APP-004627

OPERATIONS OF THE RÖSSING URANIUM CONSUMER FUEL INSTALLATIONS

UPDATED ENVIRONMENTAL MANAGEMENT PLAN

Prepared by:

Prepared for:

September 2024

Project	**UPDATED ENVIRONMENTAL MANAGEMENT PLAN FOR THE OPERATIONS OF THE RÖSSING URANIUM CONSUMER FUEL INSTALLATIONS**	
Report Date	September 2024	
Prepared for	TotalEnergies Marketing Namibia (Pty) Ltd Private Bag 5005 Swakopmund Namibia	
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Report Approval	 André Faul Conservation Ecologist	

I Ann-August Shikongo acting as the Proponent's representative (Rössing Uranium Ltd), hereby confirm that we approve the Environmental Management Plan as presented in this document. All material information in the possession of the proponent that reasonably has or may have the potential of influencing the Environmental Management Plan was provided to the consultant.

Signed at Swakopmund on the 03 day of September 2024.

Rössing Uranium Ltd

Company Registration Number

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1 OBJECTIVES OF THE EMP

Rössing Uranium Ltd (hereafter referred to as Rössing) or (the Proponent) requires an updated EMP for their existing Rössing Consumer Fuel Installations. The EMP provides management options to ensure potential impacts from operational activities are minimised. An EMP is a tool used to take pro-active action by addressing potential problems before they occur. This should limit the corrective measures needed, although additional mitigation measures might be included if necessary. The EMP acts as a stand-alone document, which can be used during the operational phases as well as the decommissioning phases of any activity or development. All personnel taking part in the operations of the facilities should be made aware of the contents of the EMP, so as to plan the relevant activities accordingly and in an environmentally sound manner.

The objectives of the EMP are:

- to include all components of the various activities related to the facilities;
- to prescribe the best practicable control methods to lessen the environmental impacts associated with the operations of the facilities;
- to monitor and audit the performance of operational personnel in applying such controls; and
- to ensure that appropriate environmental training is provided to responsible operational personnel.

Rössing implements the International Standards of Operation (ISO) 14001:2015 Environmental Management System (EMS) for its operations. An EMS is an internationally recognized and certified management system that will ensure ongoing incorporation of environmental constraints. At the heart of an EMS is the concept of continual improvement of environmental performance with resulting increases in operational efficiency, financial savings and reduction in environmental, health and safety risks. An effective EMS includes the following elements:

- A stated environmental policy which sets the desired level of environmental performance;
- An environmental legal register;
- An institutional structure which sets out the responsibility, authority, lines of communication and resources needed to implement the EMS;
- Identification of environmental, safety and health training needs;
- An environmental program(s) stipulating environmental objectives and targets to be met, and work instructions and controls to be applied in order to achieve compliance with the environmental policy; and
- Periodic (internal and external) audits and reviews of environmental performance and the effectiveness of the EMS,
- An EMP

