Republic of Zambia

RADIATION PROTECTION AUTHORITY

ANNUAL REPORT 2024

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KATETE

Republic of Zambia

RADIATION PROTECTION AUTHORITY

VISION, MISSION AND VALUES

OUR VISION

"A credible regulator ensuring a radiation safe environment."

OUR MISSION

"To regulate activities resulting into radiation exposure, for the protection of people and the environment from harmful effects of radiation".

CORE VALUES

The core values of the Authority are:

1. **Innovation**
2. **Integrity**
3. **Accountability**
4. **Teamwork**
5. **Transparency**

Our Functions

1. Advise the Government on policies, measures and matters relating to ionising radiation;
2. Implement the policies of the Government related to the protection of the public, workers and the environment from the harmful effects of ionising radiation;
3. Establish facilities for the collection and dissemination of scientific and technical information on ionising radiation;
4. Collect and disseminate information on the work of the Authority through publications, seminars, workshops and print or electronic media;
5. Liaise with the Zambia Environmental Management Agency (ZEMA) or any other regional or international organisation and institution on matters relating to the promotion of the safe use of ionising radiation in Zambia;
6. Initiate policy formulation and implement the provisions of this Act and, when so required by 6 the Minister or if the Board otherwise thinks it necessary, draw up and submit to the Minister. proposals for amending it or regulations to be made under it;(Ionising Radiation Protection Act No. 16 of 2005)
7. Ensure the protection and safety of the public in the event of an accidental release of harmful ionising radiation or other emergencies;
8. Respond to, and coordinate responses to radiological incidences and emergencies;
9. Issue Licenses and authorisations
10. Carry out such activities as are necessary or conducive to the better performance of its 11 functions under the Act.

ACRONYMS

RPA:	Radiation Protection Authority
IAEA	International Atomic Energy Agency
EU	European Union
ED	Executive Director
8ND	Eighth National Development Plan
IA	Institutional Assessment
OD	Organisational Development
OEW	Occupationally Exposed Worker
MoTS	Ministry of Technology and Science
ZEMA	Zambia Environmental Management Agency
SP	Strategic Plan
EU	European Union
SWOT	Strengths, Weakness, Opportunities, Threats
USA DOE	United States of America Department of Energy
UNDP	United Nations Development Programme
ICT	Information and Communications Technology
NISIR	National Institute for Scientific and Industrial Research
MoU	Memorandum of Understanding
TLD	Thermoluminescent Dosimeter
ERB	Energy Regulation Board
ZRA	Zambia Revenue Authority

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BOARD CHAIRPERSON' FOREWORD

I am pleased to present the Radiation Protection Authority (RPA) Annual Report for the financial year 2024. This report highlights our strategic vision, key achievements, and areas of focus in fulfilling our mandate ensuring the protection of people and the environment from the harmful effects of ionising radiation.

Throughout the reporting period, the Board provided strategic policy guidance, ensuring that the Authority remained aligned with the key objectives of the Strategic Plan (2023–2026). The process of compiling this report allowed us to reflect on our accomplishments, address challenges, and refine strategies for enhanced regulatory effectiveness.

A major milestone in 2024 was the Board's approval of several key policies, such as National Radiation Safety Policy, Naturally Occurring Radioactive Material (NORM) Safety Guide, Import and Export Guide, Radiotherapy Guide, Nuclear Medicine Regulations, Radiation Therapy Regulations Uranium Mining Regulations and the Communication Strategy, aimed at improving stakeholder engagement and public awareness. Additionally, the Board sanctioned the licensing of radiation practices and approved the addition of 50 new positions of Nuclear and Radiation Safety Technologist under the Nuclear Radiation Safety Department, strengthening regulatory oversight and compliance.

As we move forward, RPA remains committed to enhancing radiation safety standards, fostering innovation, and improving service delivery. I extend my deepest gratitude to the Board, Management, and Staff for their unwavering dedication to our mission of safeguarding public health and the environment.

Ms. Christabel Ngongola Reinke
Board Chairperson

EXECUTIVE DIRECTOR'S STATEMENT

It is my honour to present the Radiation Protection Authority (RPA) Annual Report for the financial year 2024, a year marked by progress, resilience, and strategic advancements in radiation protection and regulatory oversight. This report captures our collective efforts to safeguard public health, workers, and the environment from the harmful effects of ionising radiation, in alignment with our Strategic Plan (2023–2026).

In 2024, RPA remained steadfast in enhancing regulatory frameworks, strengthening compliance mechanisms, and advancing stakeholder engagement. Through the continued guidance of the Board of Directors, we achieved several key milestones, including: Regulatory Strengthening: We issued licenses in accordance with established safety regulations, ensuring that radiation practices comply with national and international standards.

Despite challenges such as evolving radiation technologies and compliance complexities, RPA remains committed to proactive regulation, continuous capacity building, and fostering partnerships that enhance radiation safety in Zambia.

Looking ahead, we will continue to improve service delivery, optimize operational efficiencies, and uphold our mission of protecting people and the environment. I extend my sincere appreciation to the Board, Management, and Staff for their dedication and hard work, and to our stakeholders for their unwavering support in advancing radiation safety.

Dr. Boster Dearson Siwila, PhD

Executive Director and Board Secretary

RPA BOARD OF DIRECTORS, 2024.

Ms. Christabel Ngongola Reinke
Board Chairperson

Mr. Msafiri Sinkala
Vice Board Chairperson

Ms. Olipa Jere Sakala

Ms. Brenda Mwamba

Ms. Thandiwe Chabi Phiri

Dr. Martha Chakulimba

Dr. Charles Mweshi

Brig. Gen Dr. Levy Muchemwa

Mr. Nkumbu Siame

Ms. Patricia Chilaisha

Dr. Joseph Kabunda

Dr. Steven Mudenda

Mr. Muleka Kamanisha

Mr. Christopher Kanema

RPA MANAGEMENT TEAM

Dr. Boster Dearson Siwila, PhD
Executive Director

Mr Kabuku Mushaukwa
Director Technical Services

Ms. Melody Mwewa Nsofwa
Director Nuclear and Radiation Safety

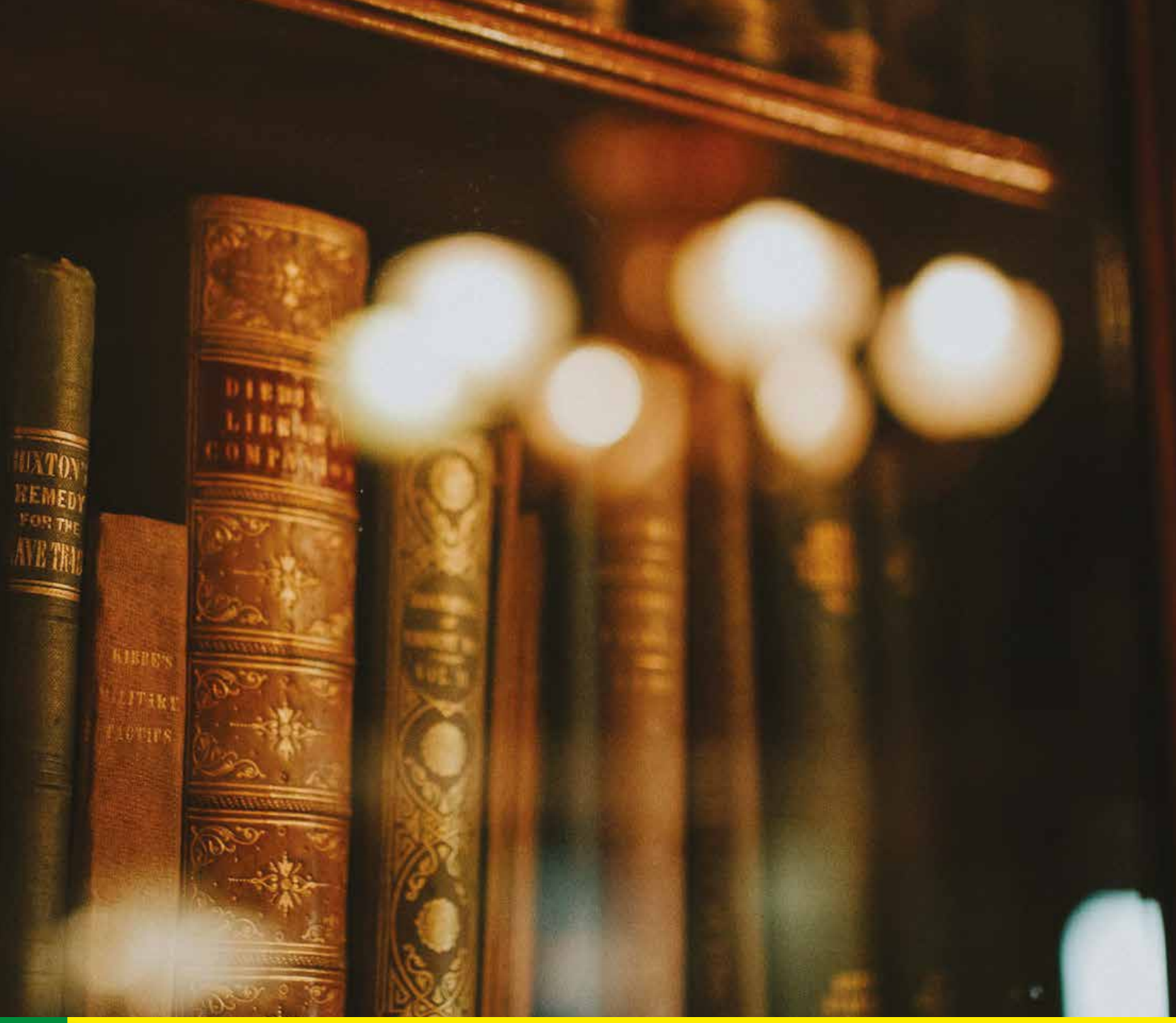
Ms. Belize Silomba
Manager Finance

Ms. Towela Jere
Manager Corporate Service

Mr. Chishinga Mulenga
Manager Technical Services

Ms. Kashewe Siyubo
Manager Legal Services

Mr Mathias Lubingu
Manager Audit



EXECUTIVE SUMMARY

www:/rpa.gov.zm/

EXECUTIVE SUMMARY

In 2024, the Radiation Protection Authority (RPA) focused on strengthening its regulatory oversight and enhancing radiation safety in Zambia. The Authority successfully addressed critical areas, including:

- Policies and Legislation
- Nuclear Security and Safeguards
- Radiation Protection and Nuclear Safety
- Performance Management

As part of its mandate to ensure compliance with radiation safety regulations, the RPA issued 402 licenses, indicating 97% compliance to radiation safety standard. And a total of 415 facilities, underwent inspections.

The RPA further screened 135,109 vehicles for the purposes of nuclear security and radiation safety, compared to 115,627 vehicles that were screened in 2023.

Under the Technical Services Department, The Research and Development section assessed radiological risks associated with food consumption in various districts. A total of 17 food samples were collected from five districts—Isoka, Chinsali, Mafinga, Solwezi, and Mpika, the samples, all locally sourced from central markets, were analysed following standardized screening procedures.

To strengthen radiation safety knowledge, the RPA conducted 30 training sessions on radiation protection and safety of radiation sources. These trainings aimed at equipping occupationally exposed workers (OEWs) with the necessary knowledge, in line with the Ionising Radiation Protection Act No. 16 of 2005 and its Amendment Act No. 19 of 2011.

In 2024, the Authority monitored 1,613 OEWs and 322 radiation students, generating 598 TLD dosimetry reports. To ensure continuous monitoring of OEWs, 1,250 TLD badges were procured.

RPA significantly boosted its radiation detection infrastructure by acquiring state-of-the-art radiation detection equipment. The acquisition included 29 advanced radiation detectors and related accessories, such as:

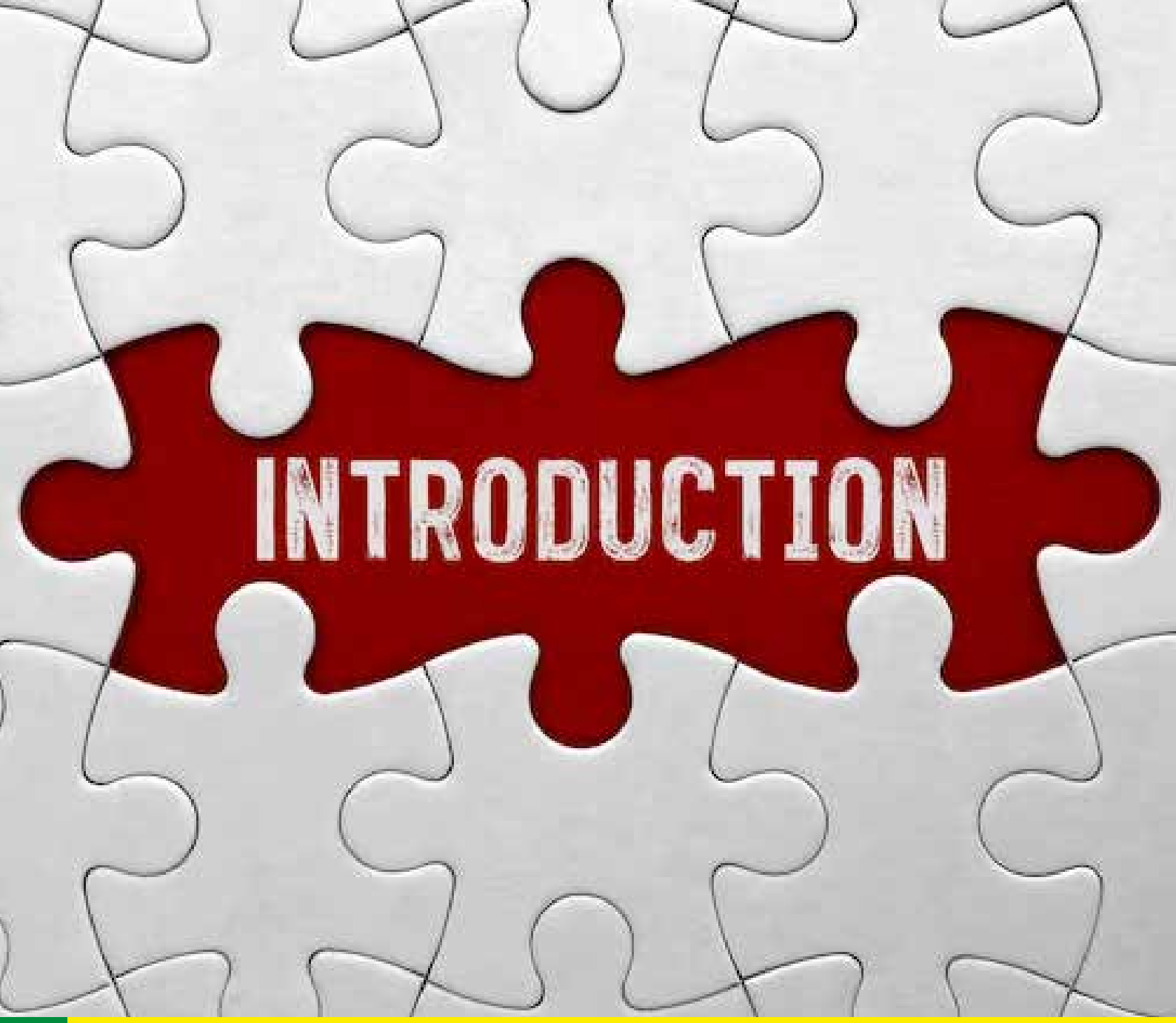
- Three (3) Radiagem 2000 Environmental Kits
- Two (2) AlphaGUARD radon monitors
- One (1) SPIR-Ace RIID
- Six (6) Radeye PRDs
- One (1) Telescopic Probe
- One (1) Swipe Counter
- One (1) Field Scaler

As part of the Zambia Mining and Environmental Remediation and Improvement Project (ZMERIP), the RPA acquired Radon Monitoring Equipment, Radiation Contamination Meters, and Hand-held Scintillation Gamma Spectrometers for field applications.

To protect underground miners from the harmful effects of radon gas exposure, the RPA procured radon gas monitoring equipment. Additionally, ZMERIP acquired identical equipment for the Authority, facilitating a comprehensive radon monitoring programme developed by the Environmental Protection section within the Technical Services Department.

The RPA initiated radon gas monitoring in underground mines in the Copperbelt Province. The first-ever radon monitoring campaign was conducted at Mopani Copper Mines Plc in Kitwe and Mufulira in November 2024. This milestone marks a significant step in ensuring occupational safety for miners exposed to radon gas.

The year 2024 marked significant progress in radiation protection, nuclear safety, and environmental safety across Zambia. The RPA's proactive regulatory approach, enhanced training programs, and advanced monitoring technologies have positioned the Authority as a key player in safeguarding the public, workers, and the environment from the harmful effects of ionizing radiation.


INTRODUCTION

1.0 INTRODUCTION

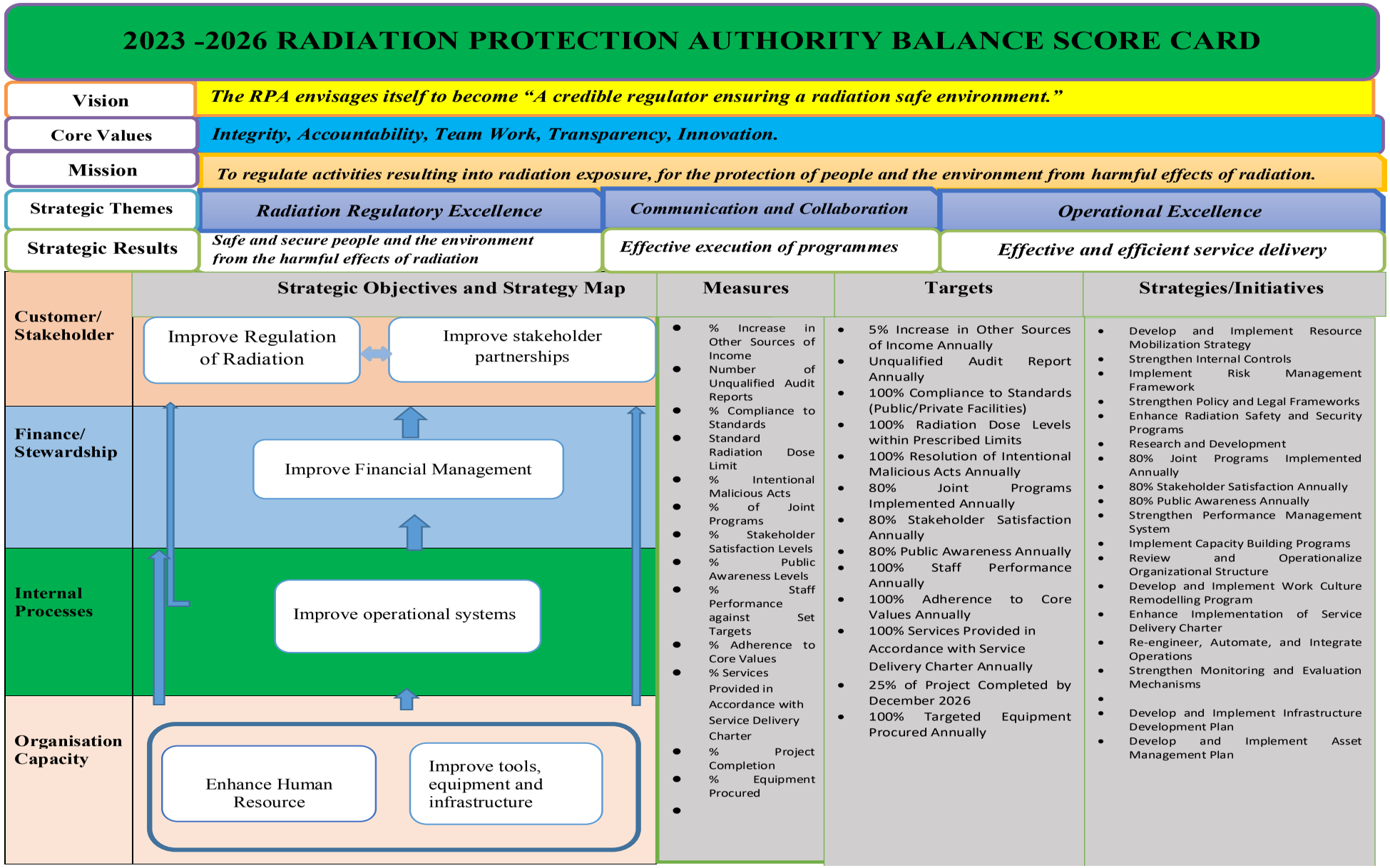
This annual report covers the period from January 1st to 31st December 2024 and highlights the major activities undertaken by the Authority during this period. The mandate of RPA is to protect the public, workers, and the environment from hazards arising from the use of devices or materials capable of producing ionizing radiation.

