



ECC

ENVIRONMENTAL
COMPLIANCE CONSULTANCY



ECC-105-235-REP-07-D

ENVIRONMENTAL MANAGEMENT PLAN

EXPLORATION ACTIVITIES ON EPL 7699 INCLUDING THE EXPLORATION AND SMALL-SCALE MINING
ACTIVITIES ON MINING CLAIMS 68855 – 68861 AND 67633 IN THE KHOMAS AND HARDAP
REGIONS

PREPARED FOR

MERTENS MINING AND TRADING (PTY) LTD

JUNE 2021

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DEFINITIONS AND ABBREVIATIONS

| ABBREVIATIONS | DESCRIPTION |
|---------------|--------------------------------------|
| ECC | Environmental Compliance Consultancy |
| EIA | Environmental Impact Assessment |
| EMP | Environmental Management Plan |
| EPL | Exclusive Prospecting Licence |
| I&APs | Interested and Affected Parties |
| IFC | International Finance Cooperation |
| SWRD | Stormwater Return Dam |
| TSF | Tailings Storage Facilities |
| WRD | Waste Rock Dumps |

1 INTRODUCTION

1.1 PROJECT BACKGROUND

Environmental Compliance Consultancy (ECC) has been contracted by Mertens Mining and Trading (Pty) Ltd to compile an Environmental Management Plant (EMP) in accordance with the Environmental Management Act, No. 7 of 2007. The purpose of this EMP is to support the proposed exploration activities on Exclusive Prospecting Licence (EPL) 7699, which is located 25km east-southeast of Rehoboth. The largest part of EPL 7699 is located within the Khomas Region, but a small portion overlaps with the Hardap Region (Figure 1).

