NRWDI

NATIONAL RADIOACTIVE WASTE DISPOSAL INSTITUTE

Annual Performance Plan

2020-2021

ACCOUNTING AUTHORITY STATEMENT

The National Radioactive Waste Disposal Institute (NRWDI) is an independent entity established by the National Radioactive Waste Disposal Institute Act (Act 53 of 2008) and is listed as a Schedule 3A national public entity. It has continued to play a pivotal role as the entity responsible for the management of radioactive waste disposal on a national basis. This 2020/2021 Annual Performance Plan (APP) is a bold plan which is closely aligned to address the nation's critical needs as identified in the National Development Plan's Vision 2030.

Whilst NRWDI has been established for only a few years, it is being challenged to consolidate gains made thus far and to plan diligently in order to actively address the challenges that lie ahead. With South Africa opting for the expansion of the Nuclear Build Programme in an attempt to diversify the energy mix in the country and to achieve security of supply, the emphasis on an entity like NRWDI to manage South Africa's radioactive waste on a national basis cannot be underestimated. This entity has the potential of being on the cutting edge of radioactive waste disposal technologies. This means that NRWDI has to engage in international benchmarking and pivotal research and development in order to be well positioned to confront the challenges.

The long-term sustainability of NRWDI, however, remains a risk for NRWDI. With the competing priorities faced by NRWDI as well as the need for delivery of their mandate the funding over the MTEF cycle is inadequate to cover both the operational and project related costs. Under the circumstances, a large portion of the allocation will be devoted to operational costs until the situation is normalised. A draft Bill to establish the Radioactive Waste Management Fund (RWMF) for the collection of levies and imposition of penalties on waste generators is currently being drafted. Once the Bill has passed the approval process, NRWDI will be able to source funds from the RWMF, thus providing long term sustainability for NRWDI. The legislation will further provide a platform for a better structured NRWDI, which would continue to respond to radioactive waste disposal in a credible and expeditious manner.

The NRWDI has been requested by waste generators to develop disposal solutions for other waste classes, encouraging it to review its work processes and interrogate its efficiencies in order to continue to deliver within the planned timeframes in line with their mandate. NRWDI has embarked on bold effective mitigation measures which have resulted in delivery within the expected timeframes. Some of these measures included collaborating closely with stakeholders, filling critical positions and ICT enablement. The NRWDI continues to re-invigorate their approach to their mandate by leveraging on the benefits of state-of-the-art technologies.

The actual extent and complexity of the core tasks and the challenges that lie ahead for NRWDI and the country will gradually unfold as it dedicatedly works its way forward. It is important to visualize and understand the depth and complexity of the tasks in the context of what has been experienced and achieved by the world's advanced nations such as France, Finland, Sweden, and others in radioactive waste research, management and disposal over a long period of time. South Africa must now commence its long journey towards the safe management and disposal of all radioactive wastes classes, including Intermediate Level Waste (ILW) and High Level Waste (HLW), while continuing its operations with Low Level Waste (LLW) at the Vaalputs site in the Northern Cape.

A key priority in operationalising NRWDI is the Vaalputs functional shift which entails the transfer of staff and assets of the Vaalputs Radioactive Waste Disposal Facility from Necsa to NRWDI in terms of section 30 of the NRWDI Act. It is envisaged that the functional shift will be completed in late 2020.

The functional shift for NRWDI will present an opportunity for NRWDI to revisit its policies, and procedures ensuring that the Vaalputs Waste Disposal Site Operations and the Head Office operations are in sync with each other. The

opportunity for change management should be embraced as it will provide NRWDI the prospect to save costs, increase efficiency and enhance employee morale.

The 2020/21 financial year will also see the RWMF Bill making its way through the legislative processes. This will assist in contributing to the sustainability of the NRWDI, thereby making a positive contribution to the successful delivery of its legislative and functional mandate, thus reinforcing the fact that financial sustainability is critical for the survival of any organisation

The nuclear environment is a highly regulated environment which the public is aware of. In the new financial year, I envisage that there would be greater interaction with one of the main stakeholders which is the public to ensure that their perceptions, concerns and expectations are adequately addressed and that there is constant flow of information to the public using digital media. Public education, participation and education will play a significant role in dispelling myths associated with radioactive waste management and disposal.

In the new year, I see more relationships being forged on a formal level with tertiary institutions as means to enhance research and development in the country regarding disposal technologies and to build new capacity with regards to the skills that are required for disposal purposes.

NRWDI, although cognizant of the complex challenges as outlined above, is however confident that it is ready to begin the journey to lay a solid foundation for the delivery of suitable strategies and solutions for the management and disposal of all South Africa's radioactive waste in a manner that will continue to ensure the protection of the public and the environment, thus making its contribution towards the safe utilization of nuclear energy in our country.

With the aim of continuous improvement and alignment with the Department of Planning, Monitoring and Evaluation's Revised Framework for Strategic Plans and Annual Performance Plans as well as the Guidelines for the Implementation of the Revised Framework for Strategic and Annual Performance Plans, this Annual Performance Plan serves as a blueprint for achieving the NRWDI vision and mission. It further focuses on the impact statement, outcomes, outputs and the indicators which are all necessary to direct the achievement of the mandate of NRWDI.

Signature: 

Mr Tshepo Mofokeng

Accounting Authority of NRWDI

ACCOUNTING OFFICER STATEMENT

It gives me immense pleasure to present the 2020/2021 Annual Performance Plan (APP) for the National Radioactive Waste Disposal Institute. This Annual Performance Plan is aligned with the Department of Mineral Resources and Energy's (DMRE) strategic outcomes and it contributes towards the delivery of the objectives of the National Development Plan (NDP) as well as the Medium Term Strategic Framework. It establishes the key areas of focus that will enable the NRWDI to deliver on its legislative and policy mandate.

The key strategic thrust of the National Radioactive Waste Disposal Institute is to execute its legislative mandate with regard to the long term management and disposal of radioactive waste in a technically sound, socially acceptable, environmentally responsible and economically feasible manner, which is an apex priority for Government and the Department to ensure that no undue burden is placed on future generations due to our past, present and future involvement in nuclear science and technology applications.

It is therefore imperative that NRWDI must be deeply committed to deliver safe, sustainable and publicly acceptable solutions for the long term management and disposal of all radioactive waste classes. This means never compromising on safety or security, taking full account of their social and environmental responsibilities, always seeking value for money and actively engaging with stakeholders in an open, transparent and respectful manner.

Since its inception, the NRWDI has steadily developed into a hub of organisational excellence. It has strengthened its core competencies of management of radioactive waste disposal exceptionally well on its mandate. NRWDI is highly admired for having achieved its objectives and having received unqualified audits from the Auditor General for the past two consecutive years.

The NRWDI's success may be partly attributed to the fact that it applies a project management-based approach and concentrates on both processes and people whilst being cognisant of finances. It offers a unique and integrated service to its stakeholders.

In preparation of this plan key consideration was taken of the Constitution of the Republic of South Africa, the NRWDI Act, the NDP, MTSF and other laws and regulations that are applicable.

The 2020/2021 APP is an ambitious programme of work for NRWDI. The commitments made are cognisant of the challenging times we face and borne out of a collective understanding of the responsibilities and obligations placed on all of us in public service by the Constitution and the aspirations of the people of South Africa.

The key focus areas for the year will be the following:

a) The finalisation of Section 30 of the National Radioactive Waste Disposal Institute Act, (Act 53 of 2008) in respect of the Vaalputs nuclear installation licence and Vaalputs functional shift.

b) The development and maintenance of a responsive radioactive waste management and disposal regime that does not compromise public safety and national security.

c) The establishment and roll-out of the Centralised Interim Storage Facility (CISF) for high level waste, in particular spent nuclear fuel.

d) Ensuring that public perceptions, concerns and expectations are adequately addressed and that public education, participation and communication activities in respect of radioactive waste management and disposal issues are placed at the centre-stage and

e) Focus on research and development as well as management and disposal technologies for all classes of radioactive waste.

With the regulatory landscape consistently changing NRWDI has had to respond strategically and operationally in creative and innovative ways. South African citizens' expectations for improved governance and service delivery from State Institutions are ever-increasing.

The NRWDI has embraced technology-enabled process innovation as a way of ensuring that it is able to successfully execute on its mandate. This enablement includes the automation of processes to ensure that non-value adding work is eradicated whilst there is the intelligent generation of data and reports to inform effective analysis and decision making.

The NRWDI will continue to engage in research and development and collaborate with international counterparts to benchmark and implement cutting edge technologies. We will enhance our capability so that NRWDI can be a centre of excellence in this field as this would assist in building capacity through the enhancement of skills in the management and disposal of radioactive waste.

It is my passionate desire that we, together with the colleagues at the DMRE, Necsa, Eskom and NNR as well as all other stakeholders continue to work proactively to ensure that we execute our mandate effectively and diligently. These efforts will improve public perception, trust and willingness to accept nuclear science and technology for power and non -power application programmes in South Africa. In this way, the people of South Africa will enjoy the benefits of economic prosperity associated with the applications related to nuclear science and technology.

The Board fully endorses this Annual Performance Plan and commits to supporting its implementation. I would like to take this opportunity to acknowledge the important work that the Board Members, NRWDI's management team and staff are executing and would like to encourage a collective and innovative spirit to embrace and accept this Annual Performance Plan and contribute towards realising the impact statement, outcomes and outputs contained therein.

Signature: 

Mr Alan Carolissen

Accounting Officer of NRWDI

OFFICIAL SIGN-OFF

It is hereby certified that this Annual Performance Plan:

- Was developed by the management of the National Radioactive Waste Disposal Institute (NRWDI) under the guidance of the Accounting Authority;
- Takes into account all the relevant policies, legislation and other mandates for which the NRWDI is responsible, and
- Accurately reflects the Impact, Outcomes and Outputs which the NRWDI will endeavour to achieve over the period 2020/21.

Signature: _____

Mr Justin Daniel

Programme 1: Administration

Signature: _____

Mr Zweli Ndziba

Programme 1: Administration

Signature: _____

Mr Alan Carolissen

Programme 2: Radioactive Waste Disposal Operations

Signature: _____

Dr Vusi Twala

Programme 3: Science, Engineering and Technology

Signature: _____

Mr Cobus Beyleveld

Programme 4: Radioactive Waste Compliance Management

Signature: _____

Mr Justin Daniel

Chief Financial Officer

Signature: _____

Ms Deshnee Govender

Manager: Strategic Planning

Signature: _____

Mr Alan Carolissen

Acting CEO of NRWDI

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Table 1: List of Abbreviations

Acronym/ Term	Description/Definition
AFRA	African Regional Cooperative Agreement for Research, Development and Training related to Nuclear Science and Technology
AU	African Union
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CISF	Central Interim Storage Facility
DEA	Department of Environmental Affairs
DMRE	Department of Mineral Resources and Energy
DSRS	Disused Sealed Radioactive Sources
EIA	Environmental Impact Assessment
GHG	Greenhouse Gas Emissions
HLW	High Level Waste
IAEA	International Atomic Energy Agency
ILW	Intermediate Level Waste
IRP	Integrated Resource Plan
ISO	International Standards Organisation
IUDF	Integrated Urban Development Framework
LLW	Low Level Waste
MTEF	Medium Term Expenditure Framework
MTSF	Medium Term Strategic Framework
NDP	National Development Plan
NIL	Nuclear Installation License
NNR	National Nuclear Regulator
NRWDIA	National Radioactive Waste Disposal Institute Act
NRWDI	National Radioactive Waste Disposal Institute
Necsa	South African Nuclear Energy Corporation
PESTLE	Political, Economic, Social, Technological, Legal, Environmental

Acronym/ Term	Description/Definition
PFMA	Public Finance Management Act
QMS	Quality Management System
RWMF	Radioactive Waste Management Fund
SADC	South African Development Community
SHEQ	Safety, Health, Environment and Quality
SQEP	Suitably Qualified and Experienced Persons
SWOT	Strengths, Weaknesses, Opportunities and Threats
UNFCCC	United Nations Framework Convention on Climate Change
WAC	Waste Acceptance Criteria

PART A

Our Mandate

PART A: OUR MANDATE

1. LEGISLATIVE AND POLICY MANDATE

The National Radioactive Waste Disposal Institute (NRWDI) carries out its work having due regard to the fundamental rights as contained in the Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996) and other related legislation. The following sections are extracts from the Constitution which have a direct bearing on NRWDI in terms of delivering on their constitutional mandate.

The NRWDI mandate is underpinned by Section 24(b) of the Constitution of the Republic of South Africa, Act 108 of 1996 which states that:

Everyone has the right –

(a) To an environment that is not harmful to their health or well-being; and

(b) To have the environment protected for the benefit of present and future generations through reasonable legislative and other measures that:

i) Prevent pollution and ecological degradation;

ii) Promote conservation; and

iii) Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

In turn, the above constitutional provisions inform further pieces of legislation that impact the functioning of NRWDI. The governance and regulation of radioactive waste management is also subject to the provisions of the following other acts. These are discussed below.

