Radiation Protection Authority Of Zimbabwe

"... protecting people and the environment against radiation effects ..."

RPAZ POLICY

AUTHORIZATION POLICY

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Definitions

The terms are defined in the Radiation Protection Act, Regulations and IAEA Glossary

The Company Secretary; the Legal Advisor of the Authority

Authority; the Radiation Protection Authority of Zimbabwe.

Authorization; a permission granted by the regulatory body to a person, natural or juridical, who has applied to carry out an activity or practice. An authorization may take the form of a licence or registration.

Authorization suspension, revocation or modification; In the event of continual, persistent or extremely serious non-compliance, or a significant release of radioactive material to the environment due to serious malfunctioning at or damage to a facility, the regulatory body shall direct the operator to curtail activities and may suspend or revoke the authorization. The operator shall be directed to eliminate any unsafe conditions.

Decommissioning; administrative and technical actions taken to allow the removal of all the regulatory controls from the facility (except for a repository which is closed which is closed and not decommissioned).

Enforcement; The application by a regulatory body of sanctions against an operator, intended to correct and, as appropriate, penalize non-compliance with conditions of an authorization.

Exemption; a determination by the Authority that a source or practice need to be subject to some or all aspects of regulatory control on the basis that the exposure (including potential exposure) due to the source or practice is too small to warrant the application of those aspects.

Graded Approach; For a system of control, such as a regulatory system or a safety system, a process or method in which the stringency of the control measures and conditions to be applied is commensurate, to the extent practicable, with the likelihood and possible consequences of, and the level of risk associated with, a loss of control.

Legal person; any organization, corporation, partnership, firm, association, trust, estate, public or private institution, group, political or administrative entity or other

persons designated in accordance with national legislation, who or which has responsibility and authority for any action taken under these Regulations.

Licensee; the holder of a current licence granted for an activity or practice, which has recognized rights and duties for the activity or practice, particularly in relation to protection and safety.

Operator; Any organization or person applying for an authorization or authorized and/or responsible for nuclear, radiation, radioactive waste or transport safety when undertaking activities or in relation to any nuclear facilities or sources of ionizing radiation. This includes inter alia, private individuals, governmental bodies, consignors or carriers, licensees, hospitals, self-employed persons, etc.

Registrant; an applicant who is granted registration of a practice or source and has recognized rights and duties of such a practice or source, particularly to protection and safety.

Registration; a form of authorization for practices of low or moderate risks whereby the legal person responsible for the practice has, as appropriate, prepared and submitted a safety assessment of the facility and equipment to the regulatory body. The practice or use is authorized with conditions or limitations as appropriate. The requirements for safety assessment and the conditions or limitations applied to the practice should be less severe than those for licensing.

Regulatory Inspection; an examination, observation, surveillance, measurement or test undertaken by or on behalf of the regulatory body to assess structures, systems, components and materials, as well as operational activities, processes, procedures and personnel competence.

Safety culture; the assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, protection and safety issues receive the attention warranted by their significance.

1.0 INTRODUCTION

The Radiation Protection Authority of Zimbabwe (RPAZ) is a statutory body with a mandate to protect people and the environment against the harmful effects of radiation. It was established in terms of the *Radiation Protection Act [Chapter 15:15].*

RPAZ is empowered to authorize the use of all radiation related practices and activities in terms of *Sections 14 and 15* of the Act. In carrying out authorization activities, RPAZ adheres to the International Atomic Energy Agency (IAEA) safety standards and International best practices. No activity involving radiation should be undertaken without authorization.

2.0 PURPOSE

The Authorization Policy provides guidance to the Authority to ensure that a graded approach is taken to the regulatory control of radiation exposure, so that the application of regulatory requirements is commensurate with the radiation risks associated with the exposure situation. The policy will provide a framework for efficient and effective regulatory management of radiation risks.

3.0 SCOPE

This policy shall apply to the regulatory objectives but not limited to matters listed below:

3.1 Radiation devices

a) System of notification.
b) Exemption and clearance and activities involving radiation.
c) Registration of activities involving radiation
d) Licensing of activities involving radiation
e) Decommissioning

3.2 NORM facilities

a) System of notification.

b) Exemption

c) Monitoring

d) Licensing

e) Decommissioning

3.3 Technical Support organisations

a) Accreditation of service providers.

3.4 National Inventory

The Authority will as appropriate, implement the authorization process to ensure safety and security of sources.

4.0 POLICY STATEMENT

The Authority shall establish and enforce requirements for the optimization of protection and safety, and the procedures to acquire authorization for all facilities and activities that give rise to radiation risks. Such measures will be undertaken to prevent unreasonable risk to health and safety of persons, environment, national security to achieve compliance to national and international standards.

5.0 IMPLEMENTATION

5.1 Notification

Any person or organization intending to carry out any actions that involve the use of radiation sources as specified in the Act and regulations shall submit a notification in the prescribed form to the Authority of such an intention. The system of notification allows the Authority to determine whether the use of radiation meets the justification criteria.

5.2 Radiation devices

5.2.1 Exemption and Clearance

The Authority shall develop a system for exemption and clearance of practices with radiation risks which are sufficiently low as not to warrant regulatory control.

5.2.2 Registration

The Authority shall develop a system for registration of practices of low or moderate risks.

5.2.3 Licensing

The Authority shall develop a system for licensing of practices on a risk-informed decision-making basis.