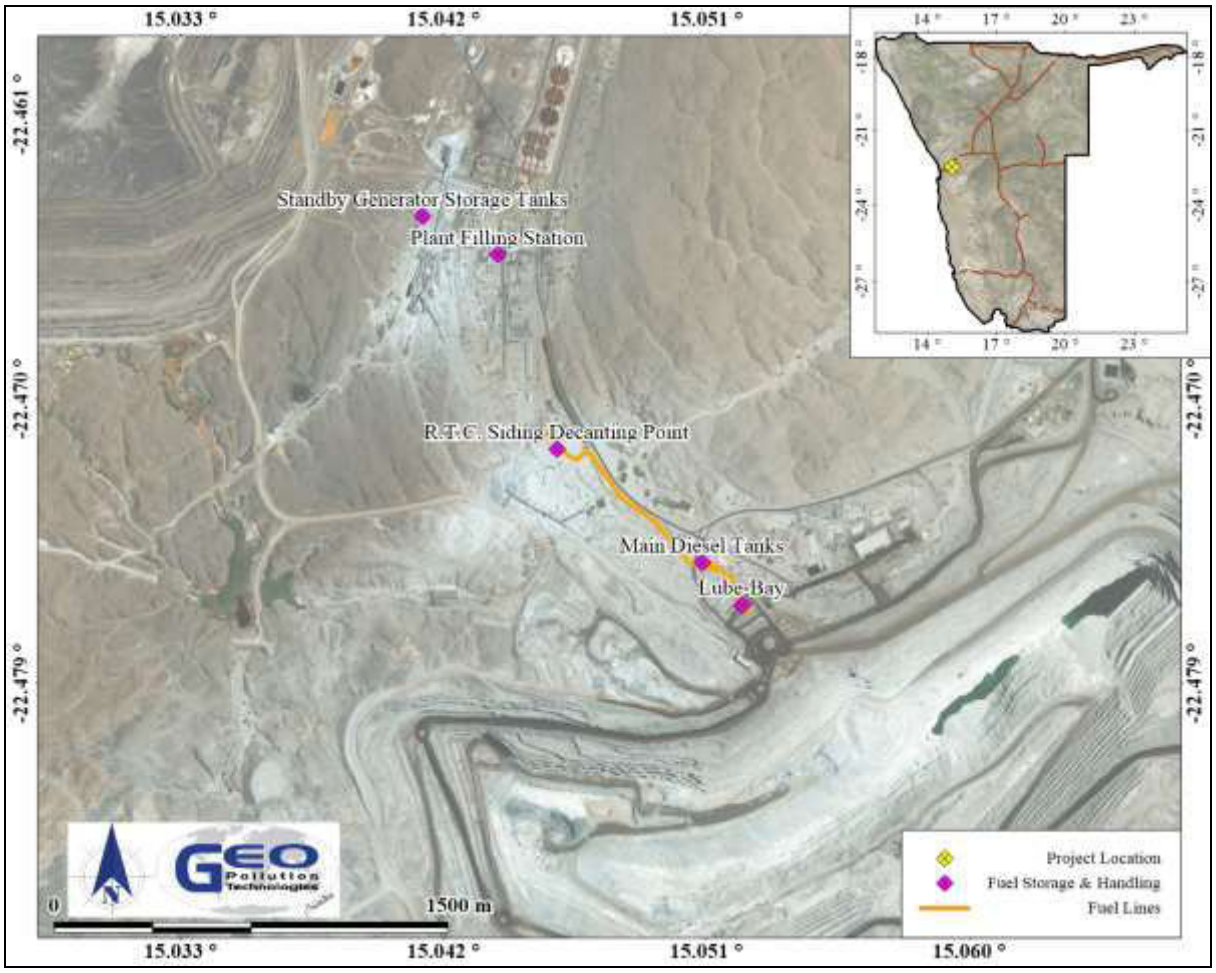

Figure 1-1 Project Location

2 ADMINISTRATIVE, LEGAL AND POLICY REQUIREMENTS

To protect the environment and achieve sustainable development, all projects, plans, programmes and policies deemed to have adverse impacts on the environment require an environmental assessment, as per the Namibian legislation. The legislation and standards provided in Table 2-1 to Table 2-3 govern the environmental assessment process in Namibia and/or are relevant to the facilities.

Table 2-1 Namibian law applicable to the fuel storage facilities

Law	Key Aspects
The Namibian Constitution	♦ Promotes the welfare of people. ♦ Incorporates a high level of environmental protection. ♦ Incorporates international agreements as part of Namibian law.
Environmental Management Act Act No. 7 of 2007, Government Notice No. 232 of 2007	♦ Defines the environment. ♦ Promotes sustainable management of the environment and the use of natural resources. ♦ Provides a process of assessment and control of activities with possible significant effects on the environment.
Environmental Management Act Regulations Government Notice No. 28-30 of 2012	♦ Commencement of the Environmental Management Act. ♦ List activities that requires an environmental clearance certificate. ♦ Provides Environmental Impact Assessment Regulations.
Petroleum Products and Energy Act Act No. 13 of 1990, Government Notice No. 45 of 1990	♦ Regulates petroleum industry. ♦ Makes provision for impact assessment. ♦ Petroleum Products Regulations (Government Notice No. 155 of 2000). ♦ Prescribes South African National Standards (SANS) or equivalents for construction, operation and decommissioning of petroleum facilities (refer to Government Notice No. 21 of 2002).
Water Resources Management Act Act No. 11 of 2013	♦ Provides for management, protection, development, use and conservation of water resources. ♦ Prevention of water pollution and assignment of liability.
Local Authorities Act Act No. 23 of 1992, Government Notice No. 116 of 1992	♦ Defines the powers, duties and functions of local authority councils. ♦ Regulates discharges into sewers.
Public and Environmental Health Act Act No. 1 of 2015, Government Notice No. 86 of 2015	♦ Provides a framework for a structured more uniform public and environmental health system, and for incidental matters. ♦ Deals with Integrated Waste Management including waste collection disposal and recycling; waste generation and storage; and sanitation.
Labour Act Act No 11 of 2007, Government Notice No. 236 of 2007	♦ Provides for Labour Law and the protection and safety of employees. ♦ Labour Act, 1992: Regulations relating to the health and safety of employees at work (Government Notice No. 156 of 1997).