National Radioactive Waste Disposal Institute Act (NRWDIA), 2008 (Act 53 of 2008)

The National Radioactive Waste Disposal Institute Act (NRWDIA) (Act no. 53 of 2008) was proclaimed by the President of the Republic of South Africa in Government Gazette no. 32764 and NRWDIA became effective on the 1st December 2009. The NRWDIA endorsed the establishment of the National Radioactive Waste Disposal Institute (NRWDI). The functions of NRWDI as per Section 5 of the NRWDI Act (Act 53 of 2008) are summarised as follows:

- Manage radioactive waste disposal on a national basis;
- Operate the national low-level waste repository at Vaalputs;
- Design and implement disposal solutions for all categories of radioactive waste;
- Develop criteria for accepting and disposing radioactive waste in compliance with applicable regulatory safety requirements and any other technical and operational requirements;
- Assess and inspect the acceptability of radioactive waste for disposal and issue radioactive waste disposal certificates;
- Manage, operate and monitor operational radioactive waste disposal facilities including related predisposal management of radioactive waste on disposal sites;
- Investigate the need for any new radioactive waste disposal facilities and to site, design and construct new facilities as required;
- Define and conduct research and development aimed at finding solutions for long-term radioactive waste management;

- Maintain a national radioactive waste database and publish a report on the inventory and location of all radioactive waste in the Republic at a frequency determined by the Board of Directors;

- Manage ownerless radioactive waste on behalf of the Government, including the development of radioactive waste management plans for such waste;

- Assist generators of small quantities of radioactive waste in all technical aspects related to the management of such waste;

- Implement institutional control over closed repositories, including radiological monitoring and maintenance as appropriate;

- Implement any assignments or directives from the Minister regarding radioactive waste management;

- Provide information on all aspects of radioactive waste management to the public living around radioactive waste disposal facilities and to the public in general;

- Advise nationally on radioactive waste management;

- Co-operate with any person or institution in matters falling within these functions; and

- Any other function necessary to achieve the objects of NRWDI.

The majority of the above functions are currently performed within the scope of Low Level Waste (LLW) inventories. In future, the scope would need to be extended to address the national inventory of radioactive waste consisting of Intermediate Level Waste (ILW), High Level Waste (HLW), long-lived waste, spent/used nuclear fuel and Disused Sealed Radioactive Sources (DSRSs). This implies that alternative disposal concepts would have to be researched, designed and implemented. It is also possible that alternative disposal sites would need to be obtained, characterised, constructed and operated.

Nuclear Energy Act, 1999 (Act 46 of 1999)

NRWDI is an independent entity established by statute under the provision of section 55(2) of the Nuclear Energy Act (No. 46 of 1999) to fulfil the institutional obligation of the Minister of Mineral Resources and Energy. In accordance with the provisions of the Nuclear Energy Act, 1999 (Act No. 46 of 1999), the discarding of radioactive waste and storage of irradiated nuclear fuel require the written permission of the Minister of Mineral Resources and Energy and are subject to such conditions that the Minister, in concurrence with the Minister of Environment, Forestry and Fisheries, deems fit to impose. The conditions so imposed will be additional to any conditions contained in a nuclear authorisation as defined in the National Nuclear Regulator Act.

National Nuclear Regulator Act, 1999 (Act 47 of 1999)

The Act provides for the establishment of a National Nuclear Regulator in order to regulate nuclear activities, for its objects and functions, for the manner in which it is to be managed and for its staff matters; to provide for safety standards and regulatory practices for protection of persons, property and the environment against nuclear damage; and to provide for matters connected therewith.

National Environmental Management Act (NEMA), 1998 (Act 107 of 1998)

In accordance with the requirements of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), an environmental assessment has to be conducted prior to the construction of a spent fuel management or radioactive waste management facility.

Mine Health and Safety Act 1996 (Act 29 of 1996)

The Act provides for protection of the health and safety of employees and other persons at mines and, for that purpose to promote a culture of health and safety; to provide for the enforcement of health and safety measures; to provide for appropriate systems of employee, employer and State participation in health and safety matters; to establish representative tripartite institutions to review legislation, promote health and enhance properly targeted research; to provide for effective monitoring systems and inspections, investigations and inquiries to improve health and safety; to promote training and human resources development; to regulate employers' and employees' duties to identify hazards and eliminate, control and minimise the risk to health and safety; to entrench the right to refuse to work in dangerous conditions; and to give effect to the public international law obligations of the Republic relating to mining health and safety; and to provide for matters connected therewith. It is significant to note that after uranium is extracted from the rocks, the processes leave behind radioactive waste. Uranium is a naturally occurring radioactive element that has been mined and used for more than a thousand years as a fuel for nuclear reactors.

Hazardous Substances Act, 1973 (Act 15 of 1973)

Sealed radioactive sources, including disused sealed sources, are controlled as Group IV Hazardous Substances, in terms of the Hazardous Substances Act, 1973 (Act No. 15 of 1973) and are regulated by the Directorate Radiation Control in the Department of Health.

Currently all disused sealed radioactive sources are temporarily stored at Necsa because the end point (i.e., final disposal) has not yet been defined in radioactive waste management plans. The disposal of all radioactive material falls within the ambit of the National Nuclear Regulator and therefore the regulatory framework to manage the total life cycle of sealed radioactive sources needs to be harmonised.

The safety, security and control of disused radioactive sources is a high priority and in line with international commitment in order to prevent radiation accidents that may be caused by the potential abuse and misuse of such sources for, e.g., malicious purposes. NRWDI will liaise with all role players and stakeholders to mitigate these risks by implementing sustainable disposal options (end points) for various categories of disused sealed radioactive sources.

Mineral and Petroleum Resources Development Amendment Act, 2008 (Act 49 of 2008)

The objectives of this Act are to recognise the internationally accepted right of the State to exercise sovereignty over all the mineral and petroleum resources within the Republic, give effect to the principle of the State's custodianship of the nation's mineral and petroleum resources, give effect to section 24 of the Constitution by ensuring that the nation's mineral and petroleum resources are developed in an orderly and ecologically sustainable manner while promoting justifiable social and economic development; and promote equitable access to the nation's mineral and petroleum resources to all the people of South Africa.

National Water Act, 1998 (Act 36 of 1998)

The purpose of this Act is to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled in ways which take into account amongst other factors: promoting equitable access to water; redressing the results of past racial and gender discrimination; promoting the efficient, sustainable and beneficial use of water in the public interest; facilitating social and economic development; protecting aquatic and associated ecosystems and their biological diversity; meeting international obligations.

Public Finance Management Act, 1999 (Act 01 of 1999 as amended by Act 29 of 1999)

The Act enables public sector managers to manage and improve accountability in terms of eliminating waste and corruption in the use of public funds. NRWDI is listed as a Schedule 3A public entity.

Promotion of Administrative Justice Act, 2000 (Act 03 of 2000)

The Act gives effect to the constitutional right to just administrative action for any member of the public whose rights have been adversely affected and to ensure efficient, effective and legitimate administration within all spheres of government.

Preferential Procurement Policy Framework Act, 2000 (Act 05 of 2000)

The Act gives effect to Section 217 (3) and provides a framework for the implementation of the procurement policy contemplated in Section 217 (2) of the Constitution.

Promotion of Access to Information Act, 2000 (Act 02 of 2000)

The Act gives effect to the constitutional right of access to any information held by the State and any information held by a private person that is required for the exercise or protection of any other right.

Intergovernmental Relations Framework Act, 2005 (Act 13 of 2005)

The Act establishes a framework for national, provincial and local government to promote and facilitate intergovernmental relations and to provide a mechanism and procedure to facilitate the settlement of intergovernmental disputes.

Skills Development Act, 1998 (Act 97 of 1998)

The Act provides an institutional framework to devise and implement national, sector and workplace strategies to develop and improve the skills of the South African workforce.

Employment Equity Act, 1998 (Act 55 of 1998)

The Act serves as a mechanism to redress the effects of unfair discrimination and to assist in the transformation of workplaces, so as to reflect a diverse and broadly representative workforce.

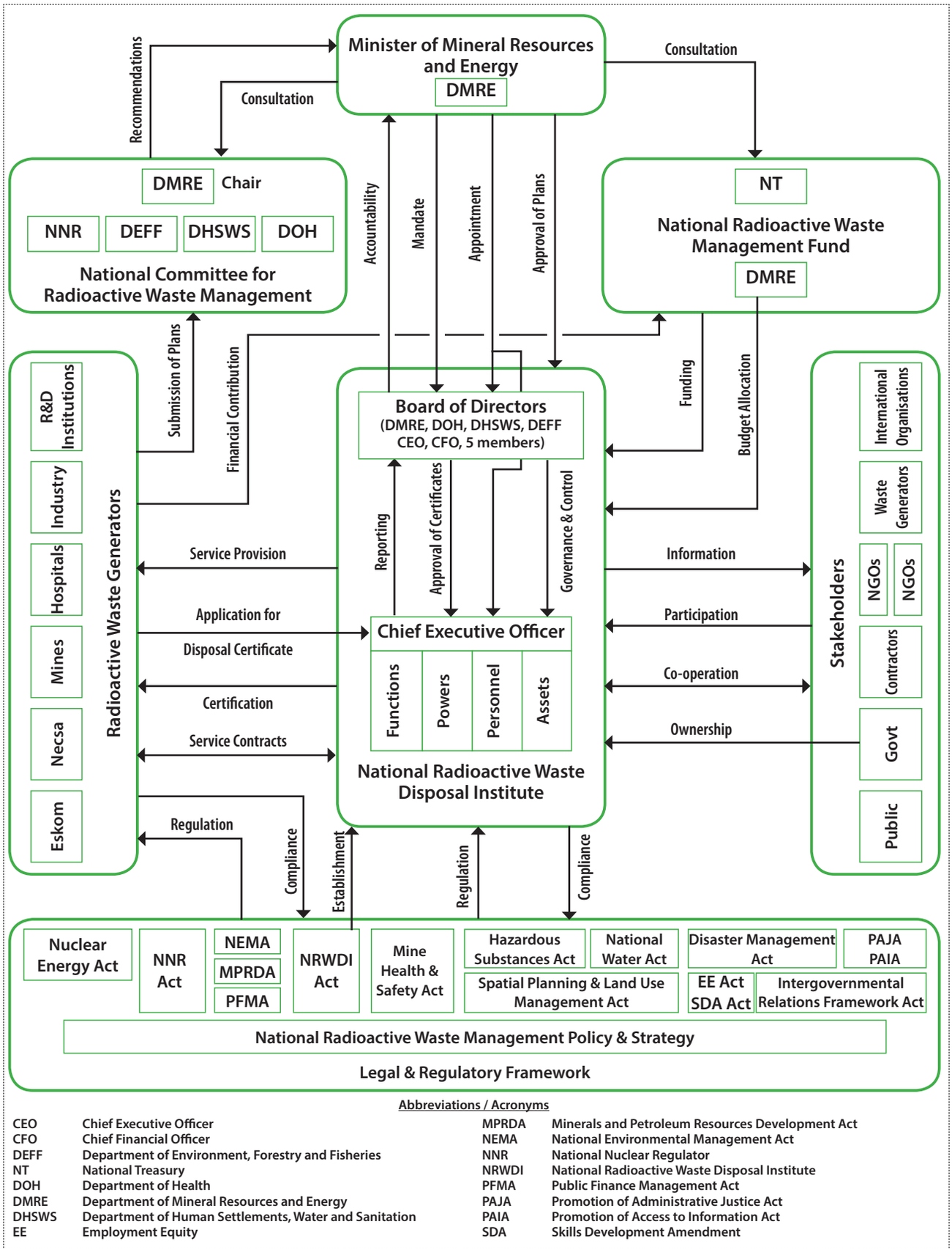
Disaster Management Act, 2002 (Act 57 of 2002)

The Act provides for an integrated and co-ordinated disaster management policy that focuses on preventing or reducing the risk of disasters, mitigating the severity of disasters, emergency preparedness, and rapid and effective responses to disaster and post-disaster recovery.

Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013)

The Act makes provision for inclusive developmental, equitable and efficient spatial planning at different spheres of government

Figure 1 : Depicts the legislative and regulatory environment within which NRWDI operates.



Abbreviations / Acronyms

CEO	Chief Executive Officer	MPRDA	Minerals and Petroleum Resources Development Act
CFO	Chief Financial Officer	NEMA	National Environmental Management Act
DEFF	Department of Environment, Forestry and Fisheries	NNR	National Nuclear Regulator
NT	National Treasury	NRWDI	National Radioactive Waste Disposal Institute
DOH	Department of Health	PFMA	Public Finance Management Act
DMRE	Department of Mineral Resources and Energy	PAJA	Promotion of Administrative Justice Act
DHSWS	Department of Human Settlements, Water and Sanitation	PAIA	Promotion of Access to Information Act
EE	Employment Equity	SDA	Skills Development Amendment

1.1 Institutional Policies and Strategies over the Five-Year Planning Period

There are a number of key policy mandates that comprehensively capture our vision and thus describe what we do and why we do them. In short, these are programs and plans that seek to address public interest. The policy mandates also provide for a relevant international framework that has a bearing on NRWDI and South Africa's policies.