The mandate is in line with the fundamental safety objective of protecting people and the environment from the harmful effects of ionizing radiation. The functions of the Authority as prescribed in the Ionising Radiation Protection Act No. 16 of 2005, as amended by the Ionising Radiation Protection Act No. 19 of 2011, Part II Section 7 and Part III Section 18, are anchored on the three thematic areas of: radiation regulatory excellence, resulting in safe and secure people and the environment from the harmful effects of radiation; service excellence, resulting in satisfied clients; and operational excellence, resulting in effective and efficient service delivery.

The Authority's modus operandi is informed by a strategic plan as a building block for "A credible regulatory body in protecting people and the environment from harmful effects of radiation." The Authority developed and implemented the 2023–2026 Strategic Plan as a blueprint on which all activities are based.

In order to ensure effective implementation of the 2023-2026 Strategic Plan, the Authority formulated a consolidated institutional work plan for 2024 that comprised activities under each department and unit with clear targets aimed at attaining strategic objectives. A quarterly review process was undertaken to ensure effective implementation and adherence to the plan. A mid-term review of the strategic plan was undertaken, and areas of improvement in terms of implementation were noted and planned for action for the remaining part of the period of the strategic plan. The authority's scorecard is presented below:

Figure 1: RPA Scorecard



NUCLEAR AND RADIATION SAFETY

SAFEGUARDING PEOPLE AND THE ENVIRONMENT FROM THE HARMFUL EFFECTS OF IONISING RADIATION

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2.0 NUCLEAR AND RADIATION SAFETY DEPARTMENT

The Nuclear and Radiation Safety Department has had a productive year in 2024, focusing on enhancing radiation safety compliance across various sectors through the development of comprehensive regulatory frameworks, stakeholder engagement, and effective enforcement actions.

2.1 STANDARDS

During the year under review, the Authority developed several safety guides, regulations, and policies to enhance radiation safety compliance across Zambia. These documents represent significant progress in establishing comprehensive regulatory frameworks for radiation protection in various sectors.

2.1.1 Safety Guides

The following safety guides were developed and published:

- **Safety Guide on Radiation Therapy:** This guide provides comprehensive protocols for medical professionals and facilities on safe practices in radiation therapy procedures, equipment maintenance, quality assurance programs, and patient protection protocols. It addresses both external beam therapy and brachytherapy applications.
- **Safety Guide on Nuclear Gauges**: Establishes standards for industrial applications of nuclear gauges, covering installation, maintenance, calibration procedures, and decommissioning requirements. The guide includes specific radiation protection measures for workers and the public.
- **Safety Guide on Well Logging:** Details safety requirements for radioactive sources used in well logging operations in the mining and petroleum sectors, including source handling, transport, emergency procedures, and record-keeping requirements.
- **Safety Guide on Import and Exports of Radiation Sources:** Outlines procedures and requirements for the safe and legal cross-border movement of radiation sources in compliance with international standards, including documentation requirements, packaging standards, and notification procedures.
- **Safety Guide for Naturally Occurring Radioactive Materials (NORM):** Addresses the management of NORM in mining operations and other industries where these materials may be encountered, including monitoring requirements, waste management, and worker protection measures.

2.1.2 Policies

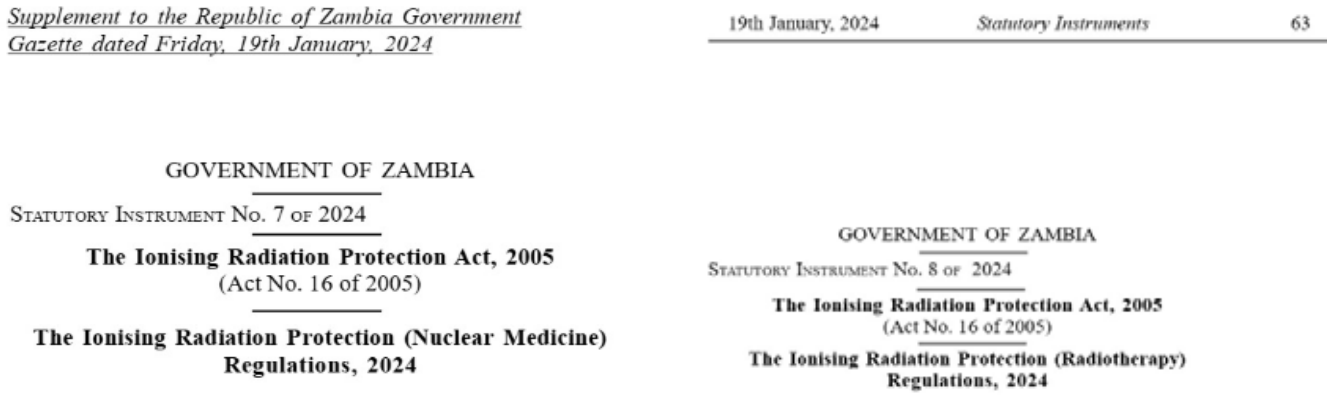
The Authority developed and implemented the following policies:

- **e-Licensing Policy**: Establishes the framework for digital transformation of licensing processes, enabling online applications and renewals for radiation-related permits. This policy aligns with the government's digital transformation agenda and aims to improve efficiency and accessibility.
- **Radiation Protection Strategy for Radiological and Nuclear Emergency Preparedness and Response**: Provides a comprehensive approach to handling radiological incidents, including roles, responsibilities, communication protocols, and coordination mechanisms between various agencies.
- **Guidelines on Requirements for Radiation Protection Officers in Zambia**: Defines qualifications, responsibilities, continuing education requirements, and certification processes for RPOs across different sectors to ensure consistent application of radiation protection principles.

2.1.3 Regulations

Two significant regulations were enacted in 2024 as part of the government's broader strategy to strengthen protection from cancer through nuclear medicine and radiation:

- **Ionising Radiation Protection (Radiotherapy) Regulations, 2024. S.I No 8 of 2024**: Establishes comprehensive requirements for radiotherapy facilities, equipment, personnel qualifications, quality assurance programs, patient protection, and record-keeping requirements.
- **Ionising Radiation Protection (Nuclear Medicine) Regulations, 2024. S.I No 7 of 2024**: Provides regulatory framework for nuclear medicine practices, including diagnostic and therapeutic procedures, waste management, facility design requirements, and radiation protection measures for patients and staff.



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GOVERNMENT OF ZAMBIA

STATUTORY INSTRUMENT No. 7 OF 2024

The Ionising Radiation Protection Act, 2005
(Act No. 16 of 2005)

The Ionising Radiation Protection (Nuclear Medicine) Regulations, 2024

GOVERNMENT OF ZAMBIA

STATUTORY INSTRUMENT No. 8 OF 2024

The Ionising Radiation Protection Act, 2005
(Act No. 16 of 2005)

The Ionising Radiation Protection (Radiotherapy) Regulations, 2024

Figure 2: Enacted regulations

The regulations were signed during a joint media press briefing on March 14, 2024, where the Minister of Technology and Science, Felix Mutati, emphasized the government's commitment to protecting citizens through an established governance-driven compliance framework developed in collaboration with the Ministry of Health and the International Atomic Energy Agency (IAEA).

Figure 3: Photo of the Honourable Minister signing the Regulations

2.2 AUTHORISATIONS

In line with Act No.19 of 2011, the Authority issued a total of 402 licenses in 2024.

The licensing activities show a 50.6% increase compared to the previous year, reflecting growing awareness and compliance with radiation safety requirements across various sectors.

2.3 PHASE I OF e-LICENSING

In the year 2024 the RPA aligned the mandate with the Electronic Act No. 41 of 2021 section 29(1) stipulates that "A public body which, pursuant to this Act or any other law, accepts the filing of documents, or requires that documents be created, written or retained, issues a permit, Licence or provides for a manner of payment, may—

(a) accept the filing of documents in electronic form;

(b) issue a permit, Licence or approval in electronic form;

or (c) make or receive payment in electronic form

The pilot phase of e-licensing was successfully initiated in the third quarter of 2024. A stakeholder engagement meeting was held on the 12th September 2024 to introduce the system to stakeholders and gather feedback for improvements.

Key features of the e-licensing system include:

- Online application submission
- Automated application tracking
- Digital license issuance
- Integrated inspection scheduling

The system is expected to reduce processing time for licenses and improve compliance tracking through automated notifications for renewals.

Figure 4: and 5: Photos taken during the stakeholder consultation meeting

2.4 ENGAGEMENTS WITH STAKEHOLDERS

2.4.1 MoU with Health Professions Council of Zambia (HPCZ)

The RPA signed a Memorandum of Understanding with the Health Professions Council of Zambia to establish a framework for collaboration in regulating medical radiation practices. The MoU focuses on:

- Joint inspections of medical facilities
- Harmonization of licensing requirements
- Information sharing on compliance issues
- Coordination of training programs for medical professionals working with radiation

Figure 6: Photo of the RPA and HPCZ meeting

2.4.2 High-Level Meeting with Hospital Administrators

The Authority conducted a high-level stakeholders' meeting with hospital administrators from both public and private sectors on April 16, 2024, in Lusaka. The meeting included representatives from the Ministry of Health and focused on:

- Compliance requirements for medical radiation facilities
- Introduction of the e-licensing system
- Discussion of common challenges in radiation safety implementation
- Strategies for improving radiation protection culture in healthcare settings

2.4.3 Engagement for Review Nuclear Gauges Safety Guide

The Nuclear and Radiation Safety Department of the Radiation Protection Authority conducted a stakeholder engagement meeting to review the safety guide for nuclear gauges. The session brought together representatives from major mining operations including Kansanshi, Lumwana, and Mopani mines, along with other relevant industry stakeholders, demonstrating the Authority's commitment to collaborative safety standards development in the nuclear sector.

2.4.4 RPO Conference for Medical Facilities

- The Authority successfully organized the 2024 RPO Conference for Medical Facilities from June 17-19, 2024, at the Zambezi Junction lodges in Livingstone. The theme of the conference was "Pioneering Innovative Strategies for Enhanced Radiation Protection and Safety in Health Care." Over 70 Radiation Protection Officers from various medical facilities across Zambia participated in the conference.
- The conference featured presentations from local experts, practical discussions of radiation safety in facilities. Key topics discussed included optimization of radiation protection in diagnostic radiology, quality assurance in radiotherapy, management of radioactive waste from nuclear medicine procedures, and protection of pregnant patients and staff.

Figure 7:,8: and 9: Photos taken during the RPO conference for medical facilities

2.4.5 RPO Conference for Non-Medical Facilities

The second phase of the annual RPO Conference, focusing on non-medical facilities, was held from October 15-17, 2024, at the Zambezi Junction Lodge in Livingstone. The conference featured participants from the mining, industrial radiography, and research sectors, focused on practical approaches to radiation safety in industrial applications.

The conference featured presentations from local and international experts with discussions cantered on safety in industrial radiography, proper use and maintenance of nuclear gauges, transport safety for radioactive sources, and emergency preparedness in industrial settings. The conference also provided a platform for sharing best practices and addressing common challenges faced by RPOs in non-medical facilities.

Figure 10:, 11: Photos taken during the RPO conference for non-medical facilities

2.4.6 National Training for Linear Accelerators in Medical Facilities

The Authority in collaboration with the United States Nuclear Regulatory Commission (USNRC), conducted specialised training on regulatory oversight of Linear Accelerators (LINACs) used in medical facilities from October 21-25, 2024. The training targeted RPA inspectors, medical physicists, and radiation oncology professionals involved in the use and regulation of LINACs.

The training covered technical aspects of LINAC operation, quality assurance protocols, safety features, potential failure modes, and regulatory approaches to ensuring safe operation. With the increasing use of advanced radiotherapy equipment in Zambia, this training was crucial in building local capacity for effective regulation and safe use of these technologies.

Figure 12: Group Photo taken during the National Training for Linear Accelerators in Medical Facilities

2.4.7 International Regulatory Cooperation

2.4.7.1 MoU with the Malawian Atomic Energy Regulatory Authority

The RPA signed a Memorandum of Understanding with the Malawian Atomic Energy Regulatory Authority focusing on:

- Exchange of technical information and expertise
- Harmonization of regulatory approaches
- Joint training initiatives
- Coordination of cross-border radiation monitoring
- Mutual assistance in emergency situations

2.4.7.2 Bilateral Meeting with Tanzania Atomic Energy Commission

The Authority held bilateral meetings with the Tanzania Atomic Energy Commission (TAEC) on July 22-23, 2024, at the Tunduma/Nakonde border. The discussions focused on establishing cooperation in several areas: - Safety and Security of nuclear and radioactive materials - Joint research in nuclear science and technology - Radioactive waste management - Environmental radiation monitoring - Radiation protection - Nuclear instrumentation and maintenance - Human resources development - Nuclear technology applications The Tanzanian delegation was led by Prof. Najat Kasim Mohammed, Director General for TAEC, while the Zambian delegation was led by Ms. Melody M. Nsofwa, Director for Nuclear and Radiation Safety.

Figure 13: Photo of the meeting between Tanzania Atomic Energy Commission and Radiation Protection Authority

2.5 NUCLEAR SAFETY, SECURITY AND SAFEGUARDS

2.5.1 Radiation Screening of Trucks and IT Vehicles

The Authority conducted extensive radiation screening at border points throughout 2024 and the Table below shows the number of Trucks and IT vehicles screened in the year 2024.

Table 1.0: Radiation screening activities at border points in 2024

Quarter	Chingola	Chirundu	Katete	Livingstone	Nakonde
First Quarter	3,286	2,366	-	4,308	19,554
Second Quarter	5,250	2,322	-	7,289	16,865
Third Quarter	11,005	4,078	653	6,061	10,696
Fourth Quarter	14,207	4,004	934	8,607	13,624
Annual Totals	33,748	12,770	1,587	26,265	60,739

Figure 14: Inland officers

2.5.2 Table Top Exercise on Transport Security

A regional table top exercise on transport security was conducted involving representatives from Zambia, Botswana, and the Democratic Republic of Congo. The exercise simulated various scenarios related to the secure transport of radioactive materials across borders.

The exercise identified key areas for improvement in cross-border coordination, communication protocols, and response procedures. The exercise, supported by the International Atomic Energy Agency (IAEA), simulated various scenarios involving the transport of high-activity radioactive sources across borders.

Participants worked through practical challenges in communication, coordination, and response to security threats or accidents involving radioactive materials in transit. The exercise highlighted the importance of harmonized procedures, shared information systems, and coordinated response mechanisms among neighboring countries to ensure effective security of radioactive materials during international transport.

Figure 15: Participants pose for a photo

Figure 16: Group photo take during the Table Top Exercise on Transport Security

2.5.3 Collaboration with Zambia Revenue Authority

2.5.3.1 Incorporation of RPA on the ZRA ASYCUDA System

A significant milestone was achieved with the successful integration of the RPA into the Zambia Revenue Authority's Automated System for Customs Data (ASYCUDA) in April 2024. This integration allows for automatic detection when goods of interest from a radiation safety perspective are being imported or exported, enabling more efficient screening and regulatory oversight.

The system integration has significantly improved the efficiency of import/export control of radiation sources. Additionally, it has enhanced data accuracy and reporting capabilities for both authorities. On April 14, 2024, the Radiation Assessment Fee began to be collected by the Zambia Revenue Authority on behalf of the Radiation Protection Authority, further streamlining administrative processes

2.5.3.2 Memorandum of Understanding with ZRA

On April 11, 2024, the Authority entered into a 5-year Memorandum of Understanding with the Zambia Revenue Authority to promote public safety through:

- Effective regulatory control of imports and exports of radiation sources
- Monitoring of goods for detection of contamination and materials out of regulatory control - Information sharing on alerts and detection alarms
- Training of frontline officers in radiation protection
- Research and development in radiation protection
- A coordinated response system to alerts related to illicit trafficking

2.5.3.3 Streamlined Radiation Assessment Fee Collection

Effective April 19, 2024, radiation assessment fees began to be collected by the ZRA through the Zambia Electronic Single Window (ZESW) system. This transition aligns with the provisions of the World Trade Organization Trade Facilitation Agreement ratified in December 2015, specifically Article 10.4 (Single Window), streamlining processes and promoting efficiency in cross-border trade.

2.5.4 Operationalization of Radiation Inland Screening Points

Figure 17: RPA Officers screening trucks for radiation

2.5.4.1 Chingola

The Chingola Inland Radiation Screening Facility was fully operationalised in February 2024, equipped with radiation detection equipment to monitor vehicles traveling along the Copperbelt transit route. The facility significantly enhanced the Authority's capability to detect illicit movement of radioactive materials along this busy corridor and provided support to mining companies in the region.

2.5.5 Operationalization of the Katete Office

In July 2024, the Authority officially opened its Katete Office, which includes a radiation screening facility for vehicles traveling along the Great East Road corridor. The establishment of this office represents a significant step in extending the Authority's presence to the Eastern Province, enabling more effective regulation and monitoring of radiation sources in the region.

A team of six staff members, including radiation safety officers and technical support personnel, was deployed to operate the facility.

Figure 18: and 19: Inland officers during screening of trucks at checkpoint

2.5.6 Awareness and Security Trainings

2.5.6.1 Zambia Revenue Authority Training

In collaboration with the Zambia Revenue Authority, the RPA conducted security awareness training at the with the Zambia Revenue Authority. The training focused on:

- Recognition of radiation warning symbols and packaging
- Basic radiation detection techniques
- Response procedures for suspected radioactive materials
- Notification protocols for the national response system

Figure 20:, 21:, 22:, 23: and 24: Group Photos taken during the Zambia Revenue Authority Training

2.5.6.2 National Workshop with USNRC on Uranium Recovery Regulation

From June 25-28, 2024, the Authority, in collaboration with the USNRC, organized a national workshop on regulation of uranium recovery operations. The workshop brought together representatives from the mining sector, regulatory bodies, and academic institutions to discuss regulatory approaches to uranium mining, processing, and transportation.

Key topics covered included environmental impact assessment, radiation safety in mining operations, waste management, and regulatory oversight mechanisms. The workshop was particularly relevant given the increasing interest in uranium exploration in Zambia and the need to ensure appropriate regulatory frameworks are in place before large-scale extraction begins.

2.5.6.3 Second USNRC Regional Capacity Building Meeting

The Second USNRC Regional Capacity Building Meeting was hosted by the Authority in February, 2024, in Lusaka at the Radison Blu Hotel. The meeting brought together representatives from regulatory authorities across Southern and Eastern Africa to discuss common challenges and share experiences in regulating various applications of radiation source

Figure 25: and 26: Participants during the meeting

Specific focus areas included regulatory approaches to medical applications, industrial radiography, well logging, and nuclear gauges. The meeting contributed to harmonization of regulatory practices across the region and strengthened professional networks among regulatory authorities.

Figure 27: Participants pose for a photo

Figure 28: RPA Executive Director delivers his speech during the official opening ceremony

2.5.6.4 Regional Workshop on IAEA Nuclear Safeguards Reporting Obligations

In September 2024, the Authority hosted a regional workshop on IAEA Nuclear Safeguards Reporting Obligations held in Livingstone at the David Livingstone Safari Lodge. The workshop provided detailed guidance on fulfilling international reporting obligations under various treaties and agreements, including the Non-Proliferation Treaty and Additional Protocol.

