.

		d	d	m	m	y	y	y	y
Signature	Rank	Date							

DE19

**energy**

Department:
Energy
REPUBLIC OF SOUTH AFRICA

APPLICATION TO TRANSPORT AND EXPORT NUCLEAR MATERIAL AND EQUIPMENT**NOTE**

1. Please read the attached Annexure A before completing this form

1. APPLICANT DETAILS (CONSIGNOR)

Name of Company			
Tel No		Fax No	
Physical Address			
		Code	
Postal Address			
		Code	
Country			
Nature of Business			

Have you previously applied to transport and export nuclear material and equipment?

YES ☐ NO ☐

If **yes** provide previous
authorisation number

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DE19

2. IMPORTER DETAILS (CONSIGNEE)

Name of Company			
Tel No		Fax No	
Physical Address			
		Code	
Postal Address			
		Code	
Country			
Nature of Business			

3. END USER DETAILS

Name of Company			
Tel No		Fax No	
Physical Address			
		Code	
Postal Address			
		Code	
Country			
Nature of Business			

DE19

4. DESCRIPTION OF NUCLEAR MATERIAL OR EQUIPMENT TO BE EXPORTED

Items No	Description(including Isotopic Composition)	Mass and Quantity

5. INDICATE THE INTENDED USE OF THE MATERIAL OR EQUIPMENT

Is the material/equipment intended or likely to be used in the development or production of nuclear, biological, or chemical weapons or in systems capable of delivering such

weapons? YES ☐ NO ☐

If **yes**, what is the possible usage of the material/equipment for non-peaceful purpose?

Will the material remain under the control of the exporter? YES ☐ NO ☐

DE19

If **no**, give details

Port of Export								
Estimated date of shipment	d	d	m	m	y	y	y	y

6. DETAILS OF CONTACT PERSON

Full name(s)			
Surname			
Tel No		Fax No	
Email			

7. AFFIDAVIT IN TERMS OF NUCLEAR ENERGY ACT

In terms of Section 34 of the Nuclear Energy Act, 1999 (Act 46 of 1999)

I,

hereby apply for an export authorisation of nuclear material and equipment and declare that all the information furnished is correct.

		d	d	m	m	y	y	y	y
Signature	Rank	Date							

DE 20

**energy**Department:
Energy
REPUBLIC OF SOUTH AFRICA**APPLICATION TO IMPORT AND TRANSPORT NUCLEAR MATERIAL AND EQUIPMENT****NOTE****1. Please read the attached Annexure A before completing this form****1. APPLICANT DETAILS (CONSIGNEE)**

Name of Company			
Tel No		Fax No	
Physical Address			
		Code	
Postal Address			
		Code	
Country			
Nature of Business			

Have you previously applied to import and transport nuclear material and equipment?

YES ☐ NO ☐If **Yes** provide previous
authorisation number

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2. EXPORTER DETAILS (CONSIGNOR)

Name of Company			
Tel No		Fax No	
Physical Address			
		Code	
Postal Address			
		Code	
Nature of Business	jjjg		

3. END USER DETAILS

Name of Company			
Tel No		Fax No	
Physical Address			
		Code	
Postal Address			
		Code	
Country			
Nature of Business			

4. DESCRIPTION OF NUCLEAR MATERIAL OR EQUIPMENT TO BE IMPORTED

Item No	Description(including Isotopic Composition)	Mass and Quantity
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DE 20

5. INDICATE THE INTENDED USE OF THE MATERIAL OR EQUIPMENT

Will the material be exported after utilised?

YES

☐

NO

☐

Port of Import								
Estimated date of shipment	d	d	m	m	y	y	y	y

6. DETAILS OF CONTACT PERSON

Full name(s)			
Surname			
Tel No		Fax No	
Email			

7. AFFIDAVIT IN TERMS OF NUCLEAR ENERGY ACT

In terms of Section 34 of the Nuclear Energy Act, 1999 (Act 46 of 1999)

DE 20

I,

hereby apply for an import authorisation nuclear material and equipment and
declare that all the information furnished is correct.

		d	d	m	m	y	y	y	y
Signature	Rank	Date							

ANNEXURE A

DEPARTMENT OF ENERGY

INSTRUCTIONS FOR AUTHORISATION OF NUCLEAR MATERIAL AND EQUIPMENT

1. The completion of the application forms is required in terms of **section 34 and 35** of the **Nuclear Energy Act (Act 46 of 1999)**. An extract from the Act is available from the departmental website at www.energy.gov.za.
2. Note that the application will be acknowledged within seven (7) days of receipt.
3. It should be noted that the processing of the application takes six (6) to eight (8) weeks.
4. Note that authorisation may be granted subject to any conditions (if any) that the Minister of Energy may determine.
5. It is essential that all the requested information be furnished to avoid delay in the processing of the application.
6. Note that the application form should be accompanied by a covering letter both signed by the Head of the Institution.
7. Note that the form should be completed electronically by using small letters, and capital letters should only be used where applicable.
8. If applying for the first time, a company profile (signed by Head of Institution) should be submitted with the application form.
9. The application form should be hand delivered to Department of Energy, 192 Visagie Street, Corner Paul Kruger and Visagie Street, Pretoria, 0001.
10. For more information please contact the **Deputy Director: Nuclear Non-Proliferation Authorisation** at (012) 406 7491/ 7500.