1.1.1 National Development Plan, Vision 2030

The National Development Plan sets out the vision for South Africa by the year 2030:

- Chapter 3, 'Economy and employment', sets out the achievement for full employment, decent work and sustainable livelihoods.
- Chapter 13, 'Building a Capable State', sets out a vision of the transformative and developmental role of the state.
- Chapter 14, 'Promoting accountability and fighting corruption', sets out a vision which has zero tolerance for corruption.

1.1.2 Radioactive Waste Management Policy and Strategy for South Africa (2005)

The cornerstone of South Africa's approach to addressing radioactive waste management issues is the Radioactive Waste Management Policy and Strategy for the Republic of South Africa. The strategic intent of this Policy and Strategy is to ensure a comprehensive radioactive waste governance framework by formulating, in addition to nuclear and other applicable legislation, a policy and implementation strategy in consultation with all role-players and stakeholders.

The development of the national policy and strategy was initiated by the Department of Minerals and Energy during May 2000. Following a process of national public consultation, the Radioactive Waste Management Policy and Strategy for the Republic of South Africa (Policy and Strategy) was published in November 2005. The Policy and Strategy serves as a national commitment to address radioactive waste management in a coordinated and cooperative manner and represents a comprehensive radioactive waste governance framework by formulating, in addition to nuclear and other applicable legislation, a policy and implementation strategy developed in consultation with all stakeholders.

1.1.3 Integrated Urban Development Framework (IUDF)

IUDF is a central urban policy that seeks to address urban spatial patterns through the creation of compact, co-ordinated cities. In the main, it is geared towards transforming urban spaces, focusing on infrastructure development and unleashing the potential of cities.

1.1.4 National Energy Efficiency Strategy

A guiding document developed by government to support implementation of energy efficient measures in South Africa

1.1.5 International Conventions

Apart from South African policies and strategies, the assurance of nuclear safety is reinforced by a number of international instruments. These include certain Conventions such as the Convention on Nuclear Safety and Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management that are legally binding on the participating Member States. South Africa, as a contracting party to these conventions is obliged to adhere to the articles of these conventions and to provide regular reports on compliance to these conventions.

The Joint Convention establishes an international peer review process among Contracting Parties and provides incentives for Member States to improve nuclear safety in line with international best practises. One of the objects of NRWDI is to fulfil national obligations in respect of international nuclear instruments relating to management of spent nuclear fuel and radioactive waste management, including disposal, to ensure that the Republic of South Africa is in compliance with the articles of the Joint Convention through existing national legal and regulatory infrastructure.

The South African Joint Convention report provides information on used fuel and waste management facilities, radioactive waste inventories, ongoing decommissioning projects, used fuel and radioactive waste management safety, as well as information on imports/exports of radioactive waste (trans-boundary movements) and disused sealed radioactive sources.

1.1.6 Sustainable Development Goals

A global agenda with a vision of ending poverty, protecting the planet and ensuring that humanity enjoys peace and prosperity. It appreciates that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development.

1.1.7 African Union 2063 Agenda

The Africa 2063 Agenda envisages an integrated, prosperous and peaceful Africa through inclusive growth and sustainable development.

1.1.8 Addis Ababa Agreement

The Addis Ababa Action, primarily provides and informs the implementation of the New Urban Agenda. Its main focus is on infrastructure, technology, micro small and medium enterprises.

1.1.9 Paris Agreement

The Paris agreement guides international efforts towards reducing and limiting greenhouse gas emissions and the associated approach towards low carbon development. Article 4.19 of the Agreement encourages its signatories to formulate and communicate long term – low GHG emission development to UNFCC by 2020.

1.1.10 Sendai Framework for Disaster Risk Reduction 2015-2030

The Sendai Framework is a non-binding voluntary framework; whose main focus is on the reduction of disaster risk.

1.2 Relevant Court Rulings

There are no current court rulings that may have an influence on NRWDI's operations and/or service delivery obligations.

PART B

Our Strategic Focus

PART B: OUR STRATEGIC FOCUS

2. VISION

To be a world-class radioactive waste disposal organisation.

3. MISSION

To provide environmentally safe and technologically innovative radio-active waste disposal solutions for the benefit of current and future generations.

4. VALUES

The NRWDI's values are grounded in strong ethical considerations. As a result, NRWDI staff members are required to maintain the highest standards of proper conduct and integrity at all times and to ensure that there is no doubt as to what is required. To this end, the NRWDI has developed a set of core values. The NRWDI's value statements are reflected in the table below:

Table 2: NRWDI Core Values

Nurturing	We will make the well-being of people and the environment, a priority.
Respect	We will respect all and obey the laws and legislation that govern our country and regulates our industry
Work-life-balance	We are committed to the creation of a culture that supports the achievement of both life and work.
Dedication	We will demonstrate passion, commitment and care in all that we do being fully aware of the impact that our actions may have on current and future generations.
Integrity	We will conduct ourselves with openness, honesty and respect for all stakeholders

NRWDI will strive to be a learning organisation, continuously evolving and developing to improve and to find the safest efficient radioactive waste disposal solutions. All NRWDI employees are consistently encouraged to live the NRWDI's values in all that they do. The NRWDI will continue to encourage staff to do so until such time as the values form an integral part of the work life of all staff at the NRWDI. Regular communication sessions will continue to be held detailing the NRWDI's purpose, mandate, role, functions and ways of working. This will ensure that the NRWDI's strategy and values remain relevant and become firmly institutionalised.

5. SITUATIONAL ANALYSIS

The situation analysis is a narration of prevailing facts and their implications for NRWDI and the execution of its mandate. It is a logical step that follows any form of planning. The NRWDI has performed a PESTLE analysis, a SWOT analysis, and a Stakeholder Analysis.

The NRWDI's macro-environment was assessed, taking into consideration the **Political, Economic, Social, Technological, Legal / Ethics & Environmental aspects**. These trends have informed the development of the impact statement, outcomes, and outcome indicators to steer the organisation on its path to deliver on its mandate.

Table 3: PESTLE: Political & Technological aspects

Political	Technological
• In terms of the Integrated Resource Plan (IRP), nuclear energy has been incorporated as a part of the energy mix for the country. With the expansion of the Koeberg Nuclear Power Plant life extension as well as the replacement of Safari Research Reactor, which is a multi-purpose reactor, the need for radioactive disposal solutions increases. Nuclear energy use is increasing around the world seeing that the greenhouse gas emissions emitted from nuclear plants are far less than coal and other hydrocarbon fired power stations. • Disposal of radioactive waste is an apex priority and NRWDI thus has the necessary political support. • There is committed political will to embrace nuclear technology and science for various power and non-power applications. • Reconfiguration and possible consolidation of SOEs	• Disposal facilities for very low level and low-level waste are already in operation in several countries. The most important remaining challenge is the development of disposal facilities for high level waste and spent nuclear fuel. Significant progress is being made in a few countries, such as Finland where the construction for a disposal site for spent nuclear fuel is currently under way making Finland the first country to have this technology. Partnerships with IAEA, France, Sweden, Finland and Switzerland also need to be forged to learn more about different waste disposal technologies and ensure that skills are transferred. • There is a need to keep abreast of advances in technology as well as new trends and methodologies in respect of disposal of radioactive waste. • Mature technologies exist for the off-site dry storage (up to 100 years) for spent nuclear fuel. • The infrastructure of the NRWDI is inadequate. • Cyber and Information security challenges.

Table 4 : Economic & Legal/Ethics aspects

Economic	Legal/Ethics
• South Africa has competing social, education, infrastructure and health budget priorities. NRWDI currently has financial challenges with regards to the establishment of waste disposal and related infrastructure for the long-term management, including disposal of radioactive waste. NRWDI needs to diversify its income streams to meet the needs of its waste generators. • Potential for economic opportunities and employment due to establishment of new waste disposal and storage related infrastructure. • A Funding Model to ensure long term sustainability of NRWDI can be outlined. • Cost cutting through consolidation of public entities.	• Current changes in the legislative environment might potentially influence operations. • There will always be legal challenges from anti-nuclear lobby groups. There are various regulatory frameworks set out by the Regulatory bodies since the nuclear space is a highly regulated one. • The RWMF Bill needs to follow the parliamentary process to be enacted to provide sustainable funding for the long-term management and disposal of all classes of radioactive waste. The nuclear authorisation to manage and operate the Vaalputs low level waste repository by NRWDI needs to be finalised urgently taking due cognisance from the nuclear regulatory regime and governance framework.

Table 5: Social & Environmental aspects

Social	Environmental
• The perceived risk associated with nuclear energy and radioactive waste has led to nuclear having a negative perception as an energy source in the energy mix. Comprehensive programmes and other interventions must be put in place to communicate the safe and secure storage and disposal of radioactive waste to the public. • Increased corporate social responsibility needs to take place. • There is an increased awareness of social media and digital connectedness. Social media like (Facebook, Twitter, Snapchat, blogs) can be used as an effective tool for communication with stakeholders to demystify and debunk the perceived risk associated with radioactive waste. • With urban migration taking place at a rapid rate, land will become available for siting for new waste disposal infrastructure. • There are high levels of unemployment in the country and the implementation of new waste management and disposal technologies will make a positive impact on socio- economic empowerment by alleviating poverty through job creation.	• Nuclear energy use is increasing around the world seeing the greenhouse gas emissions emitted from nuclear plants are far less than the coal fired power stations. The need for the safe storage of radioactive material is likely to increase as a result of the abovementioned both in SA and around the world. • Climate change and global warming has led to the environment becoming a global agenda item. The public is becoming more and more aware of the environment as they would like to preserve the environment for future generations. NRWDI plays a key role in protecting the environment for the current and future generations through its safe management and disposal of radioactive waste. • Need to minimise its Carbon Footprint. Reduced consumption - printing, water and electricity. Rise in environmentally friendly practices.

The NRWDI will continue to monitor the ongoing changes in its external environment in order to respond timeously, appropriately and with relevance to any significant shifts or changes.

5.1 Internal Environment Analysis

A SWOT analysis is a powerful tool for sizing up an organisation's resource capabilities and deficiencies. The NRWDI's internal strengths and weaknesses, together with the external opportunities and threats were evaluated to provide a basis for re-aligning, re-prioritising and refining the NRWDI's impact statement, outcomes and outcome indicators. The purpose is for the NRWDI to optimise identified strengths, harness opportunities, offset identified weaknesses and mitigate threats.

Strengths are factors that give the NRWDI a distinctive advantage or competitive edge within the environment within which it operates. NRWDI can use such factors to accomplish its strategic objectives.

The weaknesses refer to a limitation, fault, or defect within NRWDI that prevent it from achieving its objectives; it is what NRWDI does poorly or where it has inferior capabilities or limited resources as compared to other organisations within which it operates.

Opportunities include any favourable current or prospective situation which could be facilitated to allow the organisation to enhance its competitive edge. Threats may be a barrier, constraint, or anything which may inflict challenges, damages, harm or injury to the organisation.

Table 6 : SWOT: List of Strengths, Weaknesses

Strengths	Weaknesses
• NRWDI mandate is legislated and unambiguous. • Core staff is suitably qualified and have generally experienced staff. • Technical expertise in radioactive waste disposal. • World-class low-level waste disposal facility, Vaalputs, which is in operation for more than 30 years. • Board and management are committed to the open, transparent and accountable management of NRWDI • International partnerships and connectedness. • Clean audits as part of good reputation. • ISO 9001 certification. • Staff contingent, dedicated, innovative and open to embrace change.	• Sustainability of funding – this negatively influences acting on the mandate. • Lack of a Project management capability. • Sustainable leadership. • Lack of brand identity and image. • Internal processes and systems not completely in place. • Change management processes for the Vaalputs functional shift needs to be strengthened.

Table 7: SWOT: List of Opportunities and Threats

Opportunities	Threats
• Evolving culture. • Funding opportunities: offer professional services, project waste consultation services, AFRA training opportunities. • Meaningful contribution to South Africa's socio-economic transformation, NDP and MTSF imperatives. • Centre of excellence in radioactive waste management and disposal. • Render advisory services to the AU and SADC countries with regard to radio-active waste. • Build strong co-operative partnerships with IAEA, global and local waste management organisations to enhance and complement NRWDI's competencies. • Efficiency gains – other waste currently stored at Necsa and Ithemba labs. • Reallocation of resources: Vaalputs staff and asset transfer. • Innovation for the disposal of other radioactive waste classes.	• Possibility to lose highly qualified staff due to brain drain and poaching from other organisations in the very small nuclear industry. • Communication with stakeholders not adequate. • Negative public perception and sentiment regarding nuclear energy and radioactive waste. • Delays in finalisation of Waste Management Fund Bill will compromise sustainability and mandate of NRWDI. • Global nuclear events and accidents increasingly influence government policy and regulation towards the nuclear industry. • Delays in obtaining the Vaalputs Nuclear Installation License and concluding the Vaalputs functional shift. • Lack of critical mass of skilled and suitable qualified individuals in the nuclear energy sector. • Change in regulatory requirements. • Loss of mandate due to non-delivery.