Figure 29: Participants pose for a photo

2.5.6.5 Incidents

During 2024, the Authority responded to several incidents involving radioactive materials:

NORM Truck Incident: A truck carrying scrap metal triggered radiation alarms at a border post. Investigation revealed naturally occurring radioactive materials in mineral samples mixed with the scrap. The material was isolated, properly packaged, and transported to a licensed storage facility.

Source Recovery: On May 18, 2024, the Authority intercepted a truck carrying mealie meal from South Africa to DRC with a Cesium-137 gauge. The vehicle was intercepted in Livingstone, and the driver was handed over to the Police for questioning. The radioactive material was taken into custody by the Authority for further investigation, demonstrating the effectiveness of the border monitoring systems.

2.5.6.6 Search and Secure Basic (SSB) Training Course

The Authority participated in the Search and Secure Basic (SSB) Training Course held at the Radisson Blu Hotel in Lusaka from August 5–9, 2024. The training workshop brought together local and regional participants from various stakeholders and regulatory authorities responsible for the control of radioactive materials outside of regulatory control. The Office of Radiological Security from the United States of America conducted the training, which was aimed at equipping participants with knowledge on how to locate, identify, and secure radioactive sources. This training strengthens the Authority's capacity to respond to situations involving orphaned or illicit radioactive materials and aligns with international best practices in radiological security.

Figure 30: Participants pose for a photo

2.5.7 Engagement with ZCCM-IH(METS), ALFRED H KNIGHT AND KITWE TEACHING HOSPITAL

As part of the enhancing Radiation Safety Awareness, The Authority held engagement meetings with Management Alfred H Knight, ZCCM-IH(METS) and Kitwe Teaching Hospital.

Figure 31: Participants pose for a photo

Figure 32: 33: Photo of the engagement meeting with Alfred H Knight Senior Management, RPA Board Members and Management

Figure 34: Photo engagement meeting with ZCCM-IH(METs)

2.5.8 Engagement and Familiarization tour of the PS and Director Science and Technology at MOTs

The Radiation Protection Authority, led by Executive Director Dr. Boster Dearson Siwila, conducted a mine inspection at Mopani Copper Mine alongside Ministry of Technology and Science Permanent Secretary Dr. Brilliant Habeenzu. The delegation, which included RPA Board Members, Director for Science Dr. Larry Mweetwa, and Director for Nuclear and Radiation Safety Mrs. Melody Mwewa Nsofwa, was briefed on mine safety improvements. Dr. Habeenzu announced the government's ongoing revision of the Radiation Protection Act to enhance enforcement capacity and harmonize it with environmental management legislation.

Figure 35: ED, PS during the inspection at mopani

2.5.9 IAEA General Conference

The Radiation Protection Authority, represented by Executive Director Dr. Boster Dearson Siwila, participated in the 68th IAEA General Assembly in Vienna where Permanent Secretary Dr. Brilliant Habeenzu reaffirmed Zambia's commitment to peaceful nuclear technology applications. The delegation included Director of Science Dr. Larry Mweetwa and NISR CEO Dr. Henry Kambafwile.

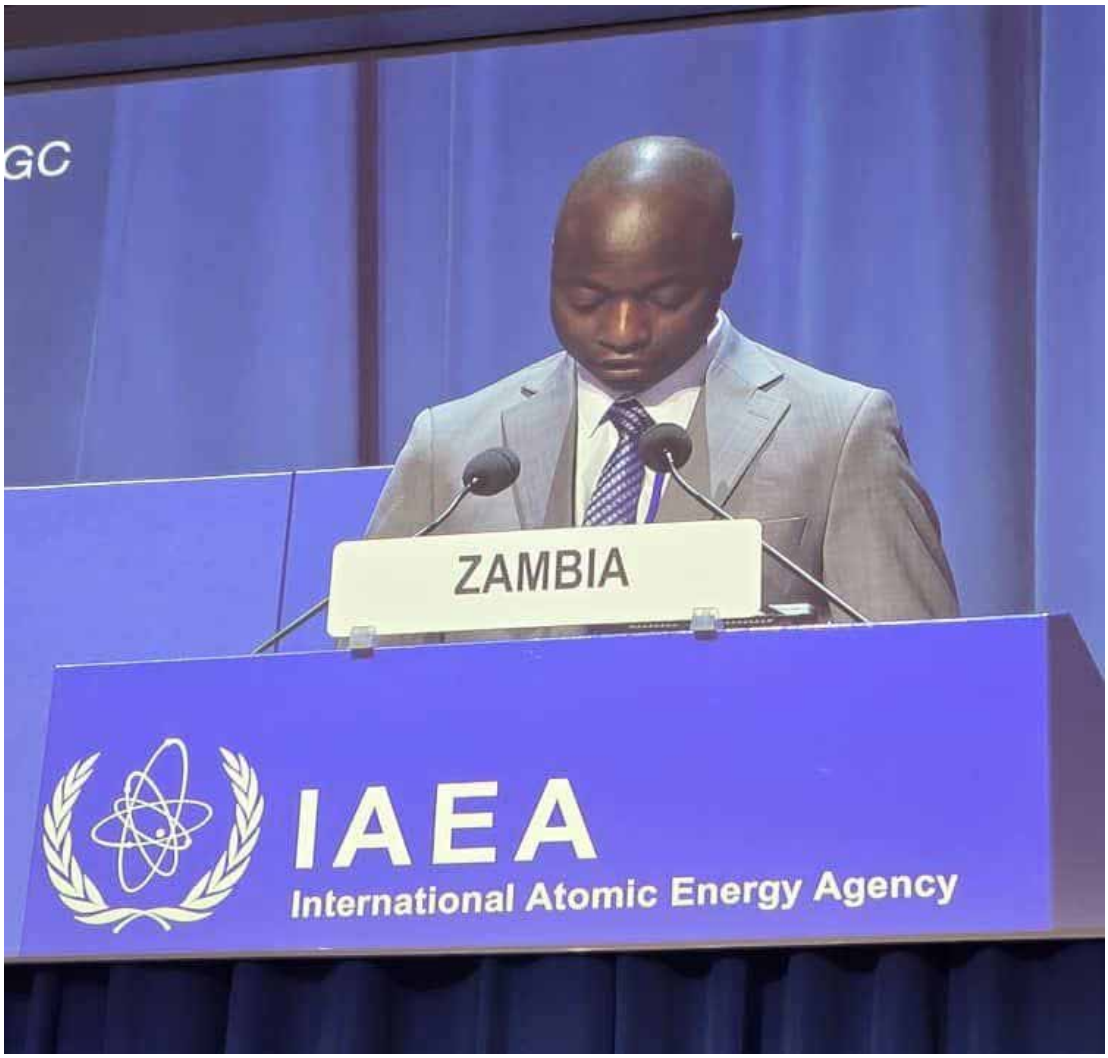

Figure 36: Permanent Secretary Dr. Brilliant Habeenzu delivers his remarks during the conference

2.5.10 MINISTERIAL CONFERENCE IAEA

The Radiation Protection Authority, represented by CEO Dr. Booster Dearson Siwila, participated in an IAEA conference in Vienna alongside Permanent Secretary Dr. Brilliant Habeenzu. The delegation highlighted nuclear technology's critical role in early zoonotic disease detection, supported the IAEA's ZODIAC initiative, and promoted Zambia's research capabilities through institutions like ACEIDHA. Other officials present included Dr. Larry Mweetwa, Mr. Trevor Sichombo, Mr. Paul Mbewe, and Mr. Mathias Tembo.

Figure 37: RPA Executive Director during the Conference poses for a picture with the Permanent Secretary

2.5.11 Participation in the International Atomic Energy Agency RAF 9070 Project

As part of strengthening the Technical Corporation with International Atomic Energy Agency, Zambia Through the Radiation Protection Authority participated in the first coordination meeting of the RAF9070 project titled enhancing the Radiation Safety Infrastructure project. The meeting was held in Abuja, Nigeria from the 13th to the 17th May 2024. The Executive Director of the RPA Dr. Boster Dearson Siwila represented the country

Figure 38: Participants pose for a photo

2.6 INSPECTIONS

The Authority carried out 415 inspections in 2024, distributed across all provinces:

Table 2.0: Planned Inspections conducted in 2024

No.	Inspections per Province	Total Number
1.	Lusaka	189
2.	Copperbelt	76
3.	Northern	16
4.	Muchinga	12
5.	Western	18
6.	Luapula	13
7.	Central	15
8.	Eastern	20
9.	North Western	25
10.	Southern	31
Total		415

These inspections covered various facilities including hospitals, industrial sites, mining operations, research institutions, and border points. The inspections focused on:

- Compliance with regulatory requirements
- Implementation of radiation protection measures
- Adequacy of safety equipment and procedures
- Competence of radiation protection officers
- Records management and documentation

2.7 RADIATION SOURCE INVENTORY

The Nuclear and Radiation Safety Department of the Radiation Protection Authority successfully initiated the first phase of its source inventory verification program in the fourth quarter. This important regulatory activity was completed across four provinces - Northern, Luapula, Western, and Muchinga - establishing a foundation for comprehensive national radioactive source tracking and verification to enhance radiation safety compliance across Zambia.

Table 3.0: National radiation source inventory for 2024

No.	Radiation Sources/Activity	Total Number
1.	**Radiation Emitting Devices**	**62**
2.	**Radioactive Materials**	**2**

The inventory provides an essential baseline for monitoring radiation sources in the country and ensures that all sources are properly registered and accounted for.

Figure 39: source verification tags

2.8 NON-COMPLIANCES

During the year under review, the Authority conducted enforcement actions for various non-compliances which varied from warning letters to sealing off of the radiation sources. The most common non-compliances included:

- Operation without valid licenses
- Failure to implement adequate radiation protection programs
- Inadequate training of radiation workers
- Improper storage of radioactive materials
- Deficiencies in record-keeping and documentation

Figure 40: Pictures showing radiation sources sealed by the Authority

RADIATION PROTECTION AUTHORITY

Technical Services Department

3.0 TECHNICAL SERVICES

The Technical Services Department of the Radiation Protection Authority provides radiation laboratory services and radiation protection technical support in order to facilitate the implementation of radiation protection and nuclear safety programmes. In addition, the department guides licensees on how to comply with the national and international safety standards which allow for the protection of the public, workers and the environment from hazards arising from the use of devices or materials capable of producing ionising radiation. The provision of these services and technical support is in line with the functions of the Authority under section seven (7) and section eighteen (18) of the Principle Act.

3.1.1 RESEARCH AND DEVELOPMENT

The R&D section is responsible for conducting research in nuclear safety, radiation safety, radiation protection, nuclear security, and safeguards to enhance regulatory control of nuclear and other radioactive materials and improve efficiency in the regulatory processes in nuclear science and technology and coordinating research for the Authority to make informed decisions. The section also develops and implements radiation protection training programs to ensure radiation users comply with safety requirements. The purpose of the training program is to sensitize and educate members of the public and licensees on radiation protection and safety matters to enhance safety and improve compliance with the safety requirements.

ACTIVITES

3.1.2 Research on the cause of non-compliances in medical facilities

The purpose of the study was to investigate the major causes of non-compliances among the medical facilities using radiation source. The study was based on routine Figure 41 below shows the major causes on non-compliance in the facilities..

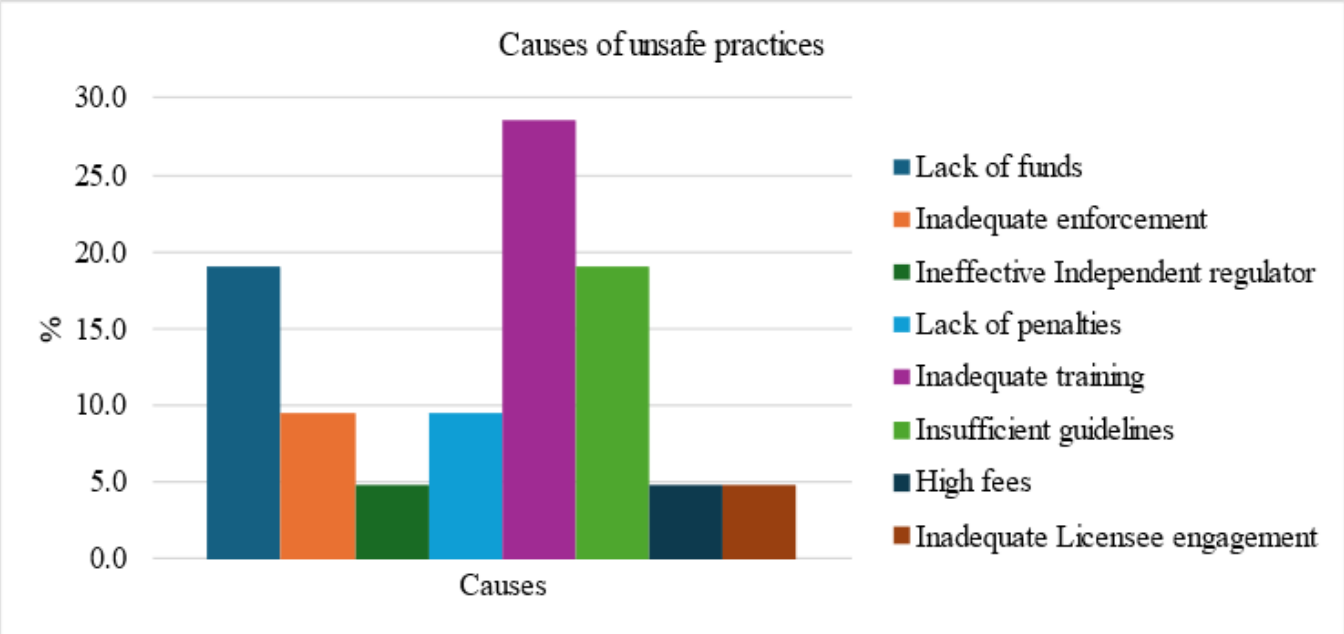

Figure 41: Causes of non-compliance

3.1.3 Screening of radioactivity in food products

The Radiation Protection Authority is mandated by the Ionising Radiation Protection Act No. 16 of 2005 and its Amendment Act No. 19 of 2011 to protect workers, members of the public and the environment from the harmful effects of ionizing radiation. Section 18 (3) (e) of the Act empowers the Authority to monitor imported and local foodstuffs to detect any potential contamination with radioactive material. In view of the above, the R&D Section assessed radiological risks arising from the food stuffs consumed by members of the public from the following districts.

Seventeen (17) samples of commonly eaten foods were collected from five (5) different districts: Isoka, Chinsali, Mafinga, Solwezi, and Mpika. All the samples were locally produced and were purchased from the local market in the central zones of each district. The activity concentration, 226Ra, 232Th and 40K in the seventeen samples of the food study of vegetables and six samples of fruits was undetectable.

3.1.4 Training

The section conducted a total number of 27 trainings in radiation protection and safety of radiation sources. The trainings aimed to impart knowledge on radiation protection and safety of radiation sources to occupationally exposed workers in accordance with the Ionising Radiation Protection Act No. 16 of 2005 and its Amendment Act No. 19 of 2011.

Figure 42: RPA trainers with China Henan workers posing for a photo at the end of the training, January 2024

Figure 43: Training session at Grizzly Mining, September 2024

Figure 44: Conclusion of the training at Grizzly Mining in Lufwanyama, September 2024

Figure 45: Training Session at Grizzly Mining in Lufwanyama, September 2024

Figure 46: Trainers posing for a photo after issuance completion of the training at Sandstone Consortium in Lumwana West in December 2024

Figure 47: Radiation Protection Training held Wilmar Industries Zambia Limited in Ndola, July 2024

Figure 48: Training session at Mingomba Mining Ltd, September 2024

Figure 49: After Closing Ceremony

3.1.5 RPA symposium

Nineteen Symposium were held from January – December 2024. The purpose of the RPA symposium is for RPA staff share and learn about RPA activities including knowledge transfer on technical issues, regulatory functions of the authority and other non-technical information. Sixteen symposiams were conducted in 2024 according to the topics shown in Table 4 . In the future the symposium will be open to members of the public.

Table 3: 2024 Symposium

S/N	Symposium topic
1.	End user requirements for procurement – procurement
2.	The need for rpa symposium – research and development
3.	Conditions of services for staff - corporate services
4.	Non-compliance trends in medical facilities - research and development
5.	Network of front line officers
6.	Search and secure of radioactive materials
7.	Security of radioactive material in transport
8.	Hands-on training for domestic inspectors
9.	Nuclear safeguards
10.	Occupational radiation protection optimisation in industrial and medical applications
11.	Cost estimation and financing for decommission
12.	Iaea requirements on education and training
13.	Rpa legal framework
14.	Legacy sites for uranium and management
15.	Transport security of radioactive material
16.	Occupational radiation protection optimisation in industrial and medical applications

Summary

Table 4: Summary of R&D activities in 2024

Area	Quantity
Training	27
R&D	2
Symposium	16

3.2 Dosimetry and Instrumentation Section

Pursuant to Part 3 section 18 of the Principal Act, workers that are exposed to ionizing radiation are to be monitored by RPA for radiation exposure. This task is the responsibility of The Dosimetry & Instrumentation Section and it is achieved by estimating the radiation dose absorbed by the human body using devices called TLDs. Through this means, the section ensures that workers and students that are exposed to ionizing radiation do not exceed the prescribed dose limits by periodically monitoring the amount of ionizing radiation that they are exposed to during the course of their work.

The Section also bears the responsibility of ensuring that all equipment used by RPA staff for radiation protection inspections, enforcements, radiation surveys, radiation dose mapping, radiation dose monitoring and any other kind of consultation are calibrated and well maintained so as to ensure accuracy and consistency in all measurements.

In 2024, the Authority monitored 1,613 Occupationally Exposed Workers (OEW) and 322 Radiation Students over the course of the year. This corresponds to a total number of 598 TLD dosimetry reports for occupationally exposed workers from 299 licensed facilities. Furthermore, to ensure that all occupationally exposed workers within the Authority's jurisdiction are being monitored, a total of 1,250 TLD badges were procured over the course of the year.