Law	Key Aspects
Atmospheric Pollution Prevention Ordinance Ordinance No. 11 of 1976	♦ Governs the control of noxious or offensive gases. ♦ Prohibits scheduled process without a registration certificate in a controlled area. ♦ Requires best practical means for preventing or reducing the escape into the atmosphere of noxious or offensive gases produced by the scheduled process.
Hazardous Substances Ordinance Ordinance No. 14 of 1974	♦ Applies to the manufacture, sale, use, disposal and dumping of hazardous substances as well as their import and export. ♦ Aims to prevent hazardous substances from causing injury, ill-health or the death of human beings.
Pollution Control and Waste Management Bill (draft document)	♦ Not in force yet. ♦ Provides for prevention and control of pollution and waste. ♦ Provides for procedures to be followed for licence applications.

Table 2-2 Standards or codes of practise

Standard or Code	Key Aspects
South African National Standards (SANS)	♦ The Petroleum Products and Energy Act prescribes SANS standards for the construction, operations and demolition of petroleum facilities. ♦ SANS 10131 is specifically aimed at storage and distribution of petroleum products in aboveground storage tanks. ♦ Provides requirements for spill control infrastructure.

Table 2-3 Relevant multilateral environmental agreements for Namibia and the development

Agreement	Key Aspects
Stockholm Declaration on the Human Environment, Stockholm 1972.	♦ Recognizes the need for a common outlook and common principles to inspire and guide the people of the world in the preservation and enhancement of the human environment.
1985 Vienna Convention for the Protection of the Ozone Layer	♦ Aims to protect human health and the environment against adverse effects from modification of the Ozone Layer are considered. ♦ Adopted to regulate levels of greenhouse gas concentration in the atmosphere.
United Nations Framework Convention on Climate Change (UNFCCC)	♦ The Convention recognises that developing countries should be accorded appropriate assistance to enable them to fulfil the terms of the Convention.
Convention on Biological Diversity, Rio de Janeiro, 1992	♦ Under article 14 of The Convention, EIAs must be conducted for projects that may negatively affect biological diversity.

The project is listed as an activity requiring an ECC as per the following points from Section 9 of Government Notice No. 29 of 2012:

9.1 "The manufacturing, storage, handling or processing of a hazardous substance defined in the Hazardous Substances Ordinance, 1974." (The consumer fuel installations store and handle hazardous substances in the form of fuel.)

- 9.2 "Any process or activity which requires a permit, licence or other form of authorisation, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorisation or which requires a new permit, licence or authorisation in terms of a law governing the generation or release of emissions, pollution, effluent or waste." (The consumer fuel installations store and handle hazardous substances in the form of fuel which is permitted by the Ministry of Mines and Energy.)
- 9.4 "The storage and handling of a dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic meters at any one location." (The consumer fuel installations store and handle more than 30 m^3 of fuel)
- 9.5 "Construction of filling stations or any other facility for the underground and aboveground storage of dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin." (The Proponent constructed a range of underground and aboveground fuel storage tanks)

3 THE EMP

Section 3 outline the management of the environmental elements that may be affected by the storage and handling fuel. Impacts addressed and mitigation measures proposed are seen as minimum requirements which have to be elaborated on by the Proponent, where relevant. Delegation of prevention and mitigation measures as well as reporting activities, should be determined by the Proponent and included in the EMP. The EMP is a living document that must be prepared in detail, and regularly updated, by the Proponent as the project progress and evolve.