5.2 Stakeholder Analysis

Achieving societal and political acceptance is one of the largest challenges with regard to the management and disposal of radioactive waste. This relates in particular to dealing with the myriad of perceptions and fears associated with nuclear disasters in the world e.g., nuclear bomb explosions and weapons programmes, nuclear reactor accidents, health effects associated with cancer and genetic birth effects. Therefore, demonstrating technical competence and regulatory compliance alone are not enough to instil stakeholder confidence and trust. Thus, it is imperative to ensure public participation and stakeholder engagement in a meaningful way.

NRWDI's stakeholder management strategy ensures that the advancement of enhanced stakeholder participation and corporate transparency go hand in glove. Stakeholder confidence building strategies and policies are regional specific and take into account cultural diversities.

Figure 2 below reflects the NRWDI's stakeholder map whilst Table 8: Stakeholder Analysis Matrix depicts the variety of stakeholders who assume substantial influence over the operation of the organisation. These stakeholders have respective expectations that must be fulfilled as tabulated below:

Figure 2: NRWDI Stakeholder Map

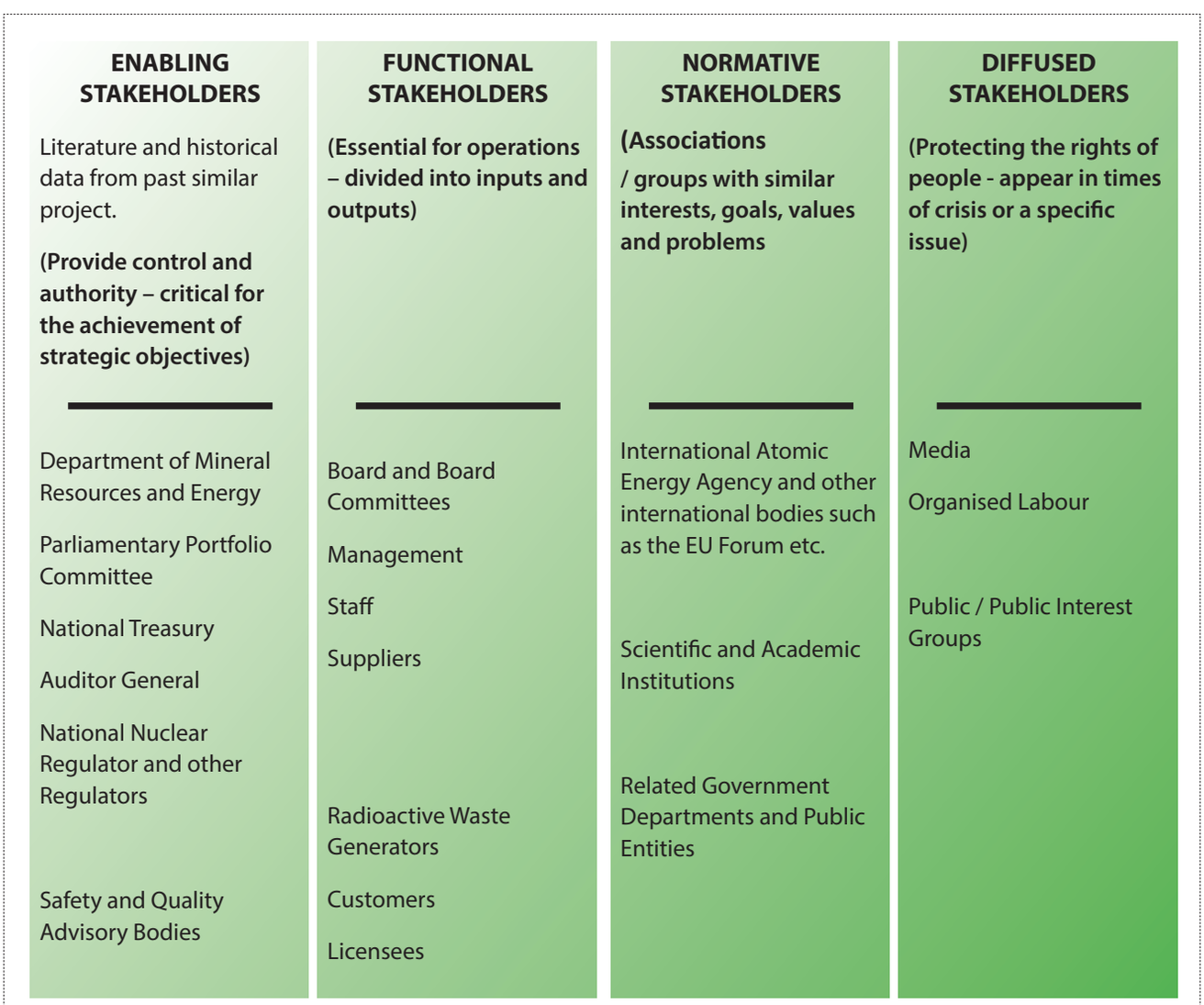


Table 8: Stakeholder Analysis Matrix

Stakeholder	Influence	Expectation
The Board and Governance Committees e.g. Technical Operations Committee, Social and Ethics Committee, Audit and Risk Committee	• Strategic direction	• Transparency • Accountability • Governance, Integrity, Ethics
Department of Mineral Resources and Energy	• Policy Setting • Administrative and governance oversight	• Conformance • Governance Continuity and Reporting • Synergy and effective collaboration • Fulfilment of legislative mandate
Parliamentary Portfolio Committees	• Sanction • Legislation • Oversight budget and reporting	• Accountability • Governance, Integrity, Ethics • Contribution to National Priorities • Provision of direction
Waste generators	• Public Perception • Risk Profile • Waste Disposal Infrastructure	• Provision of information to establish waste disposal solutions • Clarity on waste management processes • Waste management plans • Fair in operation • Consistent feedback • Good turnaround times • Honesty • Accountability • Integrity • Comply with their own license agreements • Transparency • Responsiveness • Guidance • Interaction • Accessibility, Fairness, Consistency, Feedback

Stakeholder	Influence	Expectation
Staff	• Productivity • Morale • Public Perception • Performance Effectiveness	• Fairness • Respect of Worker Rights • Equity and eqaulity • Involvement • Best Practice HRM policies/ practices • Conducive work environment • Adequate resourcing • Transparency • Ethical Behaviour
Media	• Public Perception	• Regular Communication • Transparency • Access to Information
Organized Labour	• Policies • Productivity	• Framework for engagement • Willingness to work • Transparency • Communication • Fairness • Enabling environment for association
The Public/Public interest groups/ Licensees	• Operations • Strategy • Culture	• Transparency • Fairness • Consistent delivery • Integrity • Values orientation • Information sharing • CSI
Suppliers	• Risk • Effectiveness • Turnaround	• Transparency • Fairness • Consistency • Ethical Behaviour
National Treasury (NT)	• Regulatory environment • Financial Prudency • Budgeting	• Reporting • Governance • Compliance
Auditor General (AG)	• Regulatory environment • Compliance	• Reporting • Governance • Audit outcomes • Performance

Stakeholder	Influence	Expectation
International Atomic Energy Agency and other international bodies such as EU Forum etc.	• Policy • Guidance • Safety standards • Direction	• Compliance • Implement international best practice • Capacity building • Research and Development • Collaboration
NNR/ regulators	• Source of regulation	• Regulatory compliance • Efficiency • Fairness • Regulate • Transparency • Due process • Cooperation
Scientific and Academic Institutions	• Research agenda	• Partnerships • Collaboration • Compliment the Research and development mandate

6. ORGANISATIONAL STRUCTURE

6.1 Governance structure

The NRWDI is a Schedule 3A public entity that reports to the Executive Authority i.e., the Minister of Mineral Resources and Energy. The NRWDI's activities are funded by the provision of a budget from funds voted annually to the DMRE. The governance of the NRWDI is entrusted to a Board appointed in accordance with the NRWDI Act, Section 7(1), by the Minister of Mineral Resources and Energy.

Good governance is crucial to business sustainability and growth of the organisation. The NRWDI has committees that advise the Accounting Authority on matters pertaining to governance. These are the Audit and Risk Committee, the Social and Ethics Committee which also has oversight of the Human Resources and Remuneration aspects, and the Technical Operations Committee. These committees function by way of formal Charters.

The Chief Executive Officer, assisted by a senior management team which comprises of the Chief Financial Officer and Divisional Managers, are responsible for the day-to-day running of the NRWDI. The operational component of NRWDI has to be delivered through the Vaalputs National Radioactive Waste Disposal Facility, whose functional shift from Necsa to NRWDI is a key imperative for full operationalization of the NRWDI.

6.2 Operational structure

The current operational structure of the NRWDI was approved by the Board. The structure has been adjusted over time to ensure that it remains relevant and appropriate to organisational requirements. It ensures that the NRWDI continues to have the right people, with the right skills and competencies available at the right time, at the appropriate level to deliver on its mandate.

The NRWDI has a National Office in Pelindaba, North West and its waste disposal office based in Vaalputs in the Northern Cape. As the Vaalputs National Radioactive Waste Disposal Facility, is shifted from

Necsa to NRWDI a key implication is that the shape of the NRWDI organisational structure may well change with a need for people with a different skill-set to that currently in place. This will mean that there may well be a need for current employees to undergo retraining to enable them to acquire the necessary skills. It will also require managers to hone and further develop their competencies to more effectively manage in a highly technical, highly skilled, and knowledge intensive work environment.

The NRWDI will continue to embrace Total Quality Management (TQM) by creating a total quality culture based on continuously improving the performance of every task and value chain activity.

The organogram that follows represents the organisational structure for 2020/21 of the NRWDI. It sets out the operational structures, based on the NRWDI's Strategy 2020-2025 and Annual Performance Plan 2020/21, which will best enable it to deliver on its mandate.

The key driver with regard to the number and type of future resources required is related to the types and volume of waste generated for disposal in authorised nuclear facilities. This requires a flexible and agile structure. The organisational structure of the NRWDI has therefore been designed according to the design principles of consistency, continuity, accountability, flexibility and efficiency.

In order to ensure consistency and continuity, the NRWDI will embark upon a full Workforce Planning exercise or scenario forecasting (quantitative and qualitative) exercise that will determine its specific resourcing requirements (as contained within a Workforce and Strategic Sourcing Plan) for coming years.

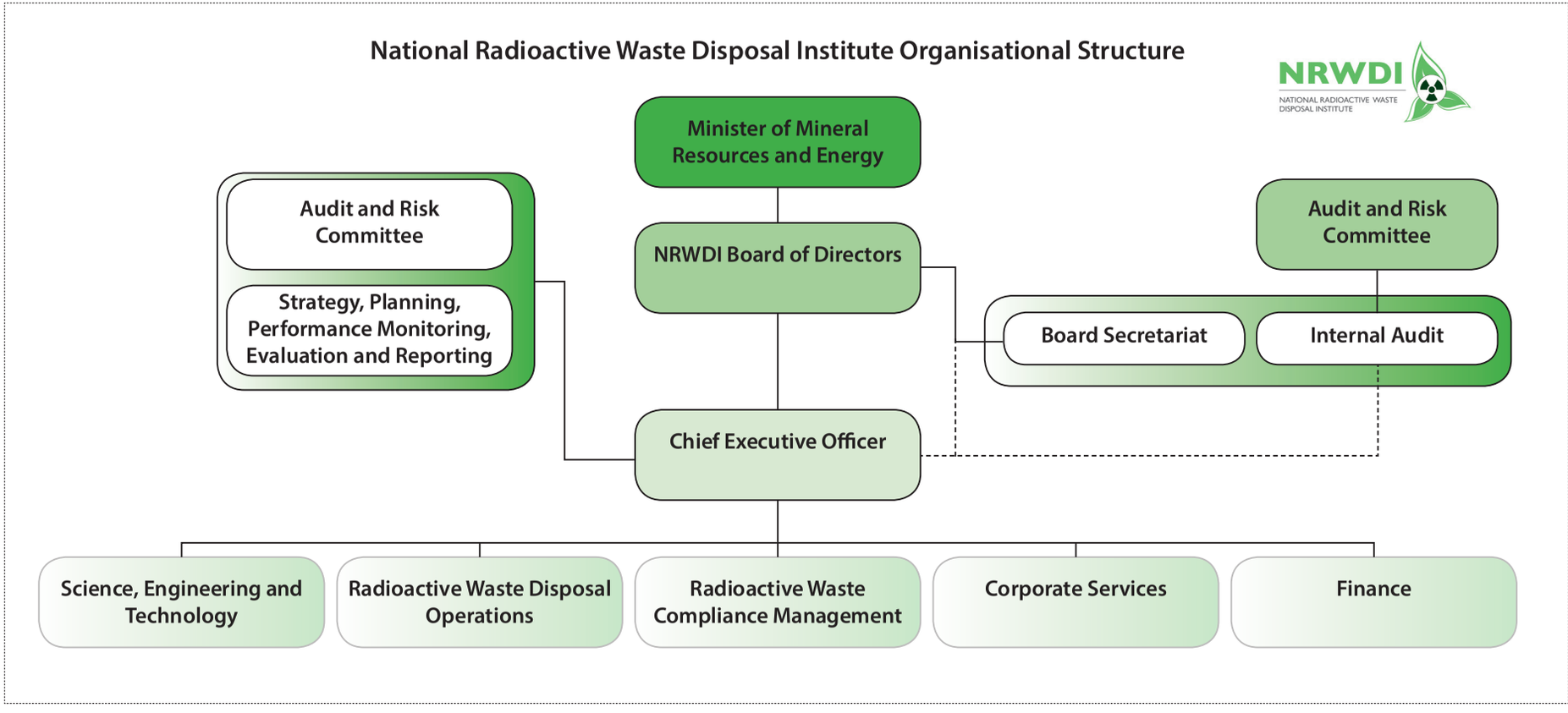
To ensure accountability, the NRWDI, wherever possible, ensures that whole work processes with discrete work products are owned 'end to end' by functional teams. The NRWDI will also use Project Management principles in managing their projects. In order to ensure efficiency, the NRWDI will be structured with a combination of permanent and contingent employees. This allows for the work-force, and the consequent employment cost, to flex and adjust to the NRWDI's variable types and amount of radioactive waste. It also provides an opportunity for the NRWDI to carefully manage the transition process.