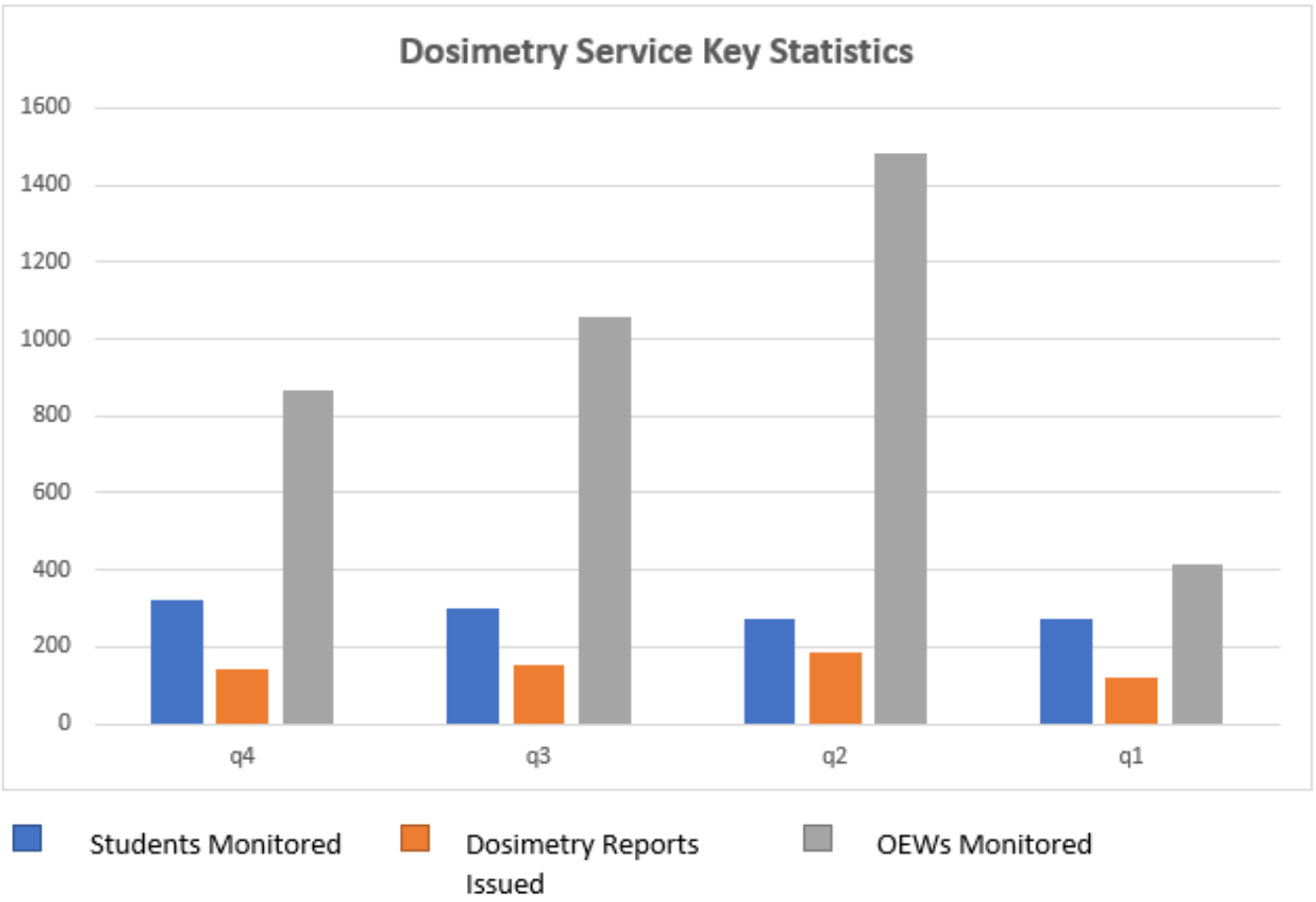

Figure 50: dosimetry services

Table 5: Dosimetry Services Key Statistics

	Q4	Q3	Q2	Q1
Students	322	300	275	275
Dosimetry Reports Issued	141	154	185	118
OEWs Monitored	864	1056	1485	416

During 2024, RPA was able to bolster its detection capabilities and architecture through the acquisition of brand-new state-of-the-art radiation detection equipment. Consequently, the section received a total of twenty-nine (29) radiation detectors and associated accessories that comprised of three (3) Radiagem 2000 Environmental Kits, two (2) AlphaGUARD radon monitors, one (1) SPIR-Ace RIID, six (6) Radeye PRDs, one (1) Telescopic Probe, one (1) Swipe Counter and one (1) Field Scaler among other notable devices as shown below.

Table 6: Equipment Acquired in 2024

Name of Equipment	Quantity	Image	Purchased By
SPIR-Ace Radionuclide Identification Device (RIID)	1		USA DOE

RadEye Personal Radiation Detector	5		USA DOE
Radiagem 2000 Survey Meter	3		USA DOE
SAB-100 Alpha/Beta Probe	3		USA DOE
SABG-15+ Alpha/beta/ gamma probe	3		USA DOE
SG-2R gamma probe	3		USA DOE
Audio-R headset	3		USA DOE

TELE-STTC telescopic probe	1		USA DOE
Thermo PackEye backback	1		USA DOE
Ludlum Swipe Counter	1		USA DOE
Ludlum Field Scaler	1		USA DOE
RadEye SPRD	1		IAEA
AlphaGUARD Radon Monitor	2		ZMERIP & RPA

AT6103 Mobile Radiation Scanning System	1		ZMERIP
Radiation Contamination Meter	1		ZMERIP

3.3 Environmental Protection Section

The Environmental Protection Section under TSD is charged with the responsibility of monitoring radioactivity in the environment, food stuffs, agricultural inputs and any other products in order to protect the people and the environment from detrimental effect that may arise from the use of ionizing radiation. During the period under review, the section conducted environmental radioactivity monitoring in water and food, radionuclide dose mapping, radon monitoring, sealed radioactive source leak testing and laboratory analysis of samples. Furthermore, the section had the Zambia Mining and Environmental Remediation and Improvement Project (ZMERIP), funded by the World Bank, with the aim of conducting the radiological risk assessment in the Copperbelt province. The project was conducted in collaboration with the National Institute for Scientific and Industrial Research (NISIR). During the period under review, the section conducted among other activities as outlined below;

3.3.1 Environmental Radioactivity Monitoring

The Environmental Protection Section collected water samples in North-Western Province for environmental radioactivity monitoring. The water samples were collected from streams, rivers, boreholes and taps in Lumwana, Chavuma, Ikelenge, Mwininlunga, Kalumbila, Solwezi and Kasempa districts of Northwestern Province. In this vein, the analysis of the water samples has since commenced.

3.3.2 Radioactivity Monitoring in Food

Similarly, food samples were collected in North-Western and Muchinga provinces, for the purpose of establishing a radioactivity baseline survey in food which will serve as a standard in food monitoring. Radioactivity in food baseline survey typically involves measuring levels of radioactive contaminants in various food items to establish baseline data. This is essential for monitoring food safety and assessing health risks associated with the consumption of contaminated foods. The survey is also vital for ensuring that food supplies are safe for consumption, especially in areas that might be affected by nuclear incidents or natural background radioactivity.

3.3.3 Radionuclide Dose Mapping

Furthermore, the radiation dose mapping activity was conducted in all the districts of North-Western, Western and Muchinga Provinces. Radiation dose mapping was conducted in a total of Thirty-six (36) districts in the third quarter of 2024. The radiation dose rate measurements for this activity ranged from 0.1µSv/h to 0.21µSv/h, 0.06µSv/h to 0.17µSv/h and 0.06µSv/h to 0.20µSv/h for North-Western, Western and Muchinga Provinces respectively. The maps for the radiation dose mapping that was conducted in 2024 are as shown below:

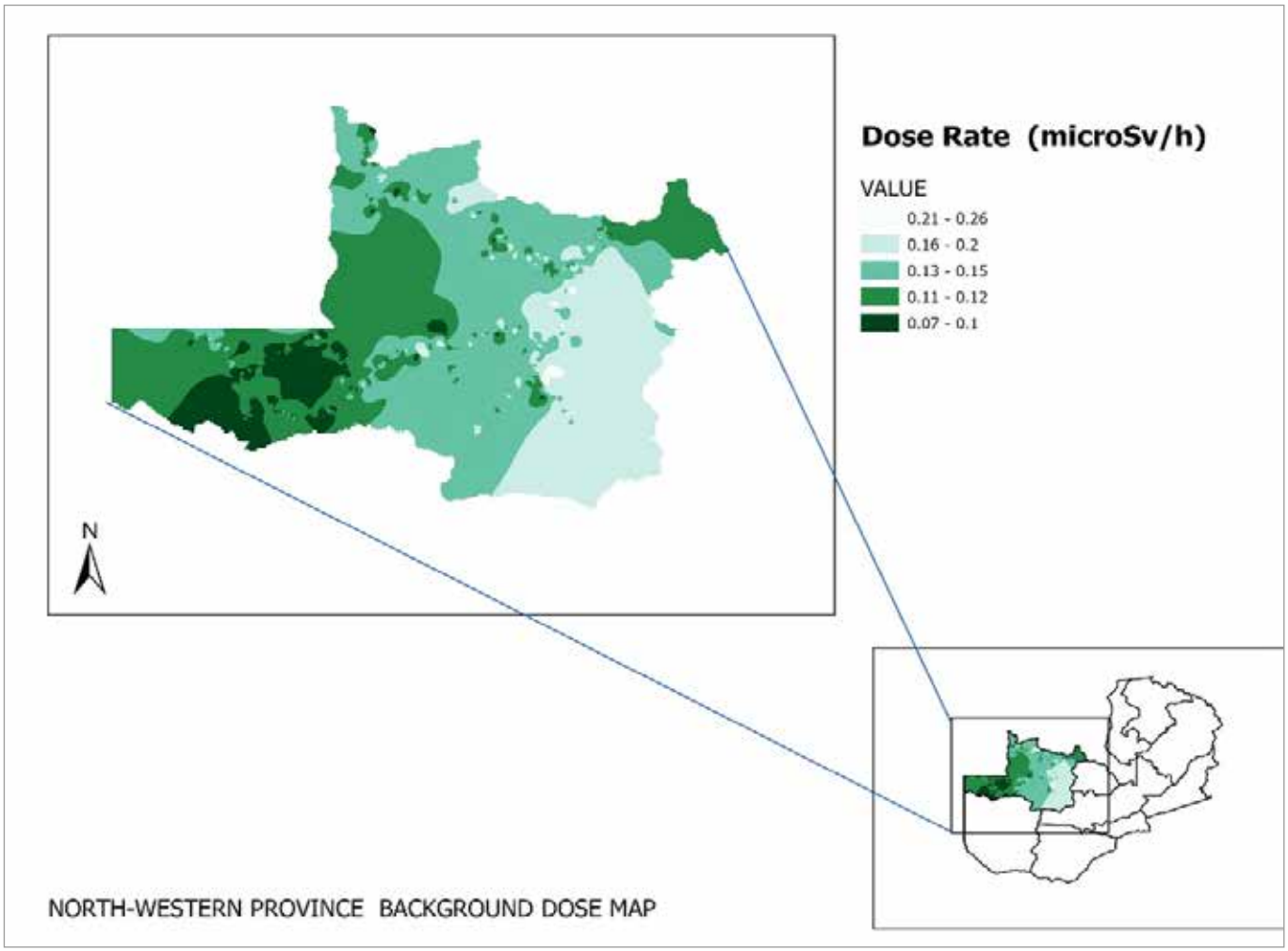

Figure 18: Radiation dose map for Northwestern Province

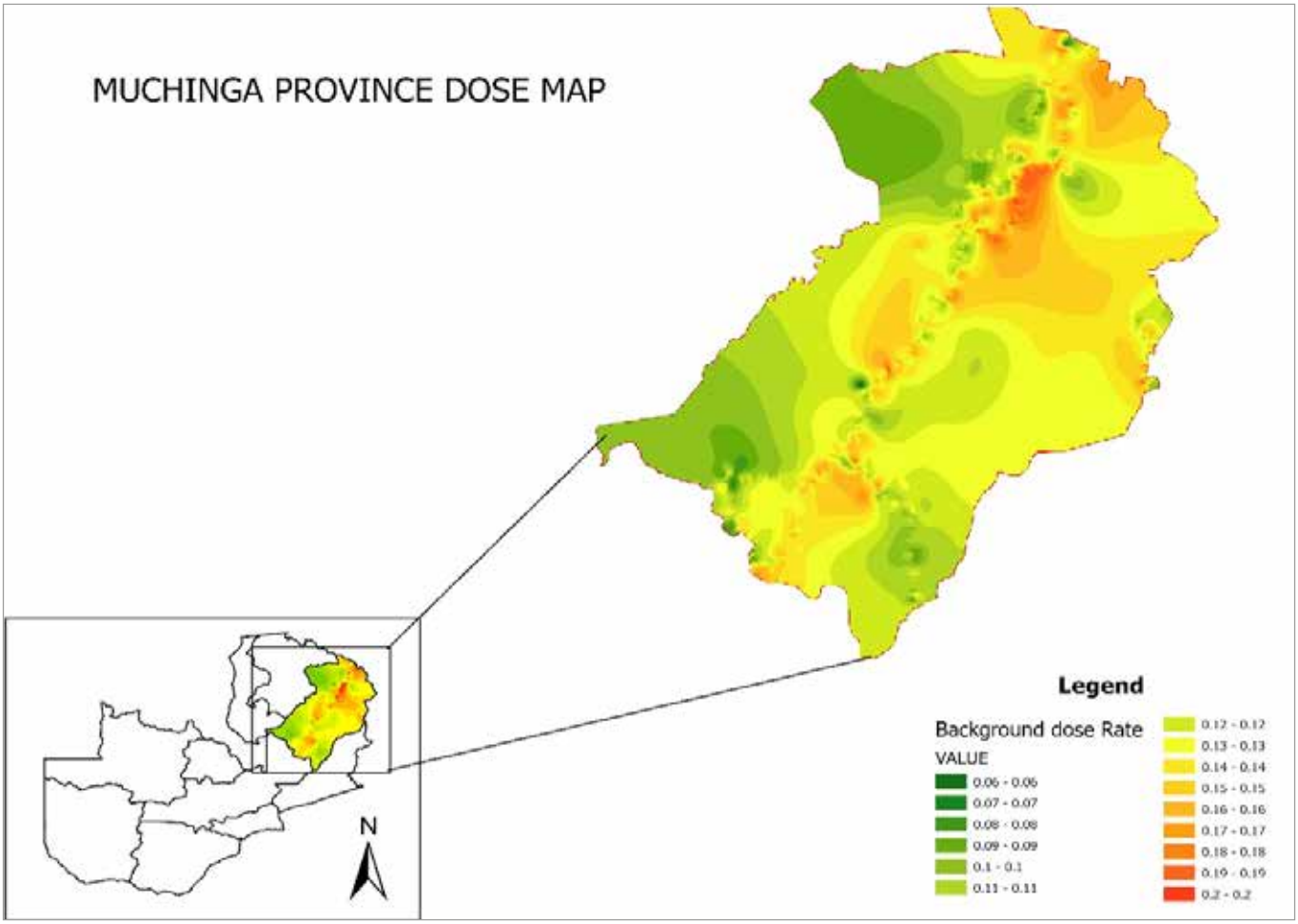

Figure 19: Radiation dose map for Muchinga Province

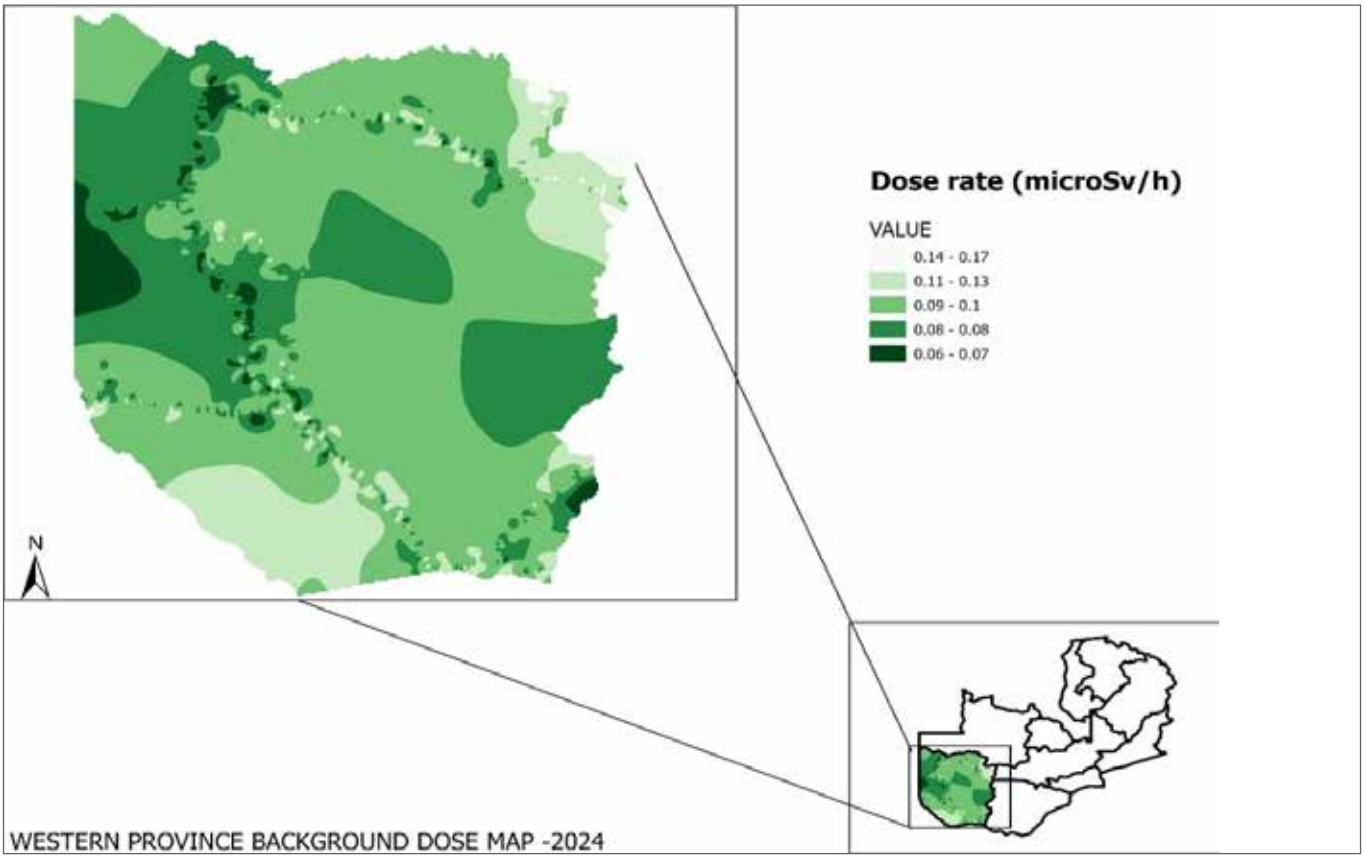

Figure 51: Radiation dose map for Western Province

3.3.4 Radon Monitoring

Additionally, the section commenced radon monitoring in underground mines on the Copperbelt Province. This follows the procurement of equipment by both RPA and ZMERIP. The activity is aimed at guaranteeing the safety of underground miners from the harmful effects of radon gas. The exercise started with Mopani Copper Mines Plc Kitwe and Mufulira and will be extended to other underground mines.

Figure 52: RPA officers and Mopani workers pose for a photo after conducting radon monitoring at the Central Mine Shaft in Kitwe.

3.3.5 Laboratory Analysis

In 2024, RPA officers analyzed a total of 99 laboratory samples. The Environmental section examined a diverse range of specimens, including chemical and organic fertilizers for agricultural use, as well as environmental and mining exploration samples, to ensure the safety of the public and the environment. Table 6 below provides a detailed summary of the laboratory analyses conducted during the year.

Table 7: Summary of Laboratory Analysis for year end 2024

No.	Activity Description	2024 Q1	2024 Q2	2024 Q3	2024 Q4	Total
1.	Urea Fertilizer	17	23	2	3	45
2.	D Compound Fertilizer	16	18	2	2	38
3.	Muriate of Potash Fertilizer		3		1	4
4.	Mono Ammonium Phosphate Fertilizer		1			1
5.	Calcium Ammonium Nitrate Fertilizer	2	5			7
6.	Ammonium Sulphate Fertilizer		3			3
7.	Manganese Ore	1				1
8.	Tin Ore			1		
Total Samples Analysed						**99**

3.3.6 Leak Test

In accordance with the requirements set forth by the Ionising Radiation Protection License, all licensees under the Radiation Protection Authority (RPA) who possess radiation sources are required to perform regular leak testing to safeguard both individuals and the environment from potential dangers linked to ionizing radiation. This essential procedure verifies the integrity of the radiation source shielding, thus reducing the risks of exposure. During the reporting period of 2024, a total of 382 radiation sources underwent leak testing across various industrial and mining organizations. All inspected radiation sources exhibited no evidence of leakage, confirming compliance with established safety standards. Subsequently, clearance certificates were issued to each entity, affirming their adherence to regulatory requirements and the safe operational status of their radiation equipment. A detailed summary of the facilities and sources leak tested is provided in Table 7 below.