The EMP and ECC must be communicated to site managers. A copy of the ECC and EMP should be kept on site. All monitoring results must be reported on as per the conditions of the ECC. Reporting is important for any future renewals of the ECC and must be submitted to the MEFT.

Various potential and definite impacts will emanate from the operations and decommissioning phases. The majority of these impacts can be prevented or mitigated to within acceptable limits. The following sections provide different management measures to be considered and implemented by the Proponent.

3.1.1 Planning

During the phases of planning for continued operations and possible future decommissioning of the facility, it is the responsibility of Proponent to ensure they are and remain compliant with all legal requirements. The Proponent must also ensure that all required management measures are in place prior to, and during all phases, to ensure potential impacts and risks are minimised. The following actions are recommended for the planning phase and should continue during various other phases of the project:

- Ensure that all necessary permits from the various ministries, local authorities and any other bodies that governs all phases of the facilities are in place and remains valid. This includes the consumer installation certificates.
- Ensure all appointed contractors and employees enter into an agreement which includes the EMP. Ensure that the contents of the EMP are understood by the contractors, sub-contractors, employees and all personnel present or who will be present on site.
- Make provisions to have a Health, Safety and Environmental Coordinator to implement the EMP and oversee occupational health and safety as well as general environmental related compliance at the site.
- Have the following emergency plans, equipment and personnel on site where reasonable to deal with all potential emergencies:
  - Risk management / mitigation / EMP/ Emergency Response Plan and HSE Manuals
  - Adequate protection and indemnity insurance cover for incidents;
  - Comply with the provisions of all relevant safety standards;
  - Procedures, equipment and materials required for emergencies.

- If one has not already been established, establish and maintain a fund for future ecological restoration of the project site should project activities cease and the site is decommissioned and environmental restoration or pollution remediation is required.
- Establish and / or maintain a six monthly reporting system to report on aspects of operations and decommissioning as outlined in the EMP.
- Submit six monthly reports to the Ministry of Environment, Forestry and Tourism to allow for environmental clearance certificate renewal after three years. This is a requirement by Ministry.
- Appoint a specialist environmental consultant to update the EMP and apply for renewal of the environmental clearance certificate prior to expiry.

Table 3-1. The Operational Phase

Criteria	Nature	Mitigation	Monitoring	Responsible Body
Enhanced skills and technology transfer to the Erongo Region and subsequent promotion of economic development	People need skills to perform their jobs. The technology to do something is often not found locally. Development of people and technology are key to economic development.	Training must be provided to local Namibians to ultimately employ a predominantly Namibian workforce. Deviations from this practice must be justified appropriately.	Proof of appointment of local Namibians on file.	Proponent
Increased spread of HIV/ AIDS	New and existing developments attract people who seek work. The trucking and distribution of fuel to and from Rössing could contribute to the spread of HIV / AIDS.	Implementing educational program on HIV/AIDS for all the staff is imperative. Restricted employment for local people only should be practiced. Deviations from this practice should be justified appropriately.	Proof of appointment of local Namibians on file. Proof of training and educational programmes.	Proponent
Employment	The facilities provide employment to locals.	Training must be provided to local Namibians to ultimately employ a predominantly Namibian workforce. Deviations from this practice must be justified appropriately.	Bi-annual summary report based on employee records.	Proponent
Secure Fuel Supply	The operation of the facilities will aid in securing fuel supply to the mining operations.	None required	None required	N/A
Traffic	The site is located inside the busier processing plant area. Vehicles entering and exiting the site constitute the traffic leaving and entering the roads to the north and east. Traffic from the mine pit area will also visit this site as the current mine service station will be closed. This will cause an increase of traffic in the plant area.	The responsible department must provide for safe and easy access to and from the service station through the creation of a combination of road markings, yield signs and stop signs.	Any complaints received regarding traffic issues should be recorded together with action taken to prevent impacts from repeating itself. All incidents reported, complaints received, and action taken to be included in a bi-annual monitoring report.	Proponent