The key divisions within NRWDI are Administration, Radioactive Waste Disposal Operations, Science, Engineering and Technology; and Radioactive Waste Compliance Management. The Administration division drives the Human Resource Strategy and Plan. HR's focus has shifted from a traditional "support unit" to one that is now a strategic delivery partner. Human resources functions incorporate amongst others, organisational design, strategic workforce planning and sourcing as well as human resource development, inclusive of a focus on ongoing learning.

To ensure the consistent communication of business objectives and changes, as well as the engagement of all staff at all levels, Administration manages internal & external communications. The role of Administration in the NRWDI also includes ensuring employment-related regulatory compliance as well as the appropriate design and utilisation of all aspects of its physical space in order to create an optimal, safe and cost-effective environment for NRWDI employees. This is accomplished by managing the core facilities management activities which include Occupational Health and Safety (OHS), maintenance, and cleaning.

The NRWDI has a reasonably stable management core enjoying a degree of continuity. This core is tasked with managing employees whose numbers vary according to organisational requirements. The evolving profile of the NRWDI workforce indicates a transition to a predominantly younger workforce over time. Managing this young, largely contingent workforce will require leadership within the NRWDI to develop the necessary skills to manage millennial employees.

Figure 3 NRWDI structure



7. MULTI-YEAR FINANCIAL PROJECTIONS

Allocations have been made to the NRWDI by National Treasury for the specific periods indicated in the table below. The following table sets out the budget and cash flows of the NRWDI for the next MTEF period (up until 2023).

Table 9: Income and Expenditure

Statement of Financial Performance - NRWDI Consolidated								
Revenue	**Audited Outcome**	**Audited Outcome**	**Audited Outcome**	**Approved budget**	**Revised estimate**	**Medium-term estimate**		
Rand Thousand	**2016/17**	**2017/18**	**2018/19**	**2019/20**		**2020/21**	**2021/22**	**2022/23**
Non-Tax revenue	5,525	1,211	1,908	1,526	2,282	2,094	2,364	2,666
Commission received	1	1	1	0	1	0	0	0
Waste disposal fees	5,111	0	0	0	0	0	0	0
Interest	413	1,210	1,907	1,526	2,281	2,094	2,364	2,666
Transfers received	10,000	30,000	45,532	47,499	47,499	49,397	51,564	54,039
Total revenue	**15,525**	**31,211**	**47,440**	**49,025**	**49,781**	**51,491**	**53,928**	**56,705**

Expenses	**Audited Outcome**	**Audited Outcome**	**Audited outcome**	**Approved budget**	**Revised estimate**	**Medium-term estimate**		
Rand Thousand	**2016/17**	**2017/18**	**2018/19**	**2019/20**		**2020/21**	**2021/22**	**2022/23**
Current payments	**24,925**	**30,320**	**36,800**	**49,025**	**54,426**	**51,491**	**53,928**	**56,705**
Compensation of employees	**15,465**	**26,192**	**31,105**	**40,171**	**34,651**	**42,169**	**44,301**	**46,549**
Salaries and wages	15,465	26,192	31,105	40,171	34,651	42,169	44,301	46,549
Goods and services	**4,251**	**3,861**	**5,192**	**8,444**	**19,079**	**8,890**	**9,171**	**9,696**
Of which								
Advertising	0	72	221	0	103	0	0	0
Agency and support/outsourced services	0	0	53	31	15	32	34	36
Assets less than R5 000	0	0	0	59	209	68	70	72
Audit costs	0	782	532	1,293	728	1,452	1,200	1,244
Bank charges	0	48	22	55	26	58	61	63
Board costs	0	324	203	309	256	325	342	355
Catering: internal activities	0	11	18	11	16	11	12	12
Communication	0	174	228	364	327	366	367	381
Computer services	0	304	378	602	840	638	676	701
Consultants	402	4	0	4	4	5	5	5
Contractors	418	279	1,080	750	4,210	750	750	778

Expenses	Audited Outcome	Audited Outcome	Audited outcome	Approved budget	Revised estimate	Medium-term estimate		
Rand Thousand	**2016/17**	**2017/18**	**2018/19**	**2019/20**		**2020/21**	**2021/22**	**2022/23**
Entertainment	0	12	11	12	6	13	14	14
Lease Payments	862	724	783	811	816	860	907	1,498
Legal fees	0	53	32	300	212	300	250	259
Non life insurance	0	0	0	120	120	127	134	139
Printing and publication	0	231	118	295	268	305	322	334
Repairs and maintenance	140	4	39	36	28	38	40	42
Training and staff development	0	11	67	798	691	1,400	1,997	1,700
Travel and subsistence	872	587	940	1,200	1,200	1,200	1,000	1,037
Venues and facilities	0	73	96	181	147	181	191	198
Other unclassified expenditure	1,557	168	370	1,214	8,857	762	799	829
Annual licence fees	1,557	0	32	37	37	39	41	43
Vaalputs NIL	0	0	0	0	7,661	0	0	0
Safety support case	0	0	68	531	531	123	130	135
PSI forums	0	0	0	250	250	250	264	274
Stationery	0	29	50	41	43	43	46	48
Postal costs	0	13	7	16	15	17	17	18
Consumables	0	97	137	64	63	68	69	72
Branding material	0	0	45	159	159	100	100	104
Sundries	0	0	6	0	0	0	0	0
Membership fees	0	28	26	116	96	122	132	137
Depreciation	78	267	492	410	696	431	455	460
Losses from	5,132	0	11	0	0	0	0	0
Disposal of fixed assets	0	0	11	0	0	0	0	0
Impairments to non-financial assets	5,132	0	0	0	0	0	0	0
Total Expenditure	**24,925**	**30,320**	**36,800**	**49,025**	**54,426**	**51,491**	**53,928**	**56,705**
Surplus/(Deficit)	(9,401)	891	10,640	0	(4,645)	0	0	0
	(9,401)	891	10,640	0	(4,645)	-	-	0

Additional notes to budget amounts for MTEF

1. **Advertising** – costs incurred for advertising vacant posts in newspapers.

2. **Agency and support (Outsourced services)** – Internal Audit Function uses a combination of projects completed by own internal resources and those allocated to audit firms where NRWDI does not have the capacity to execute the project.

3. **Assets less than R 5000** - Capital projects less than R 5000.

4. **Audit costs** – Fees for the Auditor General of South Africa.

5. **Board costs** - Remuneration of non-executive Board Members.

6. **Catering (Internal Activities)** – In terms of NT Instruction on cost containment measures, no catering is allowed for internal meetings unless there are external stakeholders attending the meeting or deviations for internal meetings are approved per delegation of authority.

7. **Communication** – Payment to Necsa for telephones, network and email facilities.

8. **Computer services** – Computer hardware such as keyboards, hard drives and servers.

9. **Contractors** – payments to service providers providing technical and specialist services where these services are unnecessary to maintain these skills in-house.

10. **Entertainment** – expenditure incurred by Senior Managers in performance of their duties. Such expenditure includes, but is not limited to, luncheon meetings held with, foreign delegations and/or other individuals in and outside the public sector.

11. **Lease payments** –rental of NRWDI office space from Necsa.

12. **Legal fees** – Provision for unforeseen legal costs that maybe incurred.

13. **Non – life insurance** – short term insurance for assets.

14. **Printing and publication** - Printing of corporate statutory documents like the strategic plan, annual performance plans and annual reports.

15. **Repairs and Maintenance** – Repairs and maintenance - building/equipment.

16. **Training and Development** – Statutory training and staff development.

17. **Travel and Subsistence** – Travel to Vaalputs, Parliament, technical meetings, domestic and international travel as well as travel for Board members.

18. **Venues and facilities** - Hiring of venues and facilities for external stakeholder engagements.

19. **Annual Licence Fees** – Software licences.

20. **Safety Support Case** – Relicensing of Vaalputs.

21. **PSI Forums** – cost associated to hold quarterly Vaalputs Public Safety Information Forum meetings sessions at Vaalputs.

22. **Stationery** – internal stationery.

23. **Postal costs** – postage and delivery costs.

24. **Consumables** – cleaning materials.

25. **Branding material** – Banners, pamphlets, brochures, signage.

26. **Membership fees** – Corporate membership fees and individual professional membership fees.

8. DESCRIPTION OF THE PLANNING PROCESS

The NRWDI is committed to an ongoing, inclusive process of strategy crafting, planning, alignment and review. As an important part of this process, the NRWDI engages with its key stakeholders and obtains structured inputs into its planning and review process. The following workshops have been held to provide relevant input into the NRWDI Strategy and Annual Performance Plan:

- On 14th and 15th November 2019, the NRWDI leadership team and strategic stakeholders participated in a workshop to craft the current NRWDI Strategy and to plan the APP going forward.

- On the 27th November 2019 and 9th December 2019, the NRWDI Leadership team reviewed and refined further the content of the Strategy and APP.

- On the 30th January 2020, at a Board meeting, the five year 2020-2025 Strategic Plan and the 2020/2021 Annual Performance Plan was reviewed and approved by the Accounting Authority for submission to the Executive Authority.

PART C

Measuring Our Performance

PART C: MEASURING OUR PERFORMANCE

9. INSTITUTIONAL PROGRAMME PERFORMANCE INFORMATION

9.1 Programme 1: Administration

9.1.1 Purpose

To ensure that NRWDI is operationally efficient, cost-effective, properly managed and complies with good corporate governance principles. Programme 1 makes a contribution to the MTSF's priority 6 which is *"Capable, Ethical and Developmental State"* by contributing to the following:

- A functional, efficient and integrated government
- A professional , meritocratic and ethical administration
- A social compact and engagement with key stakeholders
- Mainstreaming of gender, empowerment of youth and persons with disability

9.1.2 Sub -programmes

The core outcome is achieved through the provision of key corporate functions under the following sub-programmes:

i) **Strategic planning, monitoring and evaluation and reporting** coordinates the translation of policy priorities agreed upon by the Board into actionable strategic plans with clear outcomes, outputs, indicators and resource commitments. It also carries out monitoring and evaluation of the strategy as articulated in the annual performance plan and institutional operational plan to ensure that the NRWDI delivers on its impact statement and improves and sustains its performance and reporting thereof.

ii) **Risk Management** is responsible for coordinating and supporting the overall institutional risk management process ensuring that risks are identified and managed so that it does not impact negatively on the institutional performance.

iii) **Internal Audit** plays a pivotal role in the combined assurance framework by providing independent assurance over risk management and systems of internal control.

iv) **Board Secretariat** plays an important role in supporting the effectiveness of the board by monitoring that board policy and procedures are followed. The Secretariat also coordinates the timely completion and dispatch of board agenda and all other documents that are tabled before the Board.

v) **Communications and stakeholder Relations** aims to remove existing constraints by achieving alignment through effective stakeholder engagement and value-adding partnerships that are mutually beneficial which will result in the organisation meeting and exceeding its goals.

vi) **Finance and Supply Chain Management**

Finance and Supply Chain Management ensures compliance with all relevant financial statutes and regulations, the most important of which is the Public Finance Management Act (PFMA). It ensures that goods and services are procured taking into consideration the procurement legislation and the principles of good corporate governance.

vii) **Corporate Services (Human Capital Management; Information and Communications Technology Management; Legal Services Management; and General Administration and Facilities Management)**

The Corporate Services sub-programme primarily provides integrated strategic and operational business enabling services. Legal Services is responsible for providing a comprehensive legal advisory service to enable the entity to execute its mandate effectively within the rule of law. Human Resources (HR) Management provides transformational HR support enabling the entity to attract, develop and retain skilled people across the organisation. Information and Communication Technology (ICT) provides long term planning and day to day support in respect of ICT needs, services and systems. Facilities Management ensures physical and information security. It also oversees accommodation and the maintenance thereof.