Table 8: Summary of leak test for 2024

No.	Activity Description	2024 Q1	2024 Q2	2024 Q3	2024 Q4	Total
1.	Kalumbila First Quantum Minerals	85				115
2.	Lubambe Copper Mine	11				
3.	Chambishi Copper Smelters	5				
4.	CNMC Luanshya Copper Mine	12				
5.	Zhongmei Engineering Group Ltd	1				
6.	Mpande Limestone Limited		1			7
7.	Parrogate Ginneries Limited		3			
8.	Mabiza Resources Limited		3			
9.	Kansanshi Mining Plc				165	266
10.	NFCA Mining Plc				35	
11.	Dangote Industries Zambia Limited				9	
12.	Mopani Copper Mines				57	
Total Number of Radiation Sources Leak Tested						**382**

3.3.7 Zambia Mining and Environment Remediation and Improvement Project

The government of Zambia with the support from the World Bank introduced the Zambia Mining and Environment Remediation and Improvement Project. The aim of this project to mitigate environmental damage from mining, improve land use, and enhance community livelihoods affected by mining activities in Zambia. It sought to promote sustainable mining practices and restore areas impacted by mining activities. The project commenced in 2015 and was expected to run for a period of five (5) years. However, the project duration was extended and it ended in June 2024. The role of RPA in this project was to conduct radiological risk assessment in the mining towns of the Copperbelt province to ascertain the radiation risks to communities living in these mining areas. RPA in collaboration with NISIR conducted radiological risk assessments in Chingola, Chambishi, Luanshya, Mufulira and Kitwe townships. Three (3) state of the art equipment namely; Radon Monitoring, Radiation Area Monitor and Radiation Contamination Meter were procured under ZMERIP in 2024.

CORPORATE SERVICES

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4.0 CORPORATE SERVICE UNIT

The Corporate Services Unit exists to render comprehensive Human Resource and Administration functions in order to enhance service delivery and the welfare of all employees.

The unit endeavours to help the Authority capture the full value in all its operations through provision of these cross functional areas of Human Resource Management, General Administration, Information Communication and Technology (ICT), facilitating for Integrity Committee programs, and the Public Relations.

4.1 HUMAN RESOURCE AND ADMINISTRATION SECTION

In the year 2024, the Radiation Protection Authority's Board approved the addition of 50 new positions of Nuclear and Radiation Safety Technologist under the Nuclear Radiation Safety Department, strengthening regulatory oversight and compliance.

Further, a new inland office was established in Katete, while the Kasumbalesa office was relocated to Chingola to enhance operational efficiency and service accessibility.

In compliance with the government's directive to reduce the number of agencies physically operating at the boarders through the Coordinated Border Management System (CBM), the Authority staff moved inland at strategic locations to conduct assessments, ensuring continued regulatory operations and inland presence.

These developments reflect the Authority's commitment to enhancing human resource capacity, operational efficiency, and regulatory compliance.

Staff Establishment

The total Staff Establishment in the year 2024 was 139. The Authority staff level for the filled positions as of December 31st 2024, was 67. The Authority recruited a total number of Fifteen (15) staff to complement the existing staff establishment. The recruited staff were in the positions of Nuclear and Radiation Officer (2); Nuclear and Radiation Safety Technologist (11); Senior Human Resources and Administration Officer (1); and Radiation Scientist (1).

The table below shows the positions filled and the RPA structure variance as of December 31st 2024.

Table 9: staff establishment

S/N	Department	Approved Establishment	Actual as of December 31st, 2024	Separation from the Authority	Variance
1.	Executive Directors Officer	2	2	1	0
2.	Technical Services	21	10	1	11
3.	Nuclear & Radiation Safety	79	29	1	50
4.	Corporate Services	18	13	1	5
5.	Finance	12	8	0	4
6.	Procurement & Supplies Unit	3	3	0	0
7.	Internal Audit	2	1	1	1
8.	Legal	2	1	1	1
TOTAL		**139**	**67**	**6**	**72**

The table below shows the number of personnel under internship, attachments and short-term contracts during the year under review.

Table 10: Internship

S/N	Type of Employment	No. of Staff
1.	Internship	9
2.	Attachment	-
3.	Short–term contract (temporary employment)	-
Total		**9**

Medical Services

The Authority maintained a medical scheme with the University Teaching Hospital and Levy Mwanawasa General Hospital. Further, in addition to the inhouse Medical Scheme, the Authority also subscribed to the National Health Insurance Management Authority (NHIMA) for staff to access medical services at the NHIMA-accredited facilities in the country.

The RPA has also continued to maintain a Group Life Assurance cover under Prudential Life Assurance to cover employees for the period of employment. Further, the Authority additionally maintained a Funeral Policy Cover under M'life with Madison Insurance for members of staff.

4.2 PUBLIC RELATIONS SECTION

The Public Relations Section is the interface between the Authority and its various stakeholders. This Section creates and implements measures to improve the Authority's public image. During the period under review, Public Relations activities were guided by the second Perspective of the Strategic Plan, which was to improve partnerships, and the seventh Objective, which was to increase regional and border presence by bolstering and communicating a healthy and positive brand outlook in order to gain public support and confidence.

4.2.1 Public Awareness Activities

Raising Awareness on Radiation Protection: School Tour to STEM Institutions

The Radiation Protection Authority (RPA), is dedicated to protecting the public, workers, and the environment from the harmful effects of ionising radiation. As part of our ongoing efforts to promote radiation safety and awareness, the Authority organized a school tour targeted at STEM (Science, Technology, Engineering, and Mathematics) institutions. This initiative aimed to educate students and educators about the importance of radiation protection and the vital role of RPA in safeguarding health and the environment.

Figure 54: RPA Senior Radiation Scientist talking to students at David Kaunda Secondary School

Figure 55: RPA Senior Radiation Scientist talking to students at David Kaunda Secondary School

Raising Awareness on Radiation Protection: Media training

The Radiation Protection Authority conducted a media training workshop for journalists and news editors from May 22 to May 24, 2024, at Nomads Court in Lusaka.

The objective of the training was to provide media journalists with basic knowledge on radiation protection and RPA activities. The training was aimed at enhancing radiation awareness as well as discuss ways in which the Media and RPA can collaborate in the dissemination of information on radiation matters.

Figure 56: Journalists from different media houses pose for a group photo

Figure 57: Journalists from different media houses pose for a group photo

4.2.2 STAKEHOLDER ENGAGEMENTS

Familiarisation Tour for the Honourable Minister of Technology and Science at Lumwana Copper Mine and Trident FQM.

The Radiation Protection Authority conducted a familiarisation tour of Lumwana Copper Mine and Trident FQM with Hon. Minister of Technology and Science, Hon. Felix Mutati.

The Hon. Minister of Technology and Science, Hon. Felix Mutati, was on a familiarisation tour of the Radiation Protection Authority's licensees in North-Western from February 1 to 2, 2024. The purpose of the tour was for the Honourable Minister to become familiar with the Authority's activities and engagements with other institutions

Figure 58: Ministers entourage during the tour of Trident FQM

Figure 59: Hon. Minister of Technology and Science and the Executive Director of RPA during the tour of Lumwana Copper Mine.

Figure 60: Ministers entourage during the tour of Lumwana Copper Mine

Ministerial tour of RPA Offices

The Ministry of Technology and Science (MoTs) is steadfast to support the Radiation Protection Authority (RPA) strategies to further and augment and reinforce its mandate of "protecting zambians and the environment by additionally securing Zambian borders with measures to vet various entry products from outside the Country which includes building materials, fertilizers, and vehicles among other entry products.

This statement was given by the Minister of Technology and Science Minister Felix C. Mutati during his familiarization tour at the Authority.

figure 61: Hon. Minister, the Permanent Secretary and the Executive director during the familiarization tour.

figure 62: Nuclear and Radiation Scientist explaining to the hon. minister the various equipment's the Authority houses for radiation monitoring

figure 63: Hon. Minister of Technology and Science delivering his remarks during the familiarization tour of the RPA offices.

4.2.3 SHOWS AND EXHIBITIONS

International Trade Fair

The Radiation Protection Authority exhibited at the 2024 Trade Fair under the theme “unlocking economic potential through collaboration and partnerships”. The trade fair gave the Authority a platform to interact with a diverse number of stakeholders ranging from students, member of the public from different works of life.

Figure 64: Executive Director poses for a photo with members of staff during the trade fair exhibition

Figure 65: Senior Nuclear and Radiation Safety Officer attends to show goer

Agriculture and Commercial Show

The Radiation Protection Authority exhibited at the 2024 Agricultural and commercial show under the theme: Creating a Competitive Future. The show gave the Authority a platform to interact with a diverse number of stakeholders ranging from students, member of the public from different works of life.

Figure 66: Members of staff pose for a photo during the Agriculture show exhibition

Media coverage and publications

During the year ended 2024, the PR Section facilitated for the media coverage of Authority activities were reported in the media (both print and electronic), on radio and television this coverage was positive and enhanced Authority's Presence.


Page 4 • NEWS ZAMBIA DAILY MAIL, Thursday, April 18, 2024

Lumwana workers safe

Mutati says uranium levels below Atomic Agency standards


Business

Radiation body raises concern over sugilite mining

Says mineral contains radioactive content


Radiation Protection Authority lands K22m cash boost

KCM: Kabuswe calls for calm

4.3 INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) SECTION

The Information and Communication Technology (ICT) Section plays a critical role in supporting the Authority's operations by providing robust and innovative technological solutions. This Section ensures the seamless integration of ICT systems to enhance efficiency, service delivery and stakeholder engagement. During the year under review, the ICT Section was instrumental in rolling out the e-Licensing platform, a major milestone that streamlined the licensing process and improved accessibility for stakeholders. Additionally, the Section provided essential technical support and spearheaded various ICT initiatives aimed at strengthening the Authority's digital infrastructure and operational capacity.

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5.0 PROCUREMENT UNIT

5.1 ROLES AND MANDATE

The Procurement unit performs its functions in accordance with the Public Procurement No.8 of 2022.The unit is responsible for the supervision and undertaking of the procurement of goods and services in order to facilitate the smooth operations of the Authority. The department is headed by the Senior Procurement Officer whose assisted by the Assistant Procurement Officer. Other positions in the department include one Store Officer.

5.2 REPORT ON PROCUREMENT OPERATIONS FOR THE YEAR 2024

No.	ITEM	REPORT
1	Procurement Planning	The Procurement Plan for RPA for the Year 2024 was approved by the procurement Committee, and was upload on the eGP System for operationalization
2	Solicitation	Request for Quotations, Requests for Proposals, and Invitation t tender where sent to goods/ service providers via the eGP system and sometimes through corporate email
3	Bidding Process	All bids submitted where received and Evaluated on the eGP system, and in some circumstance there where evaluated manually
4	Procurement	In the year 2024, The Procurement Unit issued Local Purchase Orders/ Contracts totaling to the sum of K6,027,176.23
5	Compliance	In the Year 2024, 12 Direct Bid Reports, 4 Procurement Quarterly Reports and 4 sets of Procurement Committee meetings were submitted to ZPPA
6	Procurement Committee Meeting	The Procurement Unit in the year 2024 held 4 procurement Committee meetings for approval of procurement of TLD Badges, and Food Monitoring Equipment.
7	Risk Management	The Procurement Unit reviewed the risks associated with procurement operations and updated the RPA risk register, the risks updated include: 1. Finance Risk 2. Supplier Risk 3. Compliance Risk 4. Technological Risk
8	Performance Management	The Staff in the Procurement Unit where Appraised by the Head of the Procurement Unit for their 2024 Performance in line with the APAS procedures. The Head of procurement was appraised by the Executive Director

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6 .0 LEGAL UNIT

The Legal Department is crucial to ensuring that the Authority operates within legal and regulatory frameworks while protecting public health and the environment from the harmful effects of ionising radiation. The department's responsibilities include:

6.1 Regulatory Compliance

Ensure adherence to laws and regulations: The legal department ensures that the RPA complies with national, regional, and international laws related to radiation protection, nuclear safety, and environmental standards.

Interpretation of legislation: Legal experts interpret radiation protection laws, regulations, and standards, ensuring that the RPA's actions and decisions align with the law.

6.2 Policy Development and Advice

Draft and review policies: The legal team helps in the development and review of policies and procedures related to radiation safety, ensuring that they comply with applicable laws.

Legal advice: The department provides legal counsel to senior management and other departments on various matters, such as radiation safety protocols, risk management, and licensing requirements.

I. Licensing and Permitting

Regulatory oversight: The department handles legal procedures related to issuing or revoking permits for the operation of medical facilities using radiation, or industries using radioactive materials.

II. Enforcement and Litigation

Enforce regulations: The legal department supports enforcement actions against individuals or organizations violating radiation protection laws or regulations, including fines, sanctions, or criminal prosecution.

Litigation: In cases where violations lead to legal disputes, the legal department handles litigation, either in defense of the authority's regulatory actions or in prosecution of violators.

In summary, the legal department at a Radiation Protection Authority ensures that the organization is legally sound in its activities, provides legal guidance for radiation safety initiatives, and handles legal issues related to the regulation, enforcement, and public communication of radiation-related laws and practices.

6.3 PERFOMANCE OF THE LEGAL DEPARTMENT IN THE YEAR 2024

Board Affairs

The legal department ensured smooth operation of the Board affairs in the year 2024, thereby ensuring that resolutions made by the Board were implemented. The Board met in all the quarters of the year having four Ordinary Meetings and two extra ordinary Board Meetings. In the same vein, the Committees of the Board also held meetings in all quarters of the year. The Meetings included both Ordinary and Extra Ordinary Meetings. The supervisory role of the Board to the Authority was achieved through the implementation of its resolutions.

To ensure that the Board Members understand and have sufficient knowledge of the mandate of the Authority, some Board Members were taken on a familiarisation tour to different facilities that deal with the Authority such as Alfred H. Knight, Kitwe Central Hospital and Mopani Coper Mine

Law and Regulations

There was little progress made in 2025 relating to the amendment of the Ionising Radiation Protection Act No. 16 of 2016. Aside from the stakeholder consultation meetings for the Nuclear Safety and Radiation Protection Bill which was orchestrated by Ministry of Technology and Science, the comments were not incorporated neither was the validation meeting held.

The legal department was part of the repeal and amendment of the six's schedule of the Ionising Radiation (General) (Amendment) Act No. 58 of 2014. The amendment was done with the help of Ministry of Justice shortly after the Business Regulatory Review Agency approved the proposed revision. Currently the proposed Statutory Instrument is pending Cabinet Approval at the Ministry of Technology and Science.

Further in collaboration with the Department of Nuclear Safety and Radiation Protection, the Legal Department reviewed the developed Regulation on Naturally Occurring Radioactive Material Regulations and Ionising Radiation Protection (Prospecting, Minning and Milling of Uranium Ores and other Radioactive Mineral Ores) Regulation. The regulations were submitted to the Ministry of Technology and Science in August, 2024 and awaits further processes pending enactment.

Litigation

Under litigation the Authority received a Judgement in the case of JEAN K. CHILIKWELA AND RADIATION PROTECTION AUTHORITY CAZ/08/66/2025. The Judgment was pronounced in favour of the Authority. There has not been much litigation in the department as most cases are handled amicably through internal mediation.

INTERNAL AUDIT AND RISK MANAGEMENT UNIT

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7.0 INTERNAL AUDIT AND RISK MANAGEMENT UNIT

7.1 Internal Audit Unit

The Internal Audit Unit is an independent and objective assurance function, established under Section 19(1) of the Public Finance Management Act No. 1 of 2018, to support the Authority in achieving its strategic objectives through the provision of value-adding audit and advisory services.

The Unit operates in accordance with the International Professional Practices Framework (IPPF) of the Institute of Internal Auditors (IIA) and is governed by a risk-based Annual Audit Plan approved by the Audit and Risk Management Committee. It reports functionally to the Committee and administratively to the Director General, ensuring its operational independence and objectivity.

8.2 Mandate and Objectives

The mandate of the Internal Audit Unit is to provide independent, risk-based assurance on the effectiveness of internal controls, risk management, and governance systems. The Unit's key objectives include:

- Evaluating the adequacy and effectiveness of the Authority's internal control systems;
- Assessing compliance with applicable laws, regulations, and internal policies;
- Identifying areas of operational improvement and risk mitigation;
- Supporting the integrity and reliability of financial and operational reporting.

7.3 Key Activities During the Year

In the year under review, the Internal Audit Unit undertook a wide range of audits and advisory engagements across strategic and operational areas. Highlights include:

- **Execution of the Annual Audit Plan**: The Unit successfully completed all scheduled audits covering areas such as procurement, payroll, financial management, revenue collection, stores management, and compliance.
- **Follow-up Reviews**: Periodic follow-ups were conducted to assess the implementation status of previously issued audit recommendations. The results were reported to the Audit and Risk Management Committee.
- **Advisory Support**: Management received consultative support on strengthening internal controls, reviewing draft policies, and assessing risk exposure in new projects and processes.
- **Collaboration with External Auditors**: The Internal Audit Unit coordinated with the Office of the Auditor General and other external auditors to streamline audit efforts and address emerging issues efficiently.

7.4 Audit Coverage and Risk Management

Audit coverage was aligned to key risk areas identified in the corporate risk register. The Unit provided management with assurance on controls over high-risk operations, thus contributing to improved accountability and resource stewardship.

Performance and Impact

The Internal Audit Unit has continued to demonstrate its role as a critical enabler of good governance. Audit recommendations led to notable improvements in process efficiency, compliance, and internal control enhancement. Management's commitment to implementing audit recommendations remained strong, with a majority of issues resolved within agreed timelines.

Looking Ahead

Going forward, the Unit will enhance its use of data analytics, invest in staff development, and adopt emerging technologies to deepen audit insights and efficiency. It remains committed to supporting the Authority's mission by promoting transparency, accountability, and sound governance.

FINANCE

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8.0. FINANCE UNIT

The Finance unit performs its functions in accordance with the Public Finance Management Act No.1 of 2018.The unit is responsible for all financial and management accounting functions of the Authority in order to facilitate implementation of programmes. The department is headed by the Finance Manager who's assisted by a Senior Accountant. Other positions in the department include two Assistant Accountants based at Head Office.

The Unit performs the following specific functions:

- Prepares and submits financial management reports in order to comply with financial regulations and facilitate informed decision making;
- Implements internal controls in order to enhance transparency and accountability in the utilisation of financial and material resources
- Maintenance of expenditure and commitment ledgers in order to ensure that public funds are appropriately utilised;
- Collects and accounts for Revenues in order to safeguard resources and support the budget;
- Accounting for assets in order to safeguard property;
- Prepares and submits annual audited accounts in order to facilitate decision making;
- Manages financial risks in order to mitigate losses;
- Facilitates the processing of personnel emoluments including salaries;
- Cash Management; and
- Undertakes budgetary Control in order to prevent budget over-runs and misapplication of funds.

8.1 OVERVIEW OF FINANCIAL PERFORMANCE

The Authority's External Auditors Amazon Associates Chartered Accountants audited the Financial Statements for the year ended 31st December 2024 and in their opinion [1]***the Financial Statements present fairly in all material respects, the Financial Position of Radiation Protection Authority as at 31st December 2024 and its Financial performance and Cashflows for the year then ended in accordance with International Financial Reporting Standards requirements, the requirements of the Ionizing Radiation Protection Act No 16 of 2005 and the Public Finance Management Act No. 1 of 2018.***

i) During the Financial year ended 31st December 2024, the Authority generated revenue (internally generated funds, government and donor grants) in amounts totaling K36,002,589.82 (2023: K28,512,075.00). The total operating expenses for the year 2024 were K36,794,340.00 (2023: K27,407,408.00). [2]The figure below shows revenue and expenditure for the years 2023 and 2024 respectively.

[1]The External auditor's opinion is on the second paragraph of page 7 of the Audited Financial Statements.

[2]Reference can be made to the Statement of Comprehensive Income on page 11 and to the detailed Statement of Comprehensive Income on page 33 of the Audited Financial Statements.