Criteria	Nature	Mitigation	Monitoring	Responsible Body
Health, Safety & Security	Health risks include: ♦ Breathing in excessive fumes ♦ Slipping on wet surfaces ♦ Product contact with eyes and skin ♦ Carcinogenic effects of some petroleum products ♦ Accidents involving vehicles Security risks are related to unauthorized entry, theft and sabotage.	It is imperative that adequate measures must be brought in place to ensure safety of staff on site at all times. An integrated health and safety management system acts as a monitoring tool and mitigating tool. Typical mitigating measures within the health and safety management systems are:- ♦ Operational and procedural manuals ♦ Health and safety training ♦ Housekeeping rules ♦ Colour coding areas, pipes, equipment and substances ♦ Signage for Personal Protective Equipment (e.g. protective clothing like safety boots and hard hats) ♦ Safe work procedures and permits to work ♦ Clearance certificates for confined spaces ♦ Emergency response plans ♦ Material Safety Data Sheets (MSDS) ♦ First aid treatment and training ♦ Medical procedures and emergency services ♦ Daily safety moments and/or drills The MSDS give health related medical responses for personnel assisting staff who are exposed to the fuels. Security procedures and proper security measures must be in place. Strict security that prevents unauthorised entry and security personnel should be utilised.	Inventory of necessary information and administrative documentation to be kept on file. All incidents reported, complaints received, and action taken to be included a bi-annual monitoring report. The report should contain dates when training were conducted and when safety equipment and structures were inspected and maintained.	Proponent
Noise	Noise pollution will exist due to heavy vehicles accessing the site to offload fuel or refuel.	Rössing's noise policy must prevail with regards to their normal practice and the health department can issue a directive regarding minimum PPE for the fuel installation.	Any complaints received regarding excessive noise should be recorded with notes on action taken. All incidents reported, complaints received, and action taken to be included a bi-annual monitoring report.	Proponent

Criteria	Nature	Mitigation	Monitoring	Responsible Body
Fire Hazards	Products kept on site are flammable and therefore a fire risk exists.	The following controls are typical measures for mitigating the threat of spillage of hazardous chemicals and possible fire outbreak:- • A holistic fire protection and prevention plan is needed. This plan must include an emergency response plan, firefighting plan and spill recovery plan. • Special note must be taken of the regulations stipulated in sections 47 and 48 of the Petroleum Products and Energy Act, 1990 (Act No. 13 of 1990). • Maintain firefighting equipment, good housekeeping and personnel training (firefighting, fire prevention and responsible housekeeping practices). ***Fire Fighting and Fire Prevention:*** All fire precautions and fire control at the site must be in accordance with relevant SANS regulations or better. Firefighting measures as per the Material Safety Data Sheets of the products should be adhered to. In addition to this, all personnel have to be sensitised about responsible fire protection measures and good housekeeping such as the removal of flammable materials including rubbish and dry vegetation. Regular inspections should be carried out to check for these materials at the site. A holistic fire protection and prevention plan is needed. This plan must include an emergency response plan, firefighting plan and spill recovery plan. Experience has shown that the best chance to rapidly put out a major fire is in the first 5 minutes. It is important to recognise that a responsive fire prevention plan does not solely include the availability of firefighting equipment, but more importantly, it involves premeditated measures and activities to timeously prevent, curb and avoid conditions that may result in fires. An integrated fire prevention plan should be drafted. Special note must be taken of the regulations stipulated in sections 47 and 48 of the Petroleum Products and Energy Act, 1990 (Act No. 13 of 1990).	A bi-annual report should be compiled of all incidents reported. The report should contain dates when fire drills were conducted and when fire equipment was tested/serviced.	Proponent