5. 3 NORM facilities

5.3.1 Exemption

The Authority shall develop a system for the issuing of "exemption" certificates for facilities that have insignificant exposure to workers and the public. Facilities classified as "exemption" have minimal environmental releases of NORM radionuclides to the worker and public communities.

5.3.2 Annual Monitoring

The Authority shall develop a system for monitoring facilities that have moderate exposure to workers and the public. Facilities classified under "monitoring" have limited environmental releases of NORM radionuclides to the worker and public communities.

5.3.3 Licensing

The Authority shall develop a system for the licensing of facilities that have significant exposure to workers and the public. Facilities classified as "licensing" have significant environmental releases of NORM radionuclides to the workers and public communities.

5.4 Multi-stage licensing

The Authority shall develop a system for licensing of complex facilities in category 1 to 3. The authorisation process may be carried out in several stages with separate authorisation where required.

5.5 Categorization of Radiation Sources

The Authority shall assign categories using the IAEA standards for the categorization of radiation sources.

5.6 Transportation and Import-Export Authorizations

The Authority shall authorize:

a) transportation and transiting of radiation sources within the country as prescribed by the licensing conditions and Transport Safety and Security of radioactive sources.

b) import or export of radiation sources.

5.7 Documents submitted by applicants for authorization

As a part of the authorisation application process, applicants shall be required to make available all necessary information in accordance with the guidance provided by the Authority.

5.8 Records Keeping

The Authority shall maintain a system of regulatory information as well as adhere to the Records Management Manual.

5.9 Review and assessment of applications

The Authority shall review and assess applications to determine whether facilities and activities comply with regulatory requirements. Review and assessment of a facility or an activity shall be conducted on a risk-informed decision-making basis.

5.10 Pre-authorization Inspections

RPAZ shall conduct pre-authorization inspections on a risk-informed decision-making basis. These inspections will allow the Authority to supplement the information and scientific data needed for authorisation.

5.11 Design Approval Authorisation

The review and assessment will lead to:

1) granting of an authorization, or
2) refusal of such an authorization.

The Authority shall formally record the basis for these decisions.

The Authority shall conduct design approval authorisation for facilities where radiation will be used. This includes planning, location and layout of the facilities including structure and shielding considerations.

5.12 Renewal of Authorizations

Authorised parties shall renew their licences prior to the expiring date as guided by the Authority.

5.13 Authorisations Conditions

a) Amendment of Authorizations

An authorised party shall notify the Authority of any changes to safety-related aspects of the practice upon which:

- The authority shall amend the authorization as appropriate.
- Authority may take enforcement actions against any licensee which may entail amendment to authorizations.

b) Suspension of Authorization

Decisions on enforcement actions are taken based on the severity of non-compliance and impact on health and safety of workers, the public and the environment. An authorisation for a practice may be suspended due to
enforcement decisions from the inspections.

c) Revocation of authorization

An authorization for a practice involving the use of radiation sources may be revoked:

a) as part of an enforcement action, or

b) following the decommissioning of a practice.

5.12 Accreditation

The Authority shall accredit any service providers or persons that enable authorised parties to comply with conditions or requirements imposed by or under the Act.

6.0 RESPONSIBILITIES

6.1 Chief Executive Officer

The Chief Executive Officer (CEO) shall be responsible for;

a) Development of a strategic plan to implement this policy.

b) Mobilizing resources and support for authorization activities and maintenance of the register of sources.

c) Providing general guidance on authorization issues.

d) Protecting the interests and image of the Authority in the conduct of authorizations.

6.2 Director Regulatory Services

The Director of Regulatory Services assigned to oversee the Regulatory process at any stage shall be responsible for:

a) Developing strategies and action plans to support the implementation of this policy.

b) Developing guidance documents on authorisation.

c) Developing a system for review and assessment.

d) Maintaining an up-to-date national register of sources.

6.2 Regulatory Manager/ Regional Manager

The Regulatory manager assigned to oversee the Regulatory process at any stage shall be responsible for:

a) Developing and implementing the Authorisation plan

b) Assigning team members going to conduct Authorisation process.

c) Ensuring regulatory decisions are made according to Authority and international standards.

d) Advising the Director Regulatory Services on the regulatory process.

e) Managing the national inventory system

f) Quality review of the review and assessment processes

7.0 POLICY REVIEW

This Authorization Policy shall be reviewed, examined, and revised every two years, or earlier where circumstances warranting such revision arises.

REFERENCES

1) The Radiation Protection Act [Chapter 15:15]
2) IAEA Safety Standards, Fundamental Safety Principles, Safety Fundamentals No. SF 1
3) IAEA Safety Standards, General Safety Requirements Part 1, Government, Legal and Regulatory Framework for Safety, No. GSR Part 1
4) IAEA Safety Standards: Categorization of Radioactive Sources, Safety Guide No. RS-G-1.9
5) IAEA Safety Standards, Application of the concepts of Exclusion, Exemption and Clearance, Safety Guide No. RS-G-1.7
6) IAEA Safety Standards, Safety Guide, Regulatory Control of Radiation Sources, No. GS-G-1.5
7) IAEA TECDOC 1525, Notification and Authorization for the Use of Radiation Sources (Supplement to IAEA Safety Standards Series No. GS-G-1.5)
8) IAEA-TECDOC-1679, Exemption from Regulatory Control of Goods containing Small Amounts of Radioactive Material
9) IAEA Safety Glossary, Terminology Used in Nuclear Safety and Radiation Protection 2018 Edition