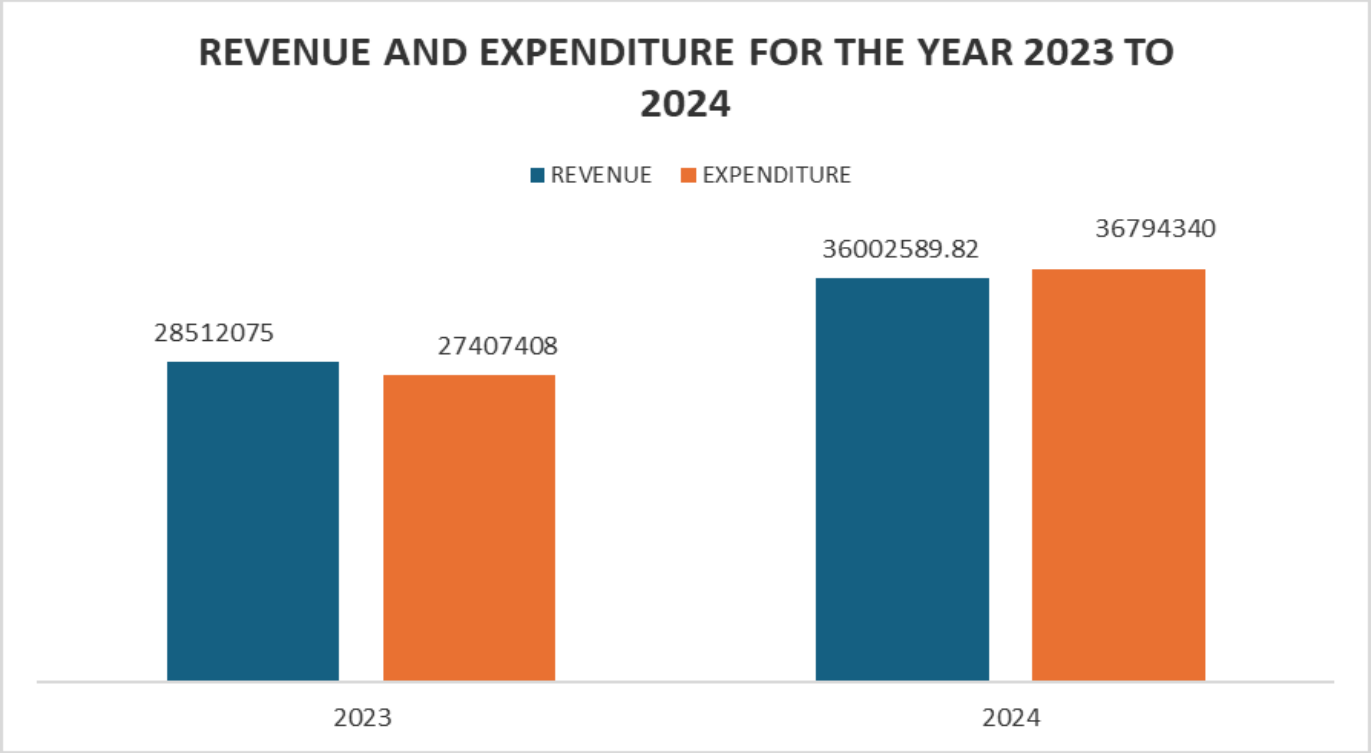

Figure 67: Revenue and expenditure bar chart for the years 2023 and 2024

ii) The total comprehensive surplus for the year increased from a surplus of K1,104,668 in 2023 to a surplus of K4,767,941 in 2024. The increase in the surplus between the year under review and the prior year was mainly as a result of the gain that was realised during the revaluation of the Authority's Fixed assets.

iv) Revenue increased by 26% (from K28,512,075.00 in 2023 to K36,002,589.52) during the year 2024. The increase in revenue was mainly attributed to the automated collection of border screening fees by ZRA through the ZRA Asycuda system which was implemented during the period under review which revealed an increase if compared to the prior year where collection of border fees was done manually[3].

v) In addition, RPA implemented the new fee units from thirty ngwee to forty ngwee for all invoices ,this was in line with the Treasury and Financial Management Circular No 12 of 2024 and Statutory Instrument No. 25 of 2024 which was published on 19th April 2024, were Cabinet approved the recommendation by the Minister of Finance and National Planning to amend the Fees and Fines (Fee and Penalty Unit Value) Regulations of 2014 to increase the unit values of both the Fee unit and Penalty unit from ***'Thirty Ngwee to Forty Ngwee'***(this also resulted in an increase in revenue). Further the Authority recorded an increase in the donations in kind during the period under review.

8.2 OVERVIEW OF THE FINANCIAL POSITION[4]

i) The total net book value of the Authority's assets was K14,633,188.00 as at 31st December 2024 (2023: K 6,497,589). [5]Assets of the Authority comprise of Laboratory equipment, Land and Building, Motor Vehicles, Computer Equipment and Office Furniture and Fittings. Apart from the additions and donations during the period under review, the main increase in the net book value of assets from the prior year is as a result the revaluation of fixed assets that was carried out during the year 2024.

[3] You may wish to not that we recorded an increase in the border screening fees compared to the prior year due to the automated collection of fees being collected by ZRA on our behalf. However, the actual border screening fees collected during the period under review is less if compared to the 2024 income budget, and this is as a result of having some products of RPA interest still under the miscellaneous category which has resulted in collecting less than our projections as this still requires manual enforcement.

4 The Authority's Total assets (noncurrent and current assets) and Total Equity and Liabilities amounted to a total sum of K24,646,101 each. Reference can be made to the Statement of Financial Position which shows the breakdown of the Assets and Equity and Liabilities on page 10 of the Audited Financial Statements.

[5] Reference can be made to Authority's asset register on pages 21 to 23 of the Audited financial statements which shows the additions, donations, disposals and revaluations as well as the depreciation charge during the period under review.

ii) The current ratio (Current Assets divided by current liabilities) of the Authority for the financial year 2024 was 1.0:0.6 (2023 was 1.0:0.87). The current ratio of 1 and above shows that the Authority is able to settle its current liabilities as and when they fall due. The major current liabilities (trade and other payables) of the Authority include; provision for leave pay, provision for gratuity, provision for litigation, statutory contributions, accrued operational expenses, etc. As @ 31st December 2024 the current liabilities stood at K4,752,369 (2023: K3,528,986), translating into a 35% increase in current liabilities. The increase was mainly as a result of implementing phase 1 of the Emoluments Commission harmonised report on staff salaries which in turn resulted in an increase in gratuity and leave pay provisions.

iii) The Authority recorded a 24% increase in trade and other receivables from K1,996,431 in the year 2023 to K3,813,642 in 2024. The increase is mainly as a result of the border screening fees that ZRA collected on behalf of RPA during the month of December 2024 but these fees were remitted to the RPA bank account during the month of January 2025.[6] In addition, the increase in the trade and other receivables is also as a result of implementing the new fee units from thirty ngwee to forty ngwee for all invoices which in turn increased the value of all invoices issued compared to the prior year.

[6] The explanatory notes to the financial statements from page 24 to 29 of the Audited Financial statements shows the movement of assets and liabilities in the Statement of Financial Position.

8.3 OVERVIEW OF THE BUDGETARY PERFORMANCE FOR THE YEAR 2024

i) This section gives an overview of the performance of the budget for the year 2024. The following table compares the actual results with the budget.

	2024 ACTUAL	2024 BUDGET	Variance	% Variance
	K	K	K	K
INCOME:				
Revenue-Internally generated funds				
	24,434,222	37,939,755	(13,505,533)	64.40%[7]
Cost of Sales	(907,163)[8]			
Operating Surplus	**23,527,059**			
Other Income:				
Operational Government				
Grant	8,250,000	9,000,000	(750,000)	91.67%[9]
Donor grant	4,225,531	2,000,000	2,225,531	211.28%[10]
Total Other Income	**12,475,531**	**11,000,000**	**1,475,531**	**113.41%**
TOTAL INCOME	**36,002,590**	**48,939,755**	**(12,937,165)**	**73.57%**
EXPENSES:				
Expenditure	36,794,340	48,939,755	12,145,415	75.18%[11]
Operating (Deficit)Surplus for the year	**(791,750)**			
Other Comprehensive Income:				
Gain on Revaluation of assets	5,529,691			
Total Comprehensive Surplus				
for the year	**4,737,941**[12]			

[7] The % variance of the internally generated funds during 2024 indicates that the Authority received K24,434,222 which represents 64.40% of the annual budgeted income amount of K37,939,755 The assessment fees collected through the ZRA Asycuda window are lower than anticipated as RPA still has to carry out manual enforcements for all goods of our interest transported which have been placed under the Miscellaneous category hence the variance reflecting of fees not collected. In addition, most of the Authority's licensees are government hospitals who are slow payers. However, Management has put in debt collection strategies to ensure that these hospitals commit to payment plans. Further Management has been carrying out sensitization exercises with the Management of these hospitals.

[8] The Cost of Sales (COS) relates to the value of TLD Badges that were sold during the year amounting to K907,163

[9] The Authority's 2024 annual government operational grant allocation was K9, 000,000 and there was a 91.67% release on the monthly government grants for 11 months out of 12 months during the period under review. Efforts are being made in following up on the December 2024 grant.

[10] The % variance of the donor funds during 2024 indicates that the Authority received donor funds amounting to K4,225,531 which represents 211.28% of the annual budgeted amount of K2,000,000. Included in this amount are assets that were donated (donations in kind amounting to K3,024,804.04) by the International Atomic Energy Agency (IAEA)

[11] The % variance for the 2024 under expenditure reveals that the Authority's implementation of activities was at 75.18% (K36,794,340) of the annual budgeted expenditure amount of K48,939,755.00 leaving a variance of K12,145,415.

[12] The Authority recorded a total comprehensive surplus for the year amounting to K4,737,941 however you will note that the increase in the surplus if compared to the year 2023 were the Authority recorded a surplus of K1104,667.0. is mainly as a result of the gain on the revaluation (K5,529,691) realised after the revaluation of Fixed Assets that was carried out by the Ministry of Infrastructure Housing and Urban Development (MoIHUD)

9. ACHIEVEMENTS AND CHALLENGES IN THE YEAR 2024

10.1 ACHIEVEMENTS

1. Revenue increased by 26% (from K28,512,075.00 in 2023 to K36,002,589.52) during the year 2024. The increase in revenue was mainly attributed to the automated collection of border screening fees by ZRA through the ZRA Asycuda system which was implemented during the period under review.
2. A new inland office was established in Katete.
3. The Radiation Protection Authority's Board approved the addition of 50 new positions of Nuclear and Radiation Safety Technologist under the Nuclear Radiation Safety Department, strengthening regulatory oversight and compliance.
4. Roll out of e-licensing platform.
5. Bulk messaging platform for notifications and reminders on License renewal created and approved under RPA-ZM ID.
6. Successful stakeholder engagements and guidelines development.

S/N	CHALLENGES	PROPOSED SOLUTIONS
1	Lack of adequate office space and purposely built Laboratory to support Environmental Monitoring Activities.	Construction of laboratories and offices at the acquired one-acre plot at NISIR`s waterfalls land to enhance the regulatory and environmental protection functions of RPA.
2	Insufficient Equipment: essential equipment like Radiation Isotope Identification Devices (RIDs), impacting operational efficiency. Limited Budget Allocation. Limited Human Resources.	Increased funding to facilitate recruitment of more personnel and purchase more equipment's.
3	Delay in issuance of Licenses due to delayed or non-payment of License fees Low compliance levels from transporters: Transporters often exhibited low compliance levels, including reluctance to make timely payments at border points, leading to delays and additional work for officers.	Enactment of a legal framework that lis adequate to cover all aspects of regulating nuclear Science and Technology.

11. THE WAY FORWARD

Building on the achievements of 2024, the Radiation Protection Authority (RPA) is committed to further strengthening its mandate of protecting the public, workers, and the environment from the harmful effects of ionizing radiation. While key milestones such as increased revenue, expansion of operations, and enhancement of regulatory oversight have been recorded, challenges in human resources, budget allocation, and specialized support continue to impact operational efficiency. In 2025, the Authority will focus on strategic initiatives to address these challenges and drive sustainable growth.

The Authority will endeavor to Implement continuous professional development programs to equip staff with the necessary skills to adapt to emerging trends in radiation safety and public engagement, Strengthening Public Awareness and Stakeholder Engagement by Increasing investment in public awareness programs to educate stakeholders on radiation safety through targeted campaigns, school outreach programs, and community sensitization.

- Advocate for increased funding to support Authority activities, including media engagement, promotional materials, and outreach programs.
- Expanding regulatory oversight and operational presence, operationalize the newly established inland office in Katete and explore opportunities for further expansion in other key regions.
- Strengthen compliance enforcement through the additional 50 Nuclear and Radiation Safety Technologist positions approved by the Board.
- Fostering Internal Collaboration and Knowledge Sharing
- Enhance interdepartmental coordination to ensure a holistic approach to radiation protection, particularly in areas requiring specialized communication strategies.
- Develop structured internal communication channels to improve information flow and knowledge sharing among staff.

12.0 CONCLUSION

The year 2025 presents an opportunity for the Authority to consolidate its gains while proactively addressing key challenges. By focusing on human resource expansion, strategic stakeholder engagement, enhanced funding, digital transformation, and operational growth, the Authority will be well-positioned to achieve its regulatory mandate more effectively. Through collaboration, innovation, and sustained commitment, RPA aims to strengthen its role as a leading entity in radiation safety, ultimately ensuring the well-being of the Zambian public and the environment.

RADIATION PROTECTION AUTHORITY

FINANCIAL STATEMENTS

FOR THE YEAR ENDED 31 DECEMBER 2024

Radiation Protection Authority

Financial Statements for the year ended 31 December 2024

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Radiation Protection Authority

Financial Statements for the year ended 31 December 2024

General Information

Country of incorporation and domicile	Zambia
Nature of business and principal activities	Protection of the public, workers, the environment from hazards arising from the use of devices or materials capable of producing ionising radiation and to monitor and regulate ionising radiation in Zambia.
Board of Directors	Ms. Christabel N. Reinke Mr. Msafiri Sinkala Ms. Olipa J. Sakala Ms. Thandiwe P. Chabi Mr. Muleka Kamanisha Dr. Joseph Kabunda Mrs. Patricia S. Chilaisha Mrs. Brenda Chibulu Mwamba Brig. Gen. Dr. Levy Muchemwa Mr. Nkumbu Siame Mr. Mumba Diangamo Nakama Dr. Charles Mweshi Dr. Steven Mudenda Mr. Gerald Mwila
Business address	Exploration House Government Road Ridgeway Lusaka, Zambia
Registered office	Exploration House Government Road Ridgeway Lusaka, Zambia
Postal address	P.O. Box 50002 Ridgeway Lusaka, Zambia
Bankers	Zambia National Commercial Bank (ZANACO) Plc Access Bank Zambia Limited (Formerly Atlas Mara)
Auditors	Amazon Associates Chartered Accountants Registered Auditors
TPIN	1002530531
Legal advisors	Bunting & Associates Advocates and Notaries

Radiation Protection Authority

Financial Statements for the year ended 31 December 2024

Directors' Report

In Pursuant to Part V of the Ionising Radiation Protection Act, No. 16 of 2005 and Public Finance Management Act No.1 of 2018 the Directors submit their report together with the audited financial statements for the year ended 31st December 2024.

1. Establishment

The Authority was established by the Ionising Radiation Protection Act No. 16 of 2005.

2. Nature of business

The Radiation Protection Authority was incorporated in Zambia with the mandate to protect public, workers and the environment from hazards arising from the use of devices or materials capable of producing ionising radiation.

3. Review of financial results and activities

The financial statements have been prepared in accordance with International Financial Reporting Standards and the requirements of the Ionising Radiation Protection Act No.16 of 2005 and Public Finance Management Act No. 1 of 2018. The accounting policies have been applied consistently compared to the prior year.

Full details of the financial position, results of operations and cash flows of the Authority are set out in these financial statements.

4. Risk management

The Board of Directors has overall responsibility for the establishment and oversight of the Authority's risk management framework. The Authority's risk management policies are established to identify and analyse the risks faced by the entity, to set appropriate risk limits and controls and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Authority's activities.

The Authority's Board of Directors oversees how management monitors compliance with the risk management policies and procedures, and reviews adequacy of the risk management framework in relation to the risks faced by the entity. The board undertakes both regular and ad hoc reviews of risk management controls and procedures.

5. Corporate governance

The Board of Directors hereby confirms that the Authority has complied with all the internal control aspects of the principles of good governance. The financial statements have been prepared in accordance with the International Financial Reporting Standards and its interpretations adopted by the International Accounting Standards Board and the requirements of the Ionising Radiation Protection Act, No.16 of 2005 and Public Finance Management Act No. 1 of 2018.

Directors' Report

6. Board of Directors

The Directors in office during the year and at the date of this report are as follows:

Board of Directors	Office	Designation	Nationality	Changes
Ms. Christabel N. Reinke	Board Chairperson	Non-executive	Zambian	Appointed 9 Nov2023
Mr. Msafiri Sinkala	Vice Chairperson	Non-executive	Zambian	Appointed 9 Nov 2023
Ms. Olipa J. Sakala	Board member	Non-executive	Zambian	Appointed 9 Nov 2023
Ms. Thandiwe P. Chabi	Board member	Non-executive	Zambian	Appointed 9 Nov 2023
Mr. Muleka Kamanisha	Board member	Non-executive	Zambian	Appointed 9 Nov 2023
Mrs. Jane Mubanga Chinkusu	Board member	Non-executive	Zambian	Resigned on 30 April 2024
Dr. Joseph Kabunda	Board member	Non-executive	Zambian	Appointed 9 Nov 2023
Mrs. Patricia S. Chilaisha	Board member	Non-executive	Zambian	Appointed 9 Nov 2023
Mrs. Brenda Chibulu Mwamba	Board member	Non-executive	Zambian	Appointed 9 Nov 2023
Brig. Gen. Dr. Levy Muchemwa	Board member	Non-executive	Zambian	Appointed 9 Nov 2023
Mr. Nkumbu Siame	Board member	Non-executive	Zambian	Appointed 9 Nov 2023
Mr. Mumba Diangamo Nakama	Board member	Non-executive	Zambian	Appointed 9 Nov 2023
Dr. Charles Mweshi	Board member	Non-executive	Zambian	Appointed 9 Nov 2023
Dr. Steven Mudenda	Board member	Non-executive	Zambian	Appointed 9 Nov 2023
Mr. Gerald Mwila	Board member	Non-executive	Zambian	Appointed 9 Nov 2023

During the year Mrs Jane Mubanga Chinkusu resigned on 30th April 2024.

7. Property, plant and equipment

There was no change in the nature of the property, plant and equipment of the Authority or in the policy regarding their use.

At 31 December 2024 the Authority's investment in property, plant and equipment amounted to ZMW14,633,188 (2023: ZMW 6,497,589), of which ZMW4,526,731 (2023: ZMW 3,994,008) was added in the current year through additions and ZMW 3,638,041 was through revaluations.

8. Employees

The average number of employees during the year was 66 (2023: 61) and their total emoluments amounted to ZMW 23,114,456.39 (2023: ZMW 15,981,202).

9. Going concern

The financial statements have been prepared on the basis of accounting policies applicable to a going concern. This basis presumes that funds will be available to finance future operations and that the realisation of assets and settlement of liabilities, contingent obligations and commitments will occur in the ordinary course of business.

The Directors believe that the Authority has adequate financial resources to continue in operation for the foreseeable future and accordingly the financial statements have been prepared on a going concern basis. The Directors have satisfied themselves that the Authority is in a sound financial position and that it has sufficient cash to meet its foreseeable obligations. The Directors are not aware of any new material changes that may adversely impact the Authority. The Directors are also not aware of any material non-compliance with statutory or regulatory requirements or of any pending changes to legislation which may affect the Authority.

Directors' Report

10. Litigation statement

The Authority becomes involved from time to time in various claims and lawsuits incidental to the ordinary course of business.

Two court cases in respect of claims by former employees to the amount of K4 million have been instituted against the Authority. The cases are still pending at the Courts and the final outcome will only be confirmed when judgement is delivered. The Authority's legal advisors are of the opinion that the cases can go either way. There is no possibility of claiming this amount from a third party resulting in reimbursement.

Save as recorded above, the Directors are not aware of any legal or arbitration proceedings, including proceedings that are pending or threatened that may have a material effect on the financial position of the Authority.