Criteria	Nature	Mitigation	Monitoring	Responsible Body
Waste Production	The ability of a product to act as waste which must be cleaned up. These can be soils that become contaminated with fuel. Domestic waste from bins, offices and ablution facilities. Contamination of fuel through accidental mixing of products results in waste.	See the MSDS for handling hazardous substances. Contaminated fuel products that can no longer be used in the market must be disposed of in the hazardous waste section of a municipal dump or where possible converted for beneficial use. All other domestic waste should be disposed of timeously to maintain visual orderliness, but more so to not give time for liquid waste to enter the soil substrate. Contaminated soils can be remediated in accordance with accepted procedures at a site dedicated for this purpose. The spill catchment traps and oil water separator should be cleaned regularly and waste disposed of at a suitably classified hazardous waste disposal facility. Surfactants (soap) may not be allowed to enter the oil water separator. Rössing's policy regarding waste and handling of hazardous waste should be followed.	A register of hazardous waste disposal should be kept. This should include type of waste, volume as well as disposal method/facility. Any complaints received regarding waste should be recorded with notes on action taken. All hazardous waste generated, incidents reported, complaints received, and action taken to be included in a bi-annual monitoring report.	Proponent
Groundwater, Surface Water and Soil Contamination	Porous surface substrate can allow unwanted hazardous and ecologically detrimental substances to seep down to the water table.	The following measures must be employed to prevent spillage into surface water drainage channels and groundwater sources:- ♦ Spill control structures and procedures must be in place according to SANS standards or better and connection of all surfaces where fuel is handled with an oil water separator. ♦ All fuelling should be conducted on surfaces provided for this purpose. E.g. Concrete slabs with regularly maintained seals between slabs. ♦ The procedures followed to prevent environmental damage during service and maintenance, and compliance with these procedures, including the correct use of sumps and regular reporting of spillages must be audited and corrections made where necessary. ♦ Proper training of operators must be conducted on a regular basis. ♦ Any spillage of more than 200 *l* must be reported to the Ministry of Mines and Energy and remediation instituted.	All spills or leakages to be included in a bi-annual monitoring report. The report should contain the following information: ♦ date and duration of spill ♦ product spilled ♦ volume of spill ♦ remedial action taken ♦ comparison of pre-exposure baseline data (previous pollution conditions survey results) with post remediation data (e.g. soil hydrocarbon concentrations) ♦ copy of documentation in which spill was	Proponent; Independent Specialist Consultant

Criteria	Nature	Mitigation	Monitoring	Responsible Body
		♦ Spill clean-up means must be available on site as per the relevant MSDS. ♦ Surfactants (soap) may not be allowed to enter the oil water separator as this will reduce or stop its effectiveness. ♦ Underground fuel storage tanks and pipelines must be subjected to tightness tests at least once a year.	reported to the Ministry of Mines and Energy	
Ecological Impact	This impact is mostly limited to pollution of the environment.	No significant impact on the biodiversity of the area is predicted as a result of the facilities normal functioning. Mitigation measures to prevent pollution as above to be implemented.	Any complaints received regarding waste, pollution or environmental damage should be recorded with notes on action taken. All records to be included in a bi-annual monitoring report.	Proponent
Visual Impact	This is an impact that not only affects the aesthetic appearance, but also the integrity of the site	Regular waste disposal and routine maintenance on infrastructure will ensure that the longevity of structures is maximised and a low visual impact is maintained. However, it is important that the real integrity of the structures is considered in the long term and not just appearances.	Any complaints received regarding visual aesthetics to be recorded with notes on action taken. All records to be included in a bi-annual monitoring report.	Proponent

Criteria	Nature	Mitigation	Monitoring	Responsible Body
Cumulative Impact	These are impacts on the environment, which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of who undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time. In relation to an activity, it means the impact of an activity that in itself may not be significant, may become significant when added to the existing and potential impacts resulting from similar or diverse activities or undertakings in the area. Possible cumulative impacts associated with the operational phase include: increased risk of groundwater and soil contamination; increased traffic in the area and increased risk of accidents.	Addressing each of the individual impacts as discussed and recommended in the EMP would reduce the cumulative impact. Reviewing monitoring reports for any new or re-occurring impacts or problems would aid in identifying cumulative impacts and help in planning if the existing mitigations are insufficient.	Bi-annual summary report based on all other impacts must be created to give an overall assessment of the impact of the operational phase.	Proponent