9.1.2.1 Programme 1: Outcomes, Outputs, Performance Indicators and Targets

Outcome	Outputs	Output indicators	Annual targets						
			Audited actual performance			Estimated performance	MTEF period		
			2016/17	2017/18	2018/19	2019/2020	2020/21	2021/22	2022/23
Effective, Efficient and Responsive NRWDI	Implemented finance strategic plan	Percentage implementation of 5-year finance strategic plan	N/A	N/A	N/A	N/A	80% implementation of year 1 plan of finance strategic plan	80% implementation of year 2 plan of finance strategic plan	80% implementation of year 3 plan of finance strategic plan
	Implemented human capital strategic plan	Percentage implementation of 5-year human capital strategic plan	N/A	N/A	N/A	N/A	80% implementation of year 1 plan of human capital strategic plan	80% implementation of year 2 plan of human capital strategic plan	80% implementation of year 3 plan of human capital strategic plan
	Unqualified Audit Report	Unqualified audit report	N/A	N/A	N/A	N/A	Unqualified audit report	Unqualified audit report	Unqualified audit report

9.1.2.2 Programme 1: Indicators, Annual and Quarterly Targets

Output indicators	Annual target 2020/2021	Q1	Q2	Q3	Q4
Percentage implementation of 5-year finance strategic plan	80% implementation of year 1 plan of the finance strategic plan	20% implementation of year 1 finance strategic plan	40% implementation of year 1 finance strategic plan	60% implementation of year 1 finance strategic plan	80% implementation of year 1 finance strategic plan
Percentage implementation of 5-year human capital strategic plan	80% implementation of year 1 of the human capital strategic plan	20% implementation of year 1 of the human strategic plan	40% implementation of year 1 of the human capital strategic plan	60% implementation of year 1 of the human capital strategic plan	80% implementation of year 1 of the human strategic plan capital
Unqualified audit report	Unqualified audit report	No target	No target	No target	Unqualified audit report

9.1.2.3 Programme 1: Explanation Of Planned Performance Over The Medium - Term Period

In order to have an effective, efficient and responsive NRWDI there must be a focus on the human resources and financial resources in the organization. There is also a need for the various policies, processes and strategies to be in place. In this case the outputs include implementation of the finance strategy, human capital strategy and an unqualified audit report all of which contribute towards achieving the outcome and impact statement.

Strategic support at NRWDI comprises of a multitude of activities which are conducted by specific units within the organisation. All of these activities need to be timeously co-ordinated and meticulously implemented in order to ensure that the organisation is able to execute its mandate. Financial viability and sustainability (compliance to the PFMA and Treasury Regulations) must be tracked and monitored to ensure sustainable operations, support effective asset management, and deliver appropriate levels of service to stakeholders.

NRWDI seeks to ensure that governance protocols are adhered to by employing robust internal control systems. Key contributions to such will be made by the Risk and Internal Audit departments and the Board Secretariat. Performance Planning, Reporting, Monitoring and Evaluation will determine the effectiveness of NRWDI in terms of meeting its mandate and the requirements of the Shareholder. The monitoring and evaluation processes are a strategic imperative, executed via the Office of the CEO, Strategy and Planning department and reported on, at defined intervals. The Human Capital strategy seeks to understand and anticipate the organisations talent needs. The strategy will focus on attracting, maintaining and retaining appropriate human capital and providing opportunities for employee growth and advancement.

The outputs i.e., a developed and implemented finance strategy; human capital strategy and an unqualified audit report will contribute jointly towards the achievement of the outcome i.e., Effective, Efficient and Responsive NRWDI.

9.1.2.4 Programme Resource Considerations

Table 10: Budget Allocation for programme 1 and subprogrammes as per the ENE and/or the EPRE

Statement of Financial Performance - Administration								
Revenue	**Audited Outcome**	**Audited Outcome**	**Audited Outcome**	**Approved budget**	**Revised estimate**	**Medium-term estimate**		
Rand Thousand	**2016/17**	**2017/18**	**2018/19**	**2019/20**		**2020/21**	**2021/22**	**2022/23**
Non-Tax revenue	5,525	1,211	1,908	1,526	2,282	2,094	2,364	2,666
Commission received	1	1	1		1	0	0	0
Waste disposal fees	5,111					0	0	0
Interest	413	1,210	1,907	1,526	2,281	2,094	2,364	2,666
Transfers received	10,000	19,400	27,945	29,362	29,362	31,618	33,073	34,643
Total revenue	**15,525**	**20,611**	**29,853**	**30,887**	**31,644**	**33,712**	**35,437**	**37,310**

Expenses	**Audited Outcome**	**Audited Outcome**	**Audited outcome**	**Approved budget**	**Revised estimate**	**Medium-term estimate**		
Rand Thousand	**2016/17**	**2017/18**	**2018/19**	**2019/20**		**2020/21**	**2021/22**	**2022/23**
Current payments	**24,925**	**19,497**	**22,343**	**30,887**	**28,918**	**33,712**	**35,437**	**37,309**
Compensation of employees	**15,465**	**15,418**	**17,130**	**23,812**	**18,291**	**25,768**	**27,085**	**28,474**
Salaries and wages	15,465	15,418	17,130	23,812	18,291	25,768	27,085	28,474
Goods and services	**4,251**	**3,812**	**4,709**	**6,665**	**9,930**	**7,513**	**7,897**	**8,375**
Of which								
Advertising	0	72	221	0	103	0	0	0
Agency and support/outsourced services	0	0	53	31	15	32	34	36
Assets less than R5 000	0	0	0	59	209	68	70	72
Audit costs	0	782	532	1,293	728	1,452	1,200	1,244
Bank charges	0	48	22	55	26	58	61	63
Board costs	0	324	203	309	256	325	342	355
Catering: internal activities	0	11	18	11	16	11	12	12
Communication	0	125	151	228	191	230	232	240
Computer services	0	304	378	602	840	638	676	701

Expenses	Audited Outcome	Audited Outcome	Audited outcome	Approved budget	Revised estimate	Medium-term estimate		
Rand Thousand	**2016/17**	**2017/18**	**2018/19**	**2019/20**		**2020/21**	**2021/22**	**2022/23**
Consultants	402	4	0	4	4	5	5	5
Contractors	418	279	1,080	750	4,210	750	750	778
Entertainment	0	12	11	12	6	13	14	14
Lease Payments	862	724	783	811	816	860	907	1,498
Legal fees	0	53	32	300	212	300	250	259
Non life insurance	0	0	0	120	120	127	134	139
Printing and publication	0	231	118	295	268	305	322	334
Repairs and maintenance	140	4	39	36	28	38	40	42
Training and staff development	0	11	26	798	691	1,400	1,997	1,700
Travel and subsistence	872	587	664	450	700	450	380	394
Venues and facilities	0	73	96	181	147	181	191	198
Other unclassified expenditure	1,557	168	283	321	344	271	281	291
Annual licence fees	1,557	0	32	37	37	39	41	43
Stationery	0	29	50	19	37	20	20	21
Postal costs	0	13	7	16	15	17	17	18
Consumables	0	97	118	51	56	54	54	56
Branding material	0	0	45	159	159	100	100	104
Sundries	0	0	6	0	0	0	0	0
Membership fees	0	28	25	39	39	41	49	51
Depreciation	78	267	492	410	696	431	455	460
Losses from	5,132	0	11	0	0	0	0	0
Disposal of fixed assets	0	0	11	0	0	0	0	0
Impairments to non-financial assets	5,132	0	0	0	0	0	0	0
Total Expenditure	**24,925**	**19,497**	**22,343**	**30,887**	**28,918**	**33,712**	**35,437**	**37,309**
Surplus/(Deficit)	(9,401)	1,114	7,510	0	2,726	0	0	0

The Administrative division will utilize their resources plan appropriately to ensure that outputs are achieved on time and within the allocated budget.

9.2 Programme 2: Radioactive Waste Disposal Operations

9.2.1 Purpose

The purpose of the program is to provide radioactive waste disposal and related services on a national basis by managing and operating various waste disposal and related nuclear facilities such as the Vaalputs National Disposal Facility, to ensure the safe disposal of all classes of radioactive waste in order to protect humans and the environment.

The following activities are inherently part of the Radioactive Waste Operations Division:

- Operate the national low level waste repository at Vaalputs;
- Manage, operate and monitor operational radioactive waste disposal facilities including related predisposal management of radioactive waste on disposal sites;
- Manage ownerless radioactive waste on behalf of the Government, including the development of radioactive waste management plans for such waste;
- Provide information on all aspects of radioactive waste management to the public living around radioactive waste disposal facilities and to the public in general.
- Maintain the Vaalputs Waste Disposal Inventory Database and submit annually a report to the NNR relating to waste inventory disposed of at Vaalputs.

Programme 2 makes a contribution to two of the MTSF priorities namely priority 1 which is *"Economic Transformation and Job Creation* and Priority 6 *"A capable, ethical and developmental state"*. NRWDI is currently establishing new waste disposal and related infrastructure that will create and sustain more decent jobs.

9.2.2 Programme 2: Outcomes, Outputs, Performance Indicators and Targets

Outcome	Outputs	Output indicators	Annual targets						
			Audited actual performance			Estimated performance	MTEF period		
			2016/17	2017/18	2018/19	2019/2020	2020/21	2021/22	2022/23
Safe disposal of all classes of radioactive waste	All radioactive waste classes disposed	Percentage compliance rate for annual SHEQ audit for disposal facilities on Vaalputs site	N/A	84%	88%	80%	80%	80%	80%
		Number of Public Safety Information Forum (PSIF) meetings held with communities surrounding Vaalputs	N/A	4	4	4	2	2	2
		Percentage acceptance rate for the disposal of waste packages received from waste generators for disposal	N/A	N/A	N/A	N/A	95%	95%	95%

9.2.3 Programme 2: Indicators, Annual and Quarterly Targets

Output indicators	Annual target 2020/2021	Q1	Q2	Q3	Q4
Percentage compliance rate for annual SHEQ audit for disposal facilities on Vaalputs site	80% compliance rate for annual SHEQ audit for the NILs on Vaalputs site	No Target	No Target	No target	80% compliance rate for annual SHEQ audit for the NILs on Vaalputs site
Number of Public Safety Information Forum (VPSIF) meetings held with communities surrounding Vaalputs	2 VPSIF meetings held with communities surrounding Vaalputs	No Target	No target	1 VPSIF meeting held with communities surrounding Vaalputs	1 VPSIF meeting held with communities surrounding Vaalputs
Percentage acceptance rate for the disposal of waste packages received from waste generators for disposal	95% acceptance rate for the disposal of waste packages received from waste generators for disposal	No Target	95% acceptance rate for the disposal of waste packages received from waste generators for disposal	No Target	95% acceptance rate for the disposal of waste packages received from waste generators for disposal

9.2.4 Programme 2: Explanation of Planned Performance over the Medium -Term Period

In order to ensure safe disposal of all radioactive waste classes, the Vaalputs National Waste Disposal must be operated within Vaalputs Nuclear Installation License conditions. Key activities will focus on the operation and management of Vaalputs by:

- verifying that waste packages presented for disposal meet all the requirements of the Vaalputs Waste Acceptance Criteria
- ensuring adherence to Vaalputs Integrated SHEQ Management System,
- sharing information with Vaalputs communities via the Vaalputs Public Safety information Forum

9.2.5 Programme Resource Considerations

Table 11: Budget Allocation for programme 2 and sub programmes as per the ENE and/or the EPRE

Statement of Financial Performance - Radioactive Waste Disposal Operations								
Revenue	**Audited Outcome**	**Audited Outcome**	**Audited Outcome**	**Approved budget**	**Revised estimate**	**Medium-term estimate**		
Rand Thousand	**2016/17**	**2017/18**	**2018/19**	**2019/20**		**2020/21**	**2021/22**	**2022/23**
Transfers received	-	2,966	4,309	4,630	4,630	4,060	4,172	4,355
Total revenue	**0**	**2,966**	**4,309**	**4,630**	**4,630**	**4,060**	**4,172**	**4,355**

Expenses	**Audited Outcome**	**Audited Outcome**	**Audited outcome**	**Approved budget**	**Revised estimate**	**Medium-term estimate**		
Rand Thousand	**2016/17**	**2017/18**	**2018/19**	**2019/20**		**2020/21**	**2021/22**	**2022/23**
Current payments	**0**	**3,074**	**3,568**	**4,630**	**4,476**	**4,060**	**4,172**	**4,355**
Compensation of employees	**0**	**3,052**	**3,534**	**4,064**	**4,064**	**3,493**	**3,649**	**3,812**
Salaries and wages	0	3,052	3,534	4,064	4,064	3,493	3,649	3,812
Goods and services	**0**	**22**	**34**	**567**	**412**	**568**	**524**	**543**
Of which								
Communication	0	22	30	40	40	40	40	41
Travel and subsistence	0	0	4	250	100	250	190	197
Other unclassified expenditure	0	0	0	277	272	278	294	305
PSI forums	0	0	0	250	250	250	264	274
Stationery	0	0	0	5	2	5	6	6
Consumables	0	0	0	3	1	3	3	3
Membership fees	0	0	0	19	19	20	21	22
Total Expenditure	**0**	**3,074**	**3,568**	**4,630**	**4,476**	**4,060**	**4,172**	**4,355**
Surplus/(Deficit)	0	(108)	741	0	154	0	0	0

The Radioactive Waste Disposal Operations division will utilize their resources plan appropriately to ensure that outputs are achieved on time and within the allocated budget.