11. Events after the reporting period

The Directors are not aware of any material event which occurred after the reporting date and up to the date of this report.

12. Statement of disclosure to the Authority's auditors

With respect to each person who is a Director on the day that this report is approved:

- there is, so far as the person is aware, no relevant audit information of which the Authority's auditors are unaware; and
- the person has taken all the steps that he/she ought to have taken as a Director to be aware of any relevant audit information and to establish that the Authority's auditors are aware of that information.

13. Terms of appointment of the auditors

The auditors, Messrs Amazon Associates Chartered Accountants will continue in office following their three year term of appointment by the Office of the Auditor General.

By Order of the Board

Executive Director
Secretary to the Board
Lusaka
28 / 03 / **2025**

Radiation Protection Authority

Financial Statements for the year ended 31 December 2024

Directors' Responsibilities and Approval

The Directors are required in terms of the Ionising Radiation Protection Act No.16 of 2005 and Public Finance Management Act No. 1 of 2018 to maintain adequate accounting records and are responsible for the content and integrity of the financial statements and related financial information included in this report. It is their responsibility to ensure that the financial statements fairly present the state of affairs of the Authority as at the end of the financial year and the results of its operations and cash flows for the period then ended, in conformity with International Financial Reporting Standards. The external auditors are engaged to express an independent opinion on the financial statements.

The financial statements are prepared in accordance with International Financial Reporting Standards and are based upon appropriate accounting policies consistently applied and supported by reasonable and prudent judgements and estimates.

The Directors acknowledge that they are ultimately responsible for the system of internal financial control established by the Authority and place considerable importance on maintaining a strong control environment. To enable the Directors to meet these responsibilities, the Directors sets standards for internal control aimed at reducing the risk of error or loss in a cost-effective manner. The standards include the proper delegation of responsibilities within a clearly defined framework, effective accounting procedures and adequate segregation of duties to ensure an acceptable level of risk. These controls are monitored throughout the Authority and all employees are required to maintain the highest ethical standards in ensuring the Authority's business is conducted in a manner that in all reasonable circumstances is above reproach. The focus of risk management in the Authority is on identifying, assessing, managing and monitoring all known forms of risk across the Authority. While operating risk cannot be fully eliminated, the Authority endeavours to minimise it by ensuring that appropriate infrastructure, controls, systems and ethical behaviour are applied and managed within predetermined procedures and constraints.

The Directors are of the opinion, based on the information and explanations given by management, that the system of internal control provides reasonable assurance that the financial records may be relied on for the preparation of the financial statements. However, any system of internal financial control can provide only reasonable, and not absolute, assurance against material misstatement or loss.

The Directors have reviewed the Authority's cash flow forecast for the year to 31 December 2025 and, in light of this review and the current financial position, they are satisfied that the Authority has access to adequate resources to continue in operational existence for the foreseeable future.

The external auditors are responsible for independently auditing and reporting on the Authority's financial statements. The financial statements have been examined by the Authority's external auditors and their report is presented on pages 7 to 9.

The financial statements set out on pages 10 to 33, which have been prepared on the going concern basis, were approved by the Board of Directors on 28 / 03 /2025 and were signed on their behalf by:

Approval of financial statements

Board Chairperson

Audit and Risk Committee Chairperson

Amazon Associates
Chartered Accountants

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Partners:
Monika Kumar
Naison Chikati

Independent Auditor's Report

To the Board of Radiation Protection Authority

Opinion

We have audited the financial statements of Radiation Protection Authority (the company) set out on pages 10 to 32, which comprise the statement of financial position as at 31 December 2024; and the statement of profit or loss and other comprehensive income; the statement of changes in funds; and the statement of cash flows for the year then ended; and notes to the financial statements, including material accounting policy information.

In our opinion, the financial statements present fairly, in all material respects, the financial position of Radiation Protection Authority as at 31 December 2024, and its financial performance and cash flows for the year then ended, in accordance with International Financial Reporting Standards and the requirements of the Ionising Radiation Protection Act No.16 of 2005 and Public Finance Management Act No. 1 of 2018.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the company in accordance with the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards) (Parts 1, 3 and 4A) (IESBA Code) and other independence requirements applicable to performing audits of financial statements in Zambia. We have fulfilled our other ethical responsibilities in accordance with the IESBA Code and in accordance with other ethical requirements applicable to performing audits in Zambia. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Revaluation on Property, plant and equipment

Description:

The Authority's property, plant, and equipment are carried at revalued amounts, which are based on periodic valuations by external independent valuers. The valuation of these assets involves significant judgment and estimation, particularly in determining the appropriate valuation methodology and the key assumptions used, such as market prices,replacement costs, and depreciation rates. Given the significance of these assets to the Authority's financial position and the inherent subjectivity in the valuation process, we have identified the revaluation of property, plant, and equipment as a key audit matter.

How the matter was addressed in the audit:

Our audit procedures included,among others:

(a) Evaluating the competence, capabilities, and objectivity of the external valuers.

(b) Assessing the appropriateness of the valuation methodologies used.

(c) Testing the key assumptions and inputs used in the valuations, including comparing them to external market data.

(d) Reviewing the adequacy of the disclosures in the financial statements regarding the revaluation of property, plant, and equipment.

Other Information

The directors are responsible for the other information. The other information comprises the General information on page 2, Directors Report on pages 3 to 5, Directors Responsibilities and Approval on page 6 and the supplementary information as set out on page 33. The other information does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express an audit opinion or any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Directors for the Financial Statements

The directors are responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards and the requirements of the Ionising Radiation Protection Act No.16 of 2005 and Public Finance Management Act No. 1 of 2018, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with International Standards on Auditing, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

Independent Auditor's Report

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Naison Chikati
Engagement Partner
Practising Certificate No. AUD/F010289
Amazon Associates Chartered Accountants
Registered Auditors

31 MARCH 2025
Lusaka

Radiation Protection Authority

Financial Statements for the year ended 31 December 2024

Statement of Financial Position as at 31 December 2024

Figures in Zambian Kwacha	Note(s)	2024	2023
Assets			
Non-Current Assets			
Property, plant and equipment	3	14,633,188	6,497,589
Current Assets			
Inventories	5	1,255,431	149,188
Trade and other receivables	4	3,813,642	1,996,431
Cash and cash equivalents	6	4,943,840	9,677,134
		10,012,913	**11,822,753**
Total Assets		**24,646,101**	**18,320,342**
Equity and Liabilities			
Equity			
Reserves		5,529,691	-
Accumulated funds		8,726,457	9,518,208
		14,256,148	**9,518,208**
Liabilities			
Non-Current Liabilities			
Capital grant	8	2,000,000	2,000,000
Current Liabilities			
Trade and other payables	10	4,752,369	3,528,986
Deferred income	7	3,637,584	3,273,148
		8,389,953	**6,802,134**
Total Liabilities		**10,389,953**	**8,802,134**
Total Equity and Liabilities		**24,646,101**	**18,320,342**

The financial statements and the notes on page 3, were approved by the Board of Directors on 28 / 03 /2025 and were signed on its behalf by:

Board Chairperson **Audit and Risk Committee Chairperson**

The accounting policies on pages 14 to 19 and the notes on pages 20 to 32 form an integral part of the financial statements.

Radiation Protection Authority

Financial Statements for the year ended 31 December 2024

Statement of Profit or Loss and Other Comprehensive Income

Figures in Zambian Kwacha	Note(s)	2024	2023
Revenue	11	24,434,222	18,203,797
Cost of sales	12	(907,163)	(570,342)
Operating surplus		**23,527,059**	**17,633,455**
Other operating income	13	12,475,531	10,878,620
Depreciation	14	(1,920,823)	(1,400,862)
Employee cost	14	(23,114,456)	(15,981,202)
Other operating expenses		(11,759,061)	(10,025,343)
Total comprehensive surplus for the year		**(791,750)**	**1,104,668**
Other comprehensive income:			
Items that will not be reclassified to profit or loss:			
Gains on property revaluation		5,529,691	-
Other comprehensive income for the year		**5,529,691**	**-**
Total comprehensive surplus for the year		**4,737,941**	**1,104,668**

The accounting policies on pages 14 to 19 and the notes on pages 20 to 32 form an integral part of the financial statements.

Radiation Protection Authority

Financial Statements for the year ended 31 December 2024

Statement of Changes in Funds

Figures in Zambian Kwacha	Revaluation reserve	Accumulated funds	Total funds
Balance at 1 January 2023	**-**	**8,413,540**	**8,413,540**
Surplus for the year	-	1,104,668	1,104,668
Other comprehensive income	-	-	-
Total comprehensive surplus for the year	**-**	**1,104,668**	**1,104,668**
Balance at 1 January 2024	**-**	**9,518,207**	**9,518,207**
Loss for the year	-	(791,750)	(791,750)
Total comprehensive deficit for the year	**-**	**(791,750)**	**(791,750)**
Revaluation gain on fixed assets	5,529,691	-	5,529,691
Total movement	**5,529,691**	**-**	**5,529,691**
Balance at 31 December 2024	**5,529,691**	**8,726,457**	**14,256,148**

The accounting policies on pages 14 to 19 and the notes on pages 20 to 32 form an integral part of the financial statements.

Radiation Protection Authority

Financial Statements for the year ended 31 December 2024

Statement of Cash Flows

Figures in Zambian Kwacha	Note(s)	2024	2023
Cash flows from operating activities			
(Deficit)/Surplus for the year		(791,750)	1,104,667
Adjustments for non-cash items:			
Depreciation		1,920,824	1,445,863
Changes in working capital:			
(Increase) decrease in inventories		(1,106,243)	(6,637)
(Increase) decrease in trade and other receivables		(1,817,211)	519,127
(Increase) decrease in prepayments		-	(352,912)
Increase (decrease) in trade and other payables		1,223,383	1,179,130
Increase (decrease) in deferred income		364,436	40,891
Cash used in operations		**(206,561)**	**3,930,129**
Net cash from operating activities		**(206,561)**	**3,930,129**
Cash flows from investing activities			
Purchase of property, plant and equipment	3	(4,526,731)	(4,039,009)
Proceeds from sale of property, plant and equipment	3	-	45,000
Net cash from investing activities		**(4,526,731)**	**(3,994,009)**
Cash flows from financing activities			
Movement in capital grant		-	1,000,000
Total cash movement for the year		**(4,733,292)**	**936,120**
Cash and cash equivalents at the beginning of the year		9,677,134	8,741,014
Cash and cash equivalents at the end of the year	6	**4,943,842**	**9,677,134**

Accounting Policies

Corporate information

The Radiation Protection Authority is a statutory body incorporated and domiciled in Zambia. The principal activity of the Authority is to monitor and regulate the use of ionising radiation in Zambia in accordance with the Ionising Radiation Protection Act No. 16 of 2005 as amended.

1. Material accounting policies

Management has considered the principles of materiality in IFRS Practice Statement 2 Making Materiality Judgements, and only those accounting policies which are considered material have been presented in these financial statements.

1.1 Basis of preparation

The financial statements have been prepared on the going concern basis in accordance with, and in compliance with, International Financial Reporting Standards ("IFRS") and International Financial Reporting Standards Interpretations Committee ("IFRS IC") interpretations issued and effective at the time of preparing these financial statements and the Ionising Radiation Protection Act No.16 of 2005 and Public Finance Management Act No. 1 of 2018 as amended.

The financial statements have been prepared on the historic cost convention, unless otherwise stated in the accounting policies which follow and incorporate the material accounting policies set out below. They are presented in Zambian Kwacha, which is the Authority's functional currency.

These accounting policies are consistent with the previous period.

1.2 Significant judgements and sources of estimation uncertainty

The preparation of financial statements in conformity with IFRS requires management, from time to time, to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. These estimates and associated assumptions are based on experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Critical judgements in applying accounting policies

Management did not make critical judgements in the application of accounting policies, apart from those involving estimations, which would significantly affect the financial statements.

Key sources of estimation uncertainty

The financial statements do not include assets or liabilities whose carrying amounts were determined based on estimations for which there is a significant risk of material adjustments in the following financial year as a result of the key estimation assumptions.

Accounting Policies

1.3 Property, plant and equipment

Property, plant and equipment is initially measured at cost.

Expenditure incurred subsequently for major services, additions to or replacements of parts of property, plant and equipment are capitalised if it is probable that future economic benefits associated with the expenditure will flow to the Authority and the cost can be measured reliably. Day to day servicing costs are included in profit or loss in the year in which they are incurred.

Property, plant and equipment is subsequently stated at cost less accumulated depreciation and impairment losses.

Depreciation method used is straight line and the useful lives of items of property, plant and equipment have been assessed as follows:

Item	Depreciation - old rate	Depreciation - new rate
Buildings	2%	2%
Furniture and fixtures	25%	25%
Motor vehicles	25%	20%
Office equipment	33%	25%
Computer equipment	33%	33%
Laboratory equipment	20%	
Laboratory equipment - High value		10%
Laboratory equipment - Low value		20%

The residual value and useful life for Motor Vehicle, Office equipment and Lab equipment were reviewed post revaluation. Material changes were made resulting in a prospective adjustment to the depreciation charge from the current reporting period.

There were no indicators of impairment for property, plant and equipment and no impairment tests were performed.

1.4 Financial instruments

Financial instruments are recognised when the Authority becomes a party to the contractual provisions. They are measured, at initial recognition, at fair value plus transaction costs, if any.

The material accounting policies for each type of financial instrument held by the Authority are presented below:

Trade and other receivables

Trade and other receivables, excluding, when applicable, prepayments, are classified as financial assets. At initial recognition, the Authority measures trade and other receivables at their transaction price (as defined in IFRS 15) as the trade receivables do not contain a significant financing component in accordance with IFRS 15 (or when the Authority applies the practical expedient in accordance with paragraph 63 of IFRS 15) (note 7).

The amortised cost is the amount recognised on the receivable initially, minus principal repayments, plus cumulative amortisation (interest) using the effective interest method of any difference between the initial amount and the maturity amount, adjusted for any loss allowance.

Trade and other receivables are recognised when the Authority becomes a party to the contractual provisions of the receivables. They are measured, at initial recognition, at fair value plus transaction costs, if any. The Authority subsequently measures the trade receivables at the undiscounted invoice price. As a practical expedient, the entity need not adjust the promised amount of consideration for the effects of a significant financing component if the entity expects, at contract inception,that the period between when the entity transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less.

The accounting policy for impairment of trade and other receivables is set out in the loss allowances and write offs accounting policy.

Accounting Policies

1.4 Financial instruments (continued)

Impairment - Expected credit losses and write offs

A provision matrix is used as a practical expedient when determining expected credit losses. The provision matrix is based on historic credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current and forecast conditions.

All other loss allowances are measured at an amount equal to lifetime expected credit losses (lifetime ECL) when there has been a significant increase in credit risk (risk of default) since initial recognition. If the credit risk has not increased significantly since initial recognition, then the loss allowance for that instrument is measured at 12 month expected credit losses (12 month ECL). The amount of expected credit losses is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective instruments. This means that at each reporting date, the ECL for a specific instrument will either be based on lifetime ECL or 12 month ECL depending on the credit risk at reporting date compared to the credit risk at initial recognition.

Irrespective of the outcome of the above assessment, the credit risk on an instrument is always presumed to have increased significantly since initial recognition if the contractual payments are more than 30 days past due, unless the Authority has reasonable and supportable information that demonstrates otherwise.

By contrast, if an instrument is assessed to have a low credit risk at the reporting date, then it is assumed that the credit risk of the receivable has not increased significantly since initial recognition.

The measurement of expected credit losses incorporates the probability of default, loss given default and the exposure at default, taking the time value of money, historical data and forward-looking information into consideration.

The movement in credit loss allowance is recognised in profit or loss with a corresponding adjustment to the carrying amount of the instrument through a loss allowance account.

The Authority writes off an instrument when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the counterparty has been placed under liquidation or has entered into bankruptcy proceedings. Instruments written off may still be subject to enforcement activities under the Authority's recovery procedures. Any recoveries made are recognised in profit or loss.

Trade and other payables

Trade and other payables (note 15), excluding amounts received in advance, are classified as financial liabilities.

They are recognised when the Authority becomes a party to the contractual provisions, and are measured, at initial recognition, at fair value plus transaction costs, if any. They are subsequently measured at the undiscounted amount of the cash expected to be paid, unless the arrangement effectively constitutes a financing transaction.

If trade and other payables contain a significant financing component, and the effective interest method results in the recognition of interest expense, then it is included in profit or loss in finance costs.

Trade and other payables expose the Authority to liquidity risk.

Cash and cash equivalents

Cash and cash equivalents are stated at carrying amount which is deemed to be fair value.

Accounting Policies

1.4 Financial instruments (continued)

Derecognition

The Authority derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party. If the Authority neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Authority recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Authority retains substantially all the risks and rewards of ownership of a transferred financial asset, the Authority continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

The Authority derecognises financial liabilities when its obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss.

1.5 Tax

The Authority is exempt from paying taxes in line with Income Tax Act Cap 323.

1.6 Leases

The Authority assesses whether a contract is, or contains a lease, at the inception of the contract.

No contracts were identified that required specific judgement as to whether they contained leases.

1.7 Inventories

Inventories are measured at the lower of cost and net realisable value on the first-in-first-out basis.

Write downs and reversals of write downs of inventories are included as part of the cost of goods sold.

1.8 Impairment of assets

The recoverable amount of an asset is the higher of its fair value less costs to sell and its value in use. If the recoverable amount cannot be determined for an individual asset, then it is determined for the cash generating unit to which the asset belongs.

Impairment losses are recognised immediately in profit or loss.

1.9 Employee benefits

Short-term employee benefits

The cost of short-term benefits, (those payable within 12 months after the service is rendered, such as paid vacation leave and sick leave, bonuses, and non-monetary benefits such as medical care), are recognised in the period in which the service is rendered and are not discounted.

The expected cost of compensated absences is recognised as an expense as the employees render services that increase their entitlement or, in the case of non-accumulating absences, when the absence occurs.

Defined contribution plans

Payments are charged as an expense as they fall due.

1.10 Provisions and contingencies

The Authority recognises provisions in circumstances where it has a present obligation resulting from past events, which can be measured reliably and for which it is probable that the Authority will be required to settle the obligation.

Accounting Policies

1.10 Provisions and contingencies (continued)

There is always a degree of estimation uncertainty involved with provisions as they are measured at management's best estimate of the amount which will be required to settle the obligation. When the effect of discounting is material, the provision is measured at the present value of such amounts.

Contingent assets and contingent liabilities are not recognised. Contingencies are disclosed in 18.

1.11 Government grants

The Authority received a government grant,the condition was which that the grant will be used for operational purposes and a part allocated for capital expenditure.

Grants are recognised when there is reasonable assurance that the:

- Authority will comply with the conditions attaching to them; and
- Grants will be received

Grants are recognised as income over the periods necesssary to match them with the related costs that they are intended to compensate.

A grant that becomes receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the entity with no future related costs is recognised as income of the period in which it becomes receivable.

Grants related to assets, including non-monetary grants at fair value, are presented in the financial position by setting up the grant as deferred income or by deducting the grant in arriving at the carrying amount of the asset.

Repayment of a grant related to income is applied first against any un-amortised deferred credit set up in respect of the grant. To the extent that the repayment exceeds any such deferred credit, or where no deferred credit exists, the repayment is recognised immediately as an expense.

Repayment of grant related to an asset is recorded by increasing the carrying amount of the asset or reducing the deffered income balance by the amount repayable. The cumulative additional depreciation that would have been recognised to date as an expense in the absence of the grant is recognised immediately as an expense.