Table 3-2. Maintenance and Decommissioning Phases

Criteria	Nature	Mitigation	Monitoring	Responsible Body
Waste Production	When performing maintenance or upon decommissioning waste will be produced in the form of building rubble, obsolete equipment and structures, obsolete or residual products and equipment or structures that can be used elsewhere or sold as scrap. Soil polluted by hydrocarbons must be treated as hazardous waste.	To reduce the amount of waste all re-usable pipelines, pumps, tanks, valves and other equipment must be removed to another site owned by the Proponent or sold. Those items that can not be used again must be scrapped in the appropriate manner. By law storage tanks may not be sold, but must be scrapped by approved recyclers. Upon maintenance or demolition of the buildings any waste, concrete and rubble must be removed from the property and taken to an approved dumpsite. Rehabilitation if necessary are to be conducted.	Regular visual inspection. A register of hazardous waste produced and disposal methods should be maintained and included in a bi-annual monitoring report.	Proponent; Contractor
Ecological Impact	Operations spanning many years may create new habitat for fauna and flora. Upon maintenance or decommissioning these habitats may be destroyed.	The Proponent would have to ensure that no new habitat is created for flora and fauna. Before decommissioning the health, safety and environmental officer would need to inspect every structural facility to ensure that the dismantling and removal of any structure would not affect any organism that has become dependent on those structures for survival, shelter or breeding. Where new habitats were created, that is now occupied by fauna or flora, the Proponent must contact the Ministry of Environment, Forestry, and Tourism (MEFT) or other appropriate organizations to establish the conservation status of it. The possibility of relocating the fauna or flora must be investigated and executed. Should the species be listed as vulnerable to extinction, or worse, a meeting should be held with MEFT in order to determine the appropriate handling of the situation.	A report should be compiled of any fauna and flora that established itself on the premises. The report should include all actions taken to relocate or deal with the situation.	Proponent; Contractor
Employment	Maintenance will require contractors. Decommissioning of the facilities may lead to retrenchments or re-location of staff no longer required.	Restricted employment of local people and contractors only should be practiced. Deviations from this practice should be justified appropriately. Plan in advance for meeting the Labour Acts requirements for retrenching of staff if required.	Employment contracts on file.	Proponent

Criteria	Nature	Mitigation	Monitoring	Responsible Body
Dust	Dust may be generated during maintenance and decommissioning phases and might be aggravated during periods of strong winds.	It is recommended that regular dust suppression be included in the maintenance and decommissioning phases, when dust becomes an issue. Personnel should be issued with dust masks for health and safety reasons.	Regular visual inspection. A complaints register must be maintained, in which any complaints from the community must be logged. Complaints must be investigated and, if appropriate, acted upon. Information to be included in a bi-annual monitoring report.	Proponent; Contractor
Noise	Noise pollution will exist due to heavy vehicles accessing the site during maintenance or to collect rubble from demolished building materials. Cranes may be erected for removing the huge storage tanks. Hammers, diggers and drills will be used.	Rössing's noise policy must prevail with regards to their normal practice and the health department can issue a directive regarding minimum PPE for the fuel installation. All personnel must be issued with hearing protectors and neighbours must be notified of the time and duration of maintenance or decommissioning.	A complaints register must be maintained, in which any complaints from the community must be logged. Complaints must be investigated and, if appropriate, acted upon. Information to be included in a bi-annual monitoring report.	Proponent; Public Relations Personnel; Contractor.
Visual Impact	This is an impact that affects the aesthetic appearance	Visual impact could pose one of the most significant impacts. Visual impacts could be limited through keeping all maintenance and decommissioned areas clean and orderly at all times. Good housekeeping also reduces the risk of injuries. Notice of the start of the major maintenance activities or decommissioning should be given to the local authorities with an invitation to give feedback at any time with regards the visual impact.	A complaints register must be maintained, in which any complaints from the community must be logged. Complaints must be investigated and, if appropriate, acted upon. Information to be included in a bi-annual monitoring report.	Proponent; Contractor
Groundwater, Surface Water and Soil Contamination	Porous surface substrate can allow unwanted hazardous and ecologically detrimental substances to seep down to the water table.	All precautions are to be taken to prevent contamination of the soil as this could enter the ecosystem. Leakages from vehicles might occur especially if they are serviced on site. Care must be taken to avoid contamination of soil and groundwater. Groundwater might spread pollutants to neighbouring receptors and may create an impact on underground utilities (i.e. fresh	Report form for all spills or leaks is to be completed by Contractor and submitted to the Ministry of Mines and Energy.	Proponent; Contractor