9.3 Programme 3: Science, Engineering And Technology

9.3.1 Purpose:

The purpose of the programme is to develop and implement technologies for the for all classes of radioactive waste that currently do not have disposal and related infrastructure such as the infrastructure for the safe storage and disposal of spent nuclear fuel or high level radioactive waste and long lived intermediate level waste on a national basis.

The following activities are inherently part of the Science, Engineering and Technology Division:

- Investigate the need for any new radioactive waste disposal facilities and to site, design and construct new facilities as required;

- Define and conduct research and development aimed at finding solutions for long-term radioactive waste management; and

- Maintain a national radioactive waste database and publish a report on the inventory and location of all radioactive waste in the Republic at a frequency determined by the Board of Directors (BoD).

Programme 3 makes a contribution to two of the MTSF priorities namely priority 1 which is *"Economic Transformation and Job Creation"* and Priority 6 *"A capable, ethical and developmental state"* NRWDI is currently establishing new waste disposal and related infrastructure that will create and sustain more decent jobs.

9.3.2 Programme 3: Outcomes, Outputs, Performance Indicators and Targets

Outcome	Outputs	Output Indicators	Annual Targets						
			Audited/Actual Performance			Estimated Performance	MTEF Period		
			2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Centralised storage of spent nuclear fuel	CISF established	Percentage of CISF project plan implemented	N/A	N/A	N/A	N/A	20%	40%	60%

9.3.3 Programme 3: Indicators, Annual and Quarterly Targets

Output Indicators	Annual Targets	Q1	Q2	Q3	Q4
Percentage of CISF project plan implemented	100% implementation of year 1 (20%) CISF project plan	25% implementation of year 1 (20%) CISF project plan	50% implementation of year 1 (20%) CISF project plan	75% implementation of year 1 (20%) CISF project plan	100% implementation of year 1 (20%) CISF project plan

9.3.4 Programme 3: Explanation Of Planned Performance Over The Medium-Term Period

There is currently no national "away from reactor site" disposal and related infrastructure available for spent nuclear fuel except for the "on-reactor site" infrastructure. This programme will focus on the establishment of a national centralised interim spent fuel storage facility by 2025 for the safe storage of Koeberg spent fuel and other high level. A project plan will be required to provide a roadmap, milestones and schedules as well as indicate resources required for achieving this outcome by 2025. Key activities and milestones will include, inter alia, pre-feasbility studies, feasibility studies, technology selection, environmental impact assessment, licensing, construction, cold and hot commissioning as well as the nuclear license to operate this facility.

9.3.5 Programme Resource Considerations

Table 12: Budget Allocation for programme 3 and sub programmes as per the ENE and/or the EPRE

Statement of Financial Performance - Science, Engineering and Technology								
Revenue	**Audited Outcome**	**Audited Outcome**	**Audited Outcome**	**Approved budget**	**Revised estimate**	**Medium-term estimate**		
Rand Thousand	**2016/17**	**2017/18**	**2018/19**	**2019/20**		**2020/21**	**2021/22**	**2022/23**
Transfers received	-	4,010	4,566	4,937	4,937	5,127	5,324	5,581
Total revenue	**0**	**4,010**	**4,566**	**4,937**	**4,937**	**5,127**	**5,324**	**5,581**

Expenses	**Audited Outcome**	**Audited Outcome**	**Audited outcome**	**Approved budget**	**Revised estimate**	**Medium-term estimate**		
Rand Thousand	**2016/17**	**2017/18**	**2018/19**	**2019/20**		**2020/21**	**2021/22**	**2022/23**
Current payments	**0**	**4,036**	**4,527**	**4,937**	**4,858**	**5,127**	**5,324**	**5,581**
Compensation of employees	**0**	**4,017**	**4,405**	**4,610**	**4,610**	**4,796**	**5,030**	**5,277**
Salaries and wages	0	4,017	4,405	4,610	4,610	4,796	5,030	5,277
Goods and services	**0**	**19**	**122**	**328**	**248**	**331**	**294**	**305**
Of which								
Communication	0	19	22	23	23	23	23	24
Travel and subsistence	0	0	100	250	200	250	210	218
Other unclassified expenditure	0	0	0	55	25	58	61	63
Stationery	0	0	0	10	2	11	13	13
Consumables	0	0	0	6	4	6	6	6
Membership fees	0	0	0	39	19	41	42	44
Total Expenditure	**0**	**4,036**	**4,527**	**4,937**	**4,858**	**5,127**	**5,324**	**5,581**
Surplus/(Deficit)	0	(26)	39	0	79	0	0	0

The Science, Engineering and Technology division will utilize their resources plan appropriately to ensure that outputs are achieved on time and within the allocated budget.

9.4 Programme 4: Radioactive Waste Compliance Management

9.4.1 Purpose

The aim of the programme is to ensure that NRWDI's core mandate (disposal of radioactive waste on a national basis) is executed in compliance with quality, health, safety, environmental and nuclear licensing regulatory requirements, relevant international standards and best practices. The programme also seeks to provide management systems and resources to discharge the obligations associated with holding a nuclear authorisation. The Radioactive Waste Compliance Management division provides a support function to NRWDI in terms of developing and ensuring compliance with the nuclear installation licence including the required safety, health, environment and quality management systems.

The following activities are inherently part of the Radioactive Waste Compliance Management Division:

- Implementation of institutional control over closed repositories, including radiological monitoring and maintenance as appropriate;

- Assessing and inspecting the acceptability of radioactive waste for disposal and issuing of radioactive waste disposal certificates; and

- Developing criteria for accepting and disposing radioactive waste in compliance with applicable regulatory safety requirements and any other technical and operational requirements.

Programme 4 makes a contribution to one priority of the MTSF namely Priority 6 which is *"Capable, Ethical and Developmental State."*

The compliance with quality, health, safety, environmental and nuclear licensing regulatory requirements, relevant international standards and best practices helps to ensure that NRWDI is in a position to deliver waste disposal services on a national basis.

9.4.2 Programme 4: Outcomes, Outputs, Performance Indicators and Targets

Outcome	Outputs	Output indicators	Annual targets						
			Audited actual performance			Estimated performance	MTEF period		
			2016/17	2017/18	2018/19	2019/2020	2020/21	2021/22	2022/23
Compliance with the applicable statutory requirements.	Management System requirements implemented	Percentage implementation of the Radiation Protection Program for Vaalputs	N/A	N/A	N/A	N/A	80% of annual project plan for implementation of the Radiation Protection Program executed	80% of annual project plan for implementation of the Radiation Protection Program executed	80% of annual project plan for implementation of the Radiation Protection Program executed
	Management System requirements implemented	Percentage implementation of a Quality Management System for NRWDI that is ISO 9001 compliant	N/A	N/A	N/A	N/A	80% of annual project plan for implementation of ISO 9001 compliant Quality Management System executed	80% of annual project plan for implementation of ISO 9001 compliant Quality Management System executed	80% of annual project plan for implementation of ISO 9001 compliant Quality Management System executed
		Percentage implementation of an ISO compliant SHE Management System for NRWDI	N/A	N/A	N/A	N/A	80% of annual project plan for implementation of ISO compliant SHE Management System executed	80% of annual project plan for implementation of ISO compliant SHE Management System executed	80% of annual project plan for implementation of ISO compliant SHE Management System executed

9.4.3 Programme 4: Indicators, Annual and Quarterly Targets

Output indicators	Annual target 2020/2021	Q1	Q2	Q3	Q4
Percentage implementation of the Radiation Protection Program for Vaalputs	80% of annual project plan for implementation of the Radiation Protection Program executed	20% of project plan for implementation of the Radiation protection Program executed	40% of project plan for implementation of the Radiation protection Program executed	60% of project plan for implementation of the Radiation protection Program executed	80% of project plan for implementation of the Radiation protection Program executed
Percentage implementation of a Quality Management System for NRWDI that is ISO 9001 compliant	80% of annual project plan for implementation of ISO 9001 compliant Quality Management System executed	20% of project plan for implementation of the Quality Management System executed	40% of project plan for implementation of the Quality Management System executed	60% of project plan for implementation of the Quality Management System executed	80% of project plan for implementation of the Quality Management System executed
Percentage implementation of an ISO compliant SHE Management System for NRWDI	80% of annual project plan for implementation of ISO compliant SHE Management System executed	20% of project plan for implementation of ISO compliant SHE Management System executed	40% of project plan for implementation of ISO compliant SHE Management System executed	60% of project plan for implementation of ISO compliant SHE Management System executed	80% of project plan for implementation of ISO compliant SHE Management System executed

9.4.4 Programme 4: Explanation of Planned Performance over the Medium-term period

The output indicators contribute directly towards achieving the NRWDI mandate, namely to manage radioactive waste disposal on a national basis. It therefore also supports all the activities for Programs 2 and 3. Compliance with the requirements and conditions of an approved Nuclear Installation License is a prerequisite for any nuclear related projects and operations. In this regard the Nuclear Installation License requires that, amongst other, a Management System be established and implemented in accordance with the safety standards and regulatory practices for nuclear related projects and operations. In order for NRWDI to manage the radioactive waste disposal operations and any other nuclear related activities on a national basis, the assumption is that the National Nuclear Regulator has approved and issued the Nuclear Installation License to NRWDI. To ensure subsequent implementation of the Nuclear Installation License conditions and requirements, these will be tracked and assessed by means of a project plan.

The outputs i.e., Nuclear Installation License requirements implemented and Management System requirements implemented contribute directly towards the outcome: Waste disposal operations and projects comply with Nuclear Installation License requirements. The establishment of a Management System to ensure compliance with Quality, Safety, Health, Environment and Radiation Protection regulations and standards is a nuclear license requirement. Project plans will be developed to address, track and assess the implementation of and compliance with the Management System requirements.

9.4.5 Programme Resource Considerations

Table 13: Budget Allocation for programme 4 and sub programmes as per the ENE and/or the EPRE

Statement of Financial Performance - Radioactive Waste Compliance Mnagement								
Revenue	**Audited Outcome**	**Audited Outcome**	**Audited Outcome**	**Approved budget**	**Revised estimate**	**Medium-term estimate**		
Rand Thousand	**2016/17**	**2017/18**	**2018/19**	**2019/20**		**2020/21**	**2021/22**	**2022/23**
Transfers received	-	3,625	8,712	8,570	8,570	8,591	8,994	9,459
Total revenue	**0**	**3,625**	**8,712**	**8,570**	**8,570**	**8,591**	**8,994**	**9,459**

Expenses	**Audited Outcome**	**Audited Outcome**	**Audited outcome**	**Approved budget**	**Revised estimate**	**Medium-term estimate**		
Rand Thousand	**2016/17**	**2017/18**	**2018/19**	**2019/20**		**2020/21**	**2021/22**	**2022/23**
Current payments	**0**	**3,713**	**6,361**	**8,570**	**16,174**	**8,591**	**8,994**	**9,459**
Compensation of employees	**0**	**3,705**	**6,035**	**7,686**	**7,686**	**8,113**	**8,538**	**8,986**
Salaries and wages	0	3,705	6,035	7,686	7,686	8,113	8,538	8,986
Goods and services	**0**	**8**	**326**	**884**	**8,488**	**478**	**457**	**473**
Of which								
Communication	0	8	25	73	73	73	73	76
Travel and subsistence	0	0	172	250	200	250	220	228
Other unclassified expenditure	0	0	88	561	8,215	155	163	169
Vaalputs NIL					7,661			
Safety support case	0	0	68	531	531	123	130	135
Stationery	0	0	0	7	2	7	7	7
Consumables	0	0	19	4	2	5	6	6
Membership fees	0	0	1	19	19	20	20	21
Total Expenditure	**0**	**3,713**	**6,361**	**8,570**	**16,174**	**8,591**	**8,994**	**9,459**
Surplus/(Deficit)	0	(88)	2,350	-	(7,604)	0	0	0

The Radioactive Waste Compliance Management division will utilize their resources plan appropriately to ensure that outputs are achieved on time and within the allocated budget.