1.12 Revenue from contracts with customers

The Authority recognises revenue from the following major sources:

- **Licence fees** - These are licenses issued to mines and hospitals to ensure that the radiations from mines and x-ray machines in hospitals are within the range/capacity that a human body should be exposed to
- **Inspection fees** - These are charges on inspections and assessment of machines in various sectors mostly Hospitals, Mines and constructions companies.
- **Imports and exports/ Transporation fees** - A minimal fee is charged for every truck/ car carrying minerals and ores entering through the borders.
- **Sale of Thermoluminescence Dosimeter Machines (TLDs)** - These are imported from Dubai and sold to hospitals and other individuals that are exposed to radiation. TLDs are worn by individuals that are exposed to radiation and these badges indicate and help reduce the radiation exposure.
- **Servicing of Thermoluminescence Dosimeter Machines (TLDs)** -These are TLD badges donated to the Authority which are hired out to students who are interns and are charged for servicing those badges every 3 months.

Revenue is measured based on the consideration specified in a contract with a customer and excludes amounts collected on behalf of third parties. The Authority recognises revenue when it transfers control of a product or service to a customer.

Interest income

Interest income is included in 'other operating income' in the statement of profit or loss and other comprehensive income.

Accounting Policies

1.13 Cost of sales

When inventories are sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realisable value, is recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversal occurs.

1.14 Translation of foreign currencies

Foreign currency transactions

A foreign currency transaction is recorded, on initial recognition in Zambian Kwacha, by applying to the foreign currency amount the spot exchange rate between the functional currency and the foreign currency at the date of the transaction.

Foreign currency monetary items are translated at the end of the reporting period using the closing rate.

Cash flows arising from transactions in a foreign currency are recorded in Zambian Kwacha by applying to the foreign currency amount the exchange rate between the Zambian Kwacha and the foreign currency at the date of the cash flow.

Notes to the Financial Statements

2. New Standards and Interpretations

2.1 Standards and interpretations effective and adopted in the current year

In the current year, the Authority has adopted the following standards and interpretations that are effective for the current financial year and that are relevant to its operations:

Standard/ Interpretation:	Effective date: Years beginning on or after	Expected impact:
• Supplier finance arrangements - amendments to IAS 7 and IFRS 7	01 January 2024	No impact
• Non-current liabilities with covenants - amendments to IAS 1	01 January 2024	No impact
• Lease liability in a sale and leaseback	01 January 2024	No impact

2.2 Standards and interpretations not yet effective

The Authority has chosen not to early adopt the following standards and interpretations, which have been published and are mandatory for the Authority's accounting periods beginning on or after 01 January 2025 or later periods:

Standard/ Interpretation:	Effective date: Years beginning on or after	Expected impact:
• IFRS 19 Subsidiaries without Public Accountability: Disclosures	01 January 2027	Unlikely there will be a material impact
• IFRS 18 Presentation and Disclosure in Financial Statements	01 January 2027	Unlikely there will be a material impact
• Amendments to IFRS 9 and IFRS 7: Amendments to the Classification and Measurement of Financial Instruments.	01 January 2026	Unlikely there will be a material impact
• Lack of exchangeability - amendments to IAS 21	01 January 2025	Unlikely there will be a material impact

Radiation Protection Authority

Financial Statements for the year ended 31 December 2024

Notes to the Financial Statements

3. Property, plant and equipment

	2024			2023		
	Cost	Accumulated depreciation	Carrying value	Cost	Accumulated depreciation	Carrying value
Buildings	3,400,000	(5,667)	3,394,333	1,796,701	(177,147)	1,619,554
Furniture and fixtures	560,960	(24,643)	536,317	613,561	(425,578)	187,983
Motor vehicles	2,121,112	(93,944)	2,027,168	3,814,553	(1,823,232)	1,991,321
Office equipment	1,124,010	(82,570)	1,041,440	589,796	(433,664)	156,132
Computer equipment	1,023,370	(44,648)	978,722	1,120,589	(479,929)	640,660
Other property, plant and equipment	6,425,977	(136,750)	6,289,227	4,662,093	(3,126,135)	1,535,958
Capital - Work in progress	365,981	-	365,981	365,981	-	365,981
Total	**15,021,410**	**(388,222)**	**14,633,188**	**12,963,274**	**(6,465,685)**	**6,497,589**

Radiation Protection Authority

Financial Statements for the year ended 31 December 2024

Notes to the Financial Statements

3. Property, plant and equipment (continued)

Reconciliation of property, plant and equipment

	Buildings	Furniture and fixtures	Motor vehicles	Office equipment	Computer equipment	Lab equipments	Capital - Work in progress	Total
Cost								
At 01 January 2023	1,796,701	506,582	2,082,553	572,449	540,819	3,447,161	68,001	9,014,266
Additions	-	106,979	1,732,000	17,347	624,770	69,000	297,980	2,848,076
Additions through donations	-	-	-	-	-	1,145,932	-	1,145,932
Disposals	-	-	-	-	(45,000)	-	-	(45,000)
At 31 December 2023	**1,796,701**	**613,561**	**3,814,553**	**589,796**	**1,120,589**	**4,662,093**	**365,981**	**12,963,274**
Additions	-	85,818	352,912	654,302	160,300	248,595	-	1,501,927
Additions through donations	-	-	-	-	-	3,024,804	-	3,024,804
Revaluations	3,400,000	475,142	1,768,200	469,707	863,070	3,152,577	-	10,128,696
Other changes, movements	(1,796,701)	(613,561)	(3,814,553)	(589,795)	(1,120,589)	(4,662,092)	-	(12,597,291)
At 31 December 2024	**3,400,000**	**560,960**	**2,121,112**	**1,124,010**	**1,023,370**	**6,425,977**	**365,981**	**15,021,410**
Depreciation								
At 01 January 2023	(141,213)	(362,751)	(1,273,404)	(282,137)	(382,280)	(2,623,038)	-	(5,064,823)
Depreciation	(35,934)	(62,827)	(549,828)	(151,527)	(97,649)	(503,097)	-	(1,400,862)
At 31 December 2023	**(177,147)**	**(425,578)**	**(1,823,232)**	**(433,664)**	**(479,929)**	**(3,126,135)**	**-**	**(6,465,685)**
Depreciation	(38,606)	(88,043)	(733,872)	(188,942)	(292,522)	(578,838)	-	(1,920,823)
Other changes, movements	210,086	488,978	2,463,160	540,036	727,803	3,568,223	-	7,998,286
At 31 December 2024	**(5,667)**	**(24,643)**	**(93,944)**	**(82,570)**	**(44,648)**	**(136,750)**	**-**	**(388,222)**
Carrying amount								
Cost	1,796,701	613,561	3,814,553	589,796	1,120,589	4,662,093	365,981	12,963,274
Accumulated depreciation	(177,147)	(425,578)	(1,823,232)	(433,664)	(479,929)	(3,126,135)	-	(6,465,685)

Radiation Protection Authority

Financial Statements for the year ended 31 December 2024

Notes to the Financial Statements

3. Property, plant and equipment (continued)

At 31 December 2023	**1,619,554**	**187,983**	**1,991,321**	**156,132**	**640,660**	**1,535,958**	**365,981**	**6,497,589**
Cost	3,400,000	560,960	2,121,112	1,124,010	1,023,370	6,425,977	365,981	15,021,410
Accumulated depreciation	(5,667)	(24,643)	(93,944)	(82,570)	(44,648)	(136,750)	-	(388,222)
At 31 December 2024	**3,394,333**	**536,317**	**2,027,168**	**1,041,440**	**978,722**	**6,289,227**	**365,981**	**14,633,188**

Details of properties

Included in Land and building is a one (1) acre plot which was allocated to Radiation Protection Authority (RPA) by the National Institute for Scrientific Research (NISIR) through the Government of the Republic of Zambia in 2015. Title to this plot is in the name of NISIR.

Notes to the Financial Statements

Figures in Zambian Kwacha	2024	2023
4. Trade and other receivables		
Financial instruments:		
Trade receivables	2,799,432	1,933,999
Loss allowance	(633,970)	(474,096)
Trade receivables at amortised cost	2,165,462	1,459,903
Other receivables	1,119,500	-
Staff loans and salary advances	192,558	183,616
Non-financial instruments:		
Prepayments	336,122	352,912
Total trade and other receivables	**3,813,642**	**1,996,431**
Split between non-current and current portions		
Current assets	3,813,642	1,996,431
Financial instrument and non-financial instrument components of trade and other receivables		
At amortised cost	3,477,520	1,462,033
Non-financial instruments	336,122	534,397
	3,813,642	**1,996,430**

Exposure to credit risk

Trade receivables inherently expose the Authority to credit risk, being the risk that the Authority will incur financial loss if customers fail to make payments as they fall due.

Fair value of trade and other receivables

The fair value of trade and other receivables approximates their carrying amounts.

5. Inventories		
TLD badges	1,255,431	149,188
6. Cash and cash equivalents		
Cash and cash equivalents consist of:		
Bank balances	4,943,840	9,677,134

Notes to the Financial Statements

Figures in Zambian Kwacha	2024	2023

7. Deferred income

The Authority has deferred income which consists of unspent donor funds and licence fees received in advance.
The Authority starts to receive licence fees early October for the following year.

Deferred income	3,637,584	3,273,148

Below is the reconciliation of the deferred income:

2024	Licence fees ZMW	ZMERIP ZMW	IAEC ZMW	European UNSNRC-RPO ZMW	Total ZMW
Opening balance	2,796,660	379,326	82,011	15,151	3,273,148
Receipts	6,980,621	-	422,882	859,080	8,262,583
Amortisation	(6,483,651)	-	(388,910)	(630,542)	(7,503,103)
Repayment	-	(379,326)	-	(15,718)	(395,044)
	3,293,630	**-**	**115,983**	**227,971**	**3,637,584**

2023	License fees ZMW	ZMERIP ZMW	IAEA ZMW	European UNSNRC-RPO ZMW	Total
Opening balance	2,836,456	258,875	134,619	2,307	3,232,257
Receipts	2,796,660	379,326	-	12,844	3,188,830
Amortisation	(2,836,456)	(258,875)	(52,608)	-	(3,147,939)
	2,796,660	**379,326**	**82,011**	**15,151**	**3,273,148**

8. Capital grant

This capital grant is allocated by the government to the Authority to help in the construction of a laboratory at the NISIR plot.

	ZMW	ZMW
Opening balance	2,000,000	1,000,000
Received during the year	-	1,000,000
	2,000,000	**2,000,000**

9. Revaluation reserve

In November 2024, the department of valuation & property management under the ministry of Infrastructure, Housing and Urban Development conducted a revaluation of all classes of the Authority's property plant and equipment located in Lusaka, Chirundu, Livingstone, Kasumbalesa and Nakonde.

Revaluation of assets	5,529,691	-

Notes to the Financial Statements

Figures in Zambian Kwacha	2024	2023

10. Trade and other payables

Financial instruments:		
Trade payables	153,358	114,131
Accrued operational expenses	488,686	444,386
Bank error account	236,954	193,877
Accrued leave pay	1,264,639	602,187
Accrued gratuity	1,679,548	1,216,203
Statutory obligations	684,341	713,359
Provision for litigation	244,843	244,843
	4,752,369	**3,528,986**

11. Revenue

Revenue from contracts with customers		
Rendering of services	13,239,112	8,076,090
Commissions received	1,553,800	1,986,750
Institutional licences	6,637,010	5,764,157
Sale and service of TLD badges	3,004,300	2,376,800
	24,434,222	**18,203,797**

Notes to the Financial Statements

Figures in Zambian Kwacha	2024	2023

11. Revenue (continued)

Disaggregation of revenue from contracts with customers

The company disaggregates revenue from customers as follows:

Rendering of services		
Fees earned	85,842	-
Imports and export licences	608,700	337,650
Monitoring of scrap	15,000	-
Laboratory sample testing	346,600	355,950
Food monitoring	1,250	5,400
Inspection fees	2,061,920	1,521,840
Monitoring of imported vehicles	5,365,400	4,311,450
RPO annual conference fees	315,000	169,500
Transportation of radioactive ores.	4,439,400	1,374,300
	13,239,112	**8,076,090**
Commissions received		
Consultancy fess/expert advice	1,553,800	1,986,750
Other revenue		
Institutional licences	6,637,010	5,764,157
TLD Badges	3,004,300	2,376,800
	9,641,310	**8,140,957**
Total revenue from contracts with customers	**24,434,222**	**18,203,797**
Timing of revenue recognition		
At a point in time		
Sale of goods	3,004,300	2,376,800
Over time		
Rendering of services	21,429,922	15,826,997
Total revenue from contracts with customers	**24,434,222**	**18,203,797**

12. Cost of sales

Sale of goods	907,163	570,342

13. Other operating income

Donor grants	1,034,603	904,845
Donations in kind	3,024,804	1,193,536
Interest income	-	694
ZMERIP donor funds	166,124	779,549
Government grants	8,250,000	7,999,996
	12,475,531	**10,878,620**

Notes to the Financial Statements

Figures in Zambian Kwacha	2024	2023

14. Operating profit (loss)

Operating (loss) profit for the year is stated after charging (crediting) the following, amongst others:

Auditor's remuneration - external		
Audit fees	127,294	102,651
Remuneration, other than to employees		
Consulting and professional services	548,168	825,808
Employee costs		
Staff emoluments	21,912,530	15,335,944
Union	14,336	-
Other contributions	443,197	108,724
NAPSA contributions	744,393	536,534
Total employee costs	**23,114,456**	**15,981,202**
Depreciation		
Depreciation of property, plant and equipment	1,920,824	1,445,863

Notes to the Financial Statements

Figures in Zambian Kwacha	2024	2023

15. Financial instruments and risk management

Categories of financial instruments

Categories of financial assets

2024

	Note(s)	Amortised cost	Total	Fair value
Trade and other receivables	4	3,477,520	3,477,520	3,477,520
Cash and cash equivalents	6	4,943,840	4,943,840	4,943,840
		8,421,360	**8,421,360**	**8,421,360**

2023

	Note(s)	Amortised cost	Total	Fair value
Trade and other receivables	4	1,643,519	1,643,519	1,643,519
Cash and cash equivalents	6	9,677,134	9,677,134	9,677,134
		11,320,653	**11,320,653**	**11,320,653**

Categories of financial liabilities

2024

	Note(s)	Amortised cost	Total	Fair value
Trade and other payables	10	4,752,371	4,752,371	4,752,371

2023

	Note(s)	Amortised cost	Total	Fair value
Trade and other payables	10	3,528,986	3,528,986	3,528,986

Notes to the Financial Statements

Figures in Zambian Kwacha	2024	2023

15. Financial instruments and risk management (continued)

Financial risk management

Overview

The company is exposed to the following risks from its use of financial instruments:

- Credit risk;
- Liquidity risk; and

Credit risk

Credit risk is the risk of financial loss to the Authority if a customer or counterparty to a financial instrument fails to meet its contractual obligations.

The Authority is exposed to credit risk on trade and other receivables and cash and cash equivalents.

Credit risk for exposures other than those arising on cash and cash equivalents, are managed by making use of credit approvals, limits and monitoring. The Authority only deals with reputable counterparties with consistent payment histories. Each counterparty is analysed individually for creditworthiness before terms and conditions are offered. The analysis involves making use of information submitted by the counterparties as well as external bureau data (where available). Counterparty credit limits are in place and are reviewed and approved by credit management committees. The exposure to credit risk and the creditworthiness of counterparties is continuously monitored.

Credit risk exposure arising on cash and cash equivalents is managed by the group through dealing with well-established financial institutions with high credit ratings.

Credit loss allowances for expected credit losses are recognised for all debt instruments. In order to calculate credit loss allowances, management determine whether the loss allowances should be calculated on a 12 month or on a lifetime expected credit loss basis. This determination depends on whether there has been a significant increase in the credit risk since initial recognition. If there has been a significant increase in credit risk, then the loss allowance is calculated based on lifetime expected credit losses. If not, then the loss allowance is based on 12 month expected credit losses. This determination is made at the end of each financial period. Thus the basis of the loss allowance for a specific financial asset could change year on year.

For trade receivables which do not contain a significant financing component, the loss allowance is determined as the lifetime expected credit losses of the instruments. For all other trade receivables, IFRS 9 permits the determination of the credit loss allowance by either determining whether there was a significant increase in credit risk since initial recognition or by always making use of lifetime expected credit losses. Management have chosen as an accounting policy, to make use of lifetime expected credit losses. Management does therefore not make the annual assessment of whether the credit risk has increased significantly since initial recognition for trade receivables.

The maximum exposure to credit risk is presented in the table below:

Notes to the Financial Statements

Figures in Zambian Kwacha		2024	2023

15. Financial instruments and risk management (continued)

		2024			2023		
		Gross carrying amount	Credit loss allowance	Amortised cost / fair value	Gross carrying amount	Credit loss allowance	Amortised cost / fair value
Trade and other receivables	4	4,447,612	(633,970)	3,813,642	2,470,527	(474,096)	1,996,431
Cash and cash equivalents	6	4,943,840	-	4,943,840	9,677,134	-	9,677,134
		9,391,452	**(633,970)**	**8,757,482**	**12,147,661**	**(474,096)**	**11,673,565**

Liquidity risk

The Authority is exposed to liquidity risk, which is the risk that the Authority will encounter difficulties in meeting its obligations as they become due.

The Authority manages its liquidity risk by effectively managing its working capital, capital expenditure and cash flows. The financing requirements are met through a mixture of cash generated from operations, grants and donations.

There have been no significant changes in the liquidity risk management policies and processes since the prior reporting period.

The maturity profile of contractual cash flows of non-derivative financial liabilities, and financial assets held to mitigate the risk, are presented in the following table. The cash flows are undiscounted contractual amounts.

2024

		Less than 1 year	Total	Carrying amount
Current liabilities				
Trade and other payables	10	4,712,609	4,712,609	4,712,609
Current assets				
Trade and other receivables	4	(3,757,064)	(3,757,064)	(3,757,064)
Cash and cash equivalents	6	(4,943,840)	(4,943,840)	(4,943,840)
		(8,700,904)	**(8,700,904)**	**(8,700,904)**
		(3,988,295)	**(3,988,295)**	**(3,988,295)**

2023

		Less than 1 year	Total	Carrying amount
Current liabilities				
Trade and other payables	10	3,528,986	3,528,986	3,528,986
Current assets				
Trade and other receivables	4	(1,996,430)	(1,996,430)	(1,996,430)
Cash and cash equivalents	6	(9,677,134)	(9,677,134)	(9,677,134)
		(11,673,564)	**(11,673,564)**	**(11,673,564)**
		(8,144,578)	**(8,144,578)**	**(8,144,578)**

Notes to the Financial Statements

Figures in Zambian Kwacha	2024	2023

16. Change in estimate

Property, plant and equipment

The useful life of certain plant was revised in the year 2024 refer to accounting policy note 1.3. The effect of this revision has decreased the depreciation charges for the current and future periods by ZMW 800,000

17. Comparative figures

Where necessary certain accounts have been reclassified to comply with the current year presentation.

18. Contingent liabilities

The Authority is facing two legal suits where former employees sued the Authority.

19. Capital commitments

As at 31 December 2024 the Authority had entered into a committment for the purchase of a food monitoring machine at ZMW 336,121.60 (As at 31 December 2023 committments included a purchase of a motor vehicle at ZMW 352,812 and a radom monitoring machine at ZMW 248,595).

20. Going concern

The financial statements have been prepared on the basis of accounting policies applicable to a going concern. This basis presumes that funds will be available to finance future operations and that the realisation of assets and settlement of liabilities, contingent obligations and commitments will occur in the ordinary course of business.

The directors believe that the Authority has adequate financial resources to continue in operation for the foreseeable future and accordingly the financial statements have been prepared on a going concern basis. The directors are satisfied that the Authority is in a sound financial position and that it has sufficient funds to meet its foreseeable obligations. The directors are not aware of any new material changes that may adversely impact the Authority. The directors are also not aware of any material non-compliance with statutory or regulatory requirements or of any pending changes to legislation which may affect the Authority.

21. Events after the reporting period

There has not arisen since the end of the financial year any item, transaction or event of a material and unusual nature likely in the opinion of the directors of the Authority, to affect substantially the operations of the Authority, the results of those operations or the state of affairs of the Authority in subsequent financial years.

Notes to the Financial Statements

Figures in Zambian Kwacha	2024	2023

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Republic of Zambia

RADIATION PROTECTION AUTHORITY

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