Criteria	Nature	Mitigation	Monitoring	Responsible Body
		water supply to buildings, sewerage system). Pollutants in the soil and building rubble must be transported away from the site to an approved, appropriately classified waste disposal site. Confirm MSDS information for any remaining fuels, oils or lubricants that must be discarded.	A baseline study must be carried out after the decommissioning. This is to assess the condition of soil substrate and any groundwater present. Comparisons with previous conditions survey data is to be made and any discrepancies must be addressed before the site can be signed over.	
Health, Safety and Security	During the maintenance and decommissioning phase similar risks to human beings as with the operational phase will be present. Once the tanks and pipelines have been emptied completely of their contents residual amounts of fuel might exist. All other risks associated with demolitions must be considered.	The maintenance and decommissioning of a fuel installation can cause serious health and safety risks to workers on site. Occupational exposures are normally related to dermal contact with fuels and inhalation of fuel vapours during handling of such products. For this reason adequate measures must be brought in place to ensure safety of staff on site, and includes: (Provide forms for all end users who monitor) ♦ Proper training of operators; ♦ First aid treatment; ♦ Medical assistance; ♦ Emergency treatment; ♦ Prevention of inhalation of fumes (fuel); ♦ Protective clothing, footwear, gloves and belts; safety goggles and shields; ♦ Manuals and training regarding the correct handling of materials and packages should be in place and updated as new or updated MSDS' become available; Risks might be lower but still exist especially if tanks must be entered for inspections. Confined Space Training will be required. ♦ 24-hour security surveillance in case of opportunistic activities.	A register of all incidents must be maintained on a daily basis. This should include measures taken to ensure that such incidents do not repeat itself. Information to be included in a bi-annual monitoring report.	Proponent; Contractor

Criteria	Nature	Mitigation	Monitoring	Responsible Body
Fire and Explosion Hazard	Residual hydrocarbons could be present and might pose a risk to the teams doing maintenance or dismantling the various structures. Fire and/or explosion events are still possible.	Various international occupational health and safety performances should be consulted for specific regulations regarding the decommissioning of the facilities to ensure all risks are mitigated. All relevant regulations and precautions should be in place as it was during the Operational Phase. In addition to this, all personnel have to be sensitised about responsible fire protection measures and good housekeeping such as the removal of flammable materials including rubbish, dry vegetation, and hydrocarbon-soaked soil from the vicinity of the fuel storage facilities. Regular inspections should still be carried out to inspect and test fire fighting equipment and pollution control materials at the fuel storage facilities. All fire precautions and fire control at the fuel storage facilities must be in accordance with SANS, or better. The holistic fire protection and prevention plan should still be utilised. Experience has shown that the best chance to rapidly put out a major fire is in the first 5 minutes. It is important to recognise that a responsive fire prevention plan does not solely include the availability of fire fighting equipment, but more importantly, it involves premeditated measures and activities to timeously prevent, curb and avoid conditions that may result in fires.	A register of all incidents must be maintained on a daily basis. This should include measures taken to ensure that such incidents do not repeat itself. Information to be included in a bi-annual monitoring report.	Proponent; Contractor

4 CONCLUSIONS

The above updated EMP, if properly implemented will help to continually minimise adverse impacts on the environment. Where impacts occur, immediate action must be taken to reduce the escalation of effects associated with these impacts. To ensure the relevance of this document to the specific stage of project, it needs to be reviewed throughout all phases.

The EMP should continue to be used as an on-site reference document during all phases of the proposed project, and auditing should take place in order to determine compliance with the EMP for the proposed site, and parties responsible for transgression of the EMP should be held responsible for any rehabilitation that may need to be undertaken.

Monitoring reports must be submitted to the Ministry of Environment, Forestry and Tourism every six months to allow for the future renewal of the Environmental Clearance Certificate.

5 REFERENCES

Faul A, Botha P, Short, S. 2018. Updated Environmental Impact Assessment for the Operations of the Rössing Uranium Consumer Fuel Installations