10. KEY RISKS

OUTCOME	KEY RISK	RISK MITIGATION
1. An effective, efficient and responsive NRWDI	Lack of developed, documented and implemented policies and procedures.	• Ensure that robust policies and procedures are developed and implemented in line with applicable legislation.
	Inadequate capacity and capability (people, systems and processes)	• Implement effective talent management strategies. • Drive organisational culture change. • Strengthen internal capacity to deliver on the mandate. • Ensure development and implementation of robust processes and systems. • Build strategic partnerships.
	Inadequate budget appropriation to implement plans.	• Develop revenue generation strategy.
2. Safe disposal of all classes of radioactive waste	Inability of waste generators to comply with the waste acceptance criteria.	• Pre-shipment compliance inspections. • Audit waste generators management systems.
	Ageing of infrastructure	• Develop and implement an ageing infrastructure management program.
3. Centralised storage of spent nuclear fuel	Delay in licensing due to NNR processes.	• Regular communication with NNR.
	Delay in EIA authorisation due to DEA processes.	• Regular communication with DEA.
	Lack of project funding	• Explore joint ventures and public-private partnerships.
	Lack of SQEP to plan and implement the CISF	• Explore secondments, hiring of SQEP, and training of existing staff.
	Public opposition to the CISF project	• Establish public/stakeholder awareness and engagement programmes.
4. Compliance with the applicable statutory requirements.	Delays in issuing NRWDI with the Nuclear Installation License.	• Liaison with the National Nuclear Regulator (NNR).
	Failure to implement Integrated Management System	• Prioritise the development and maintenance of mandatory SHEQ & RP processes. • Regular internal inspections and audits of Integrated Management System.

11. PUBLIC ENTITIES

N/A

12. INFRASTRUCTURE PROJECTS

NRWDI does not have any infrastructure projects.

13. PUBLIC PRIVATE PARTNERSHIPS

NRWDI does not have any public-private partnerships.

PART D

Technical Indicator Description

PART D: TECHNICAL INDICATOR DESCRIPTION

PROGRAMME 1: ADMINISTRATION

Indicator title	Percentage implementation of five- year finance strategic plan
Definition	The five-year Finance strategic plan will be implemented on an annual basis taking the 5 sub- annual plans into consideration. The target for each year will be 80%. The finance strategic plan will be a formal document that contains the deliverables that will be achieved over the five- year period.
Source of data	Finance Strategic Plan
Method of calculation / assessment	Actual number of deliverables achieved in Finance Strategic Plan / the number of deliverables contained in the plan x 100
Means of verification	Audit reports, quarterly reports and annual reports
Assumptions	Adequate resources in the finance division
Disaggregation of beneficiaries (where applicable)	• Target for woman: N/A • Target for youth: N/A • Target for disabled persons: N/A
Spatial transformation (where applicable)	• Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A
Calculation type	Cumulative (year-to-date)
Reporting cycle	Quarterly
Desired performance	80% of the Finance Strategic Plan implemented.
Indicator responsibility	Chief Financial Officer

Indicator title	Percentage implementation of five year human capital strategy
Definition	The five-year Human Capital strategic plan will be implemented on an annual basis taking the 5 sub- annual plans into consideration. The target for each year will be 80%. The Human Capital strategic plan will be a formal document that contains the deliverables that will be achieved over the five year period
Source of data	Human Capital Strategic Plan
Method of calculation / assessment	Actual number of deliverables achieved in Human Capital Strategic Plan / the number of deliverables contained in the plan x 100
Means of verification	Audit reports, quarterly reports and annual reports
Assumptions	• The current HR team comprises of two resources. The efficient and effective implementation of the plan is based on the assumption that the HR department will be adequately resourced. • All supporting systems and processes are timeously executed.
Disaggregation of beneficiaries (where applicable)	Target for woman: As per the Human Capital Strategic Plan Target for youth: As per the Human Capital Strategic Plan Target for disabled persons: As per the Human Capital Strategic Plan
Spatial transformation (where applicable)	Contribution to spatial transformation priorities: N/A Spatial impact area: N/A
Calculation type	Cumulative
Reporting cycle	Quarterly (year-to-date)
Desired performance	80% of the Annual Plan implemented.
Indicator responsibility	Executive Manager: Corporate Services

Indicator title	Unqualified Audit Opinion
Definition	An unqualified audit opinion received from the AGSA
Source of data	AGSA audit report
Method of calculation / assessment	Final outcome of the AGSA audit report
Means of verification	AGSA report and management letter
Assumptions	Unqualified audit opinions for different audit types
Disaggregation of beneficiaries (where applicable)	Target for woman: N/A Target for youth: N/A Target for disabled persons: N/A
Spatial transformation (where applicable)	Contribution to spatial transformation priorities: N/A Spatial impact area: N/A
Calculation type	Non-Cumulative
Reporting cycle	Annual
Desired performance	Unqualified Audit Opinion
Indicator responsibility	Chief Financial Officer

PROGRAMME 2: RADIOACTIVE WASTE OPERATIONS MANAGEMENT

Indicator title	Percentage compliance rate for annual SHEQ audit for disposal facilities on Vaalputs site
Definition	Compliance rate refers to the outcome of a SHEQ audit expressed as a percentage in terms of the number of findings divided by the total number of requirements audited.
Source of data	SHEQ audit reports
Method of calculation / assessment	% compliance = number of findings/number of requirements audited x 100
Means of verification	Annual SHEQ audit Report
Assumptions	• Implemented SHEQ management system • Functional SHEQ management system
Disaggregation of beneficiaries (where applicable)	Target for woman: N/A Target for youth: N/A Target for disabled persons: N/A
Spatial transformation (where applicable)	Contribution to spatial transformation priorities: N/A Spatial impact area: N/A
Calculation type	Non-Cumulative
Reporting cycle	Annual
Desired performance	80% compliance rate or higher than targeted performance is desirable
Indicator responsibility	Chief Operations Officer

Indicator title	Number of public meetings held with communities surrounding Vaalputs
Definition	Vaalputs Public Safety Information Forum meetings held in accordance with the requirements of the NNR Act (Act 47 of 1999)
Source of data	Meeting attendance register and minutes of meeting
Method of calculation / assessment	Number of VPSIF meetings held per annum
Means of verification	VPSIF Minutes and attendance registers
Assumptions	• Date and venue of VPSIF meetings advertised in local news papers • Public attendance of VPSIF meetings
Disaggregation of beneficiaries (where applicable)	Target for woman: no limits for attendance and participation Target for youth: no limits for attendance and participation Target for disabled persons: no limits for attendance and participation
Spatial transformation (where applicable)	• Contribution to spatial transformation priorities: N/A • Spatial impact area: N/A GPS Coordinates :30.1348o S, 18. 4967O E
Calculation type	Cumulative (Year to Date)

Reporting cycle	Quarterly
Desired performance	2 VPSIF meetings per annum
Indicator responsibility	Chief Operations Officer

Indicator title	**Percentage acceptance rate for the disposal of waste packages received from waste generators for disposal**
Definition	Waste packages received from waste generators can only be accepted for disposal at Vaalputs if these waste packages meet the requirements of the Vaalputs Waste Acceptance Criteria.
Source of data	Waste shipment records/waste disposal records.
Method of calculation / assessment	Actual number of waste packages disposed/ number of waste packages received from waste generators x 100
Means of verification	Waste shipment records/ Waste Disposal Records
Assumptions	• WAC checklist fully completed for every waste consignment • WAC checklists filed in records system • Provision made for waivers • WAC non-compliance addressed by means of non-conformance reports (NCR's)
Disaggregation of beneficiaries (where applicable)	Target for woman: N/A Target for youth: N/A Target for disabled persons: N/A
Spatial transformation (where applicable)	Contribution to spatial transformation priorities: N/A Spatial impact area: N/A
Calculation type	Cumulative (Year End)
Reporting cycle	Bi-annual
Desired performance	95% of the waste packages received have been accepted for disposal.
Indicator responsibility	Chief Operations Officer

PROGRAMME 3: SCIENCE, ENGINEERING AND TECHNOLOGY

Indicator Title	Percentage of CISF project plan implemented
Definition	A project plan for the CISF project will be implemented on a cumulative year-to-date basis, with 20% of it accomplished in the first financial year, 40% in the second year and 60% in the third year. The project plan is a formal document that contains a project scope and objective and will show the basis upon which to assess performance of the project and measure its results.
Source of Data	Literature, consultants and historic data from past similar project/s.
Method of Calculation/ Assessment	% implementation= number of activities completed/ number of activities on project plan x 100
Means of Verification	Feedback from review committees, draft and approved project plan documents.
Assumptions	• Funding will be obtained • Regulatory requirements satisfied • Regulatory approvals obtained
Disaggregation of Beneficiaries (where applicable)	Target for woman: N/A Target for youth: N/A Target for disabled persons: N/A
Spatial Transformation (where applicable)	Contribution to spatial transformation priorities: N/A Spatial impact area: N/A
Calculation Type	Cumulative (Year-to-date)
Reporting Cycle	Annual
Desired Performance	100% of year one project plan
Indicator Responsibility	Chief Technology Officer

PROGRAMME 4: RADIOACTIVE WASTE COMPLIANCE MANAGEMENT

Indicator title	Percentage implementation of the Radiation Protection Program (RPP) for Vaalputs
Definition	The RPP prescribes the radiation protection standards, requirements and procedures for safe operation of a nuclear facility. Implementation includes development, compliance verification, monitoring and measurement, compliance oversight, awareness training and review.
Source of data	RPP standards, requirements and procedures, action plan
Method of calculation / assessment	% implementation = number of activities completed /number of activities on action plan x 100
Means of verification	Action plan, portfolio of evidence required to verify the validity of data
Assumptions	NIL issued in the name of NRWDI NIL implemented RPP documented Resources available for implementation of RPP
Disaggregation of beneficiaries (where applicable)	Target for woman: N/A Target for youth: N/A Target for disabled persons: N/A
Spatial transformation (where applicable)	Contribution to spatial transformation priorities: N/A Spatial impact area: N/A
Calculation type	Cumulative (Year End)
Reporting cycle	Quarterly
Desired performance	80% of the RPP implemented
Indicator responsibility	Executive Manager: Radioactive Waste Compliance Management

Indicator title	Percentage implementation of a Quality Management System (QMS) for NRWDI that is ISO 9001 compliant
Definition	The QMS prescribes the standards, procedures and guidelines for quality management and is a requirement of the NIL. Implementation includes development, compliance verification, monitoring and measurement, compliance oversight, awareness training and review.
Source of data	QMS standards, procedures and guidelines, action plan
Method of calculation / assessment	% implementation = number of activities completed /number of activities on action plan x 100
Means of verification	Action plan, portfolio of evidence required to verify the validity of data
Assumptions	QMS documented QMS is ISO 9001 compliant QMS complies with stakeholder and regulatory requirements Resources available for implementation of QMS

Disaggregation of beneficiaries (where applicable)	Target for woman: N/A Target for youth: N/A Target for disabled persons: N/A
Spatial transformation (where applicable)	Contribution to spatial transformation priorities: N/A Spatial impact area: N/A
Calculation type	Cumulative (Year End)
Reporting cycle	Quarterly
Desired performance	80% of the QMS implemented
Indicator responsibility	Executive Manager: Radioactive Waste Compliance Management

Indicator title	**Percentage implementation of an ISO compliant Safety, Health and Environment (SHE) Management System for NRWDI**
Definition	The SHE management system prescribes the standards, procedures and guidelines for addressing and managing safety, health and environmental risks in the workplace and is a requirement of the NIL. Implementation includes development, compliance verification, monitoring and measurement, compliance oversight, awareness training and review.
Source of data	SHE standards, procedures and guidelines, and action plan.
Method of calculation / assessment	% implementation = number of activities completed /number of activities on action plan x 100
Means of verification	Action plan, portfolio of evidence required to verify the validity of data
Assumptions	SHE Management System documented SHE Management System is ISO compliant SHE Management System complies with regulatory requirements Resources available for implementation of SHE Management System
Disaggregation of beneficiaries (where applicable)	Target for woman: N/A Target for youth: N/A Target for disabled persons: N/A
Spatial transformation (where applicable)	Contribution to spatial transformation priorities: N/A Spatial impact area: N/A
Calculation type	Cumulative (Year End)
Reporting cycle	Quarterly
Desired performance	80% of the SHE Management System implemented
Indicator responsibility	Executive Manager: Radioactive Waste Compliance Management

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