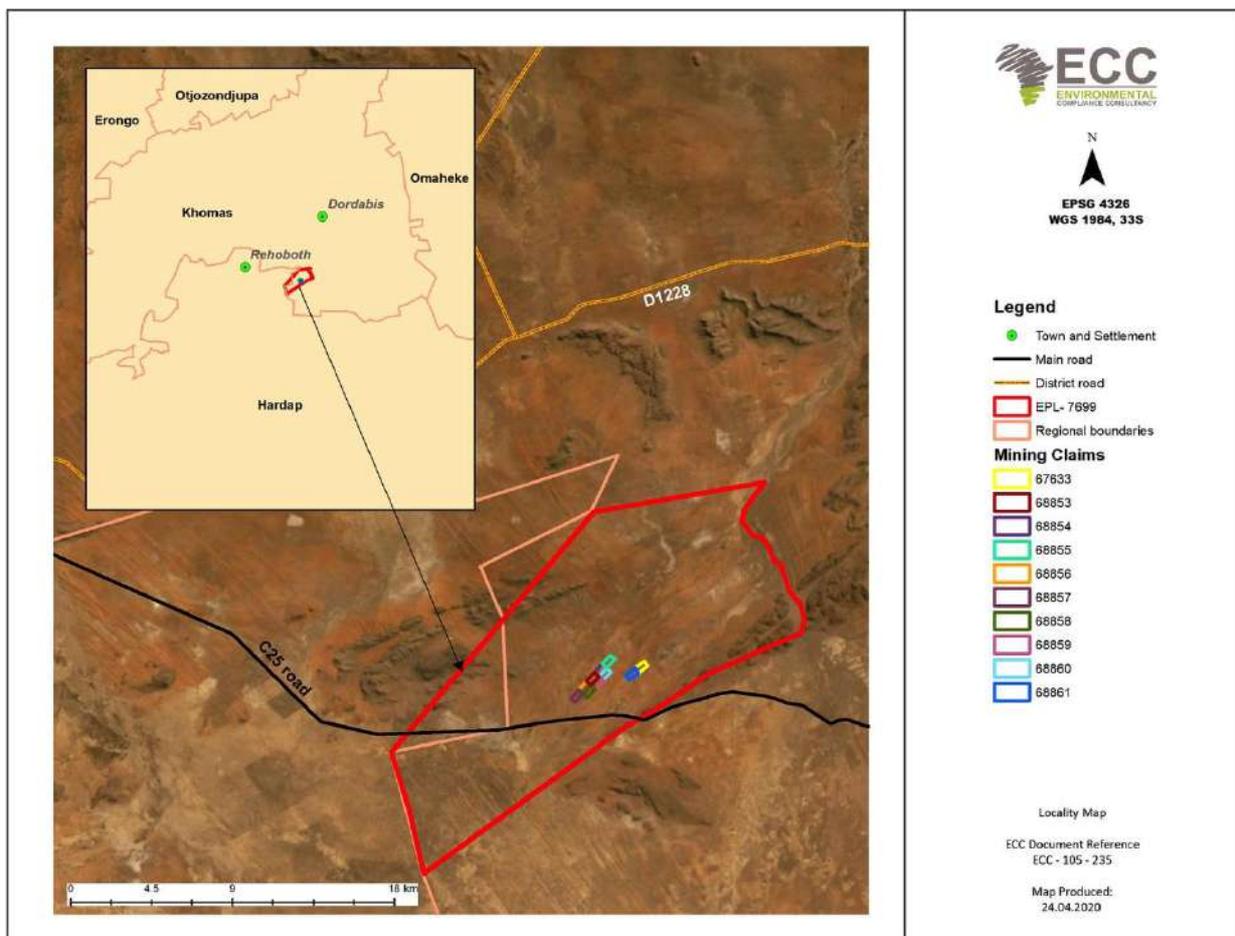


FIGURE 1 – LOCATION OF EPL 7699

Mertens Mining and Trading (Pty) Ltd, is a Namibian registered company (registration number 2007/0308), and holds the mineral exploration licence of EPL 7699. The project started in 2008 in phases resulting in the initial proclamation of EPL 4034, which covered an area of 34,824.80ha. Mining claims 68855 - 68861 and 67633 were proclaimed too – all of them located on the farm Mertens (No.63), which was part of EPL 4034. Bulk sampling and trenching exploration

commenced and an onsite crushing and milling plant and a pilot 10t/h flotation plant were established to conduct trial processing and metallurgical testing. The plant is fully containerized. A small tailings facility (<1ha) in a retainer dam – a single point depository – was also established. Power is provided by a diesel generator on site and mining equipment is used for the ongoing exploration activities. Bulk diesel is kept on site, within a bunded area, in a fenced-in yard. Water is sourced from an existing borehole, which is approved and monitored. Since 2008 the project was exposed to several potential acquisitions and mergers, which is still ongoing.

The existing mining claims will be converted and consolidated as part of EPL 7699, including the current operational activities at the pilot plant and the associated facilities and infrastructure. EPL 7699 includes most of the former EPL 4034, the mining claims 68855 - 68861 and 67633 on farm Mertens, and overlaps and borders several other farms.

Simultaneous drilling, bulk sampling and pilot testing will be conducted to evaluate the prospect of the proposed project. Should the proposed exploration programme produce results that indicate a viable and minable resource, this could potentially lead to the extension of mining activities. For this purpose, the proponent is required to apply for a mining licence, whereby a full environmental impact assessment has to be performed.

1.2 ENVIRONMENTAL REGULATORY REQUIREMENTS

In terms of the Environmental Impact Assessment (EIA) Regulations and the Environmental Management Act, No. 7 of 2007, the proposed development qualifies as a listed activity. Therefore, an application for an environmental clearance certificate is to be submitted. An environmental scoping report and EMP are required to be submitted as part of the application process, as well as to support the decision-making process. This report presents the EMP and has been undertaken in terms of the requirements of the act and its regulations.

1.3 PURPOSE AND SCOPE OF THIS REPORT

The purpose of this EMP is to provide a management framework for the proposed activities in EPL 7699 so that the potential environmental impacts are avoided, minimised and mitigated as far as reasonably practicable, and that statutory requirements and other legal obligations are fulfilled.

This EMP also presents protocols, procedures, roles and responsibilities to ensure the management arrangements are appropriately and effectively implemented. This EMP forms an appendix to the environmental scoping report and has been based on the findings of the assessment; therefore, the environmental scoping report should be referred to for further information on the proposed project, assessment methodology, applicable legislation, and assessment findings.

This EMP is a live document and will be reviewed at predetermined intervals, and or updated when the scope of works alters, or when further data / information can be added. All personnel working on the project will be legally required to comply with the standards set out in this EMP.

The scope of this EMP includes all exploration and bulk sampling activities carried out on EPL 7699.

1.4 MANAGEMENT OF THIS EMP

The proponent, Mertens Mining and Trading (Pty) Ltd will hold the environmental clearance certificate for the proposed project and will be responsible for the implementation and management of this EMP. Prior to the exploration activities commencing, this EMP will be reviewed, amended as required and approved ready for implementation. The implementation and management of this EMP and thus the monitoring of compliance will be undertaken through daily duties and activities and monthly inspections.

This EMP will be circulated to all contractors and made available on ECC's website.

1.5 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS OF THIS EMP

This EMP does not include measures for compliance with statutory occupational health and safety requirements. This will be provided in the health and safety management plan to be developed by the proponent.

Where there is any conflict between the provisions of this EMP and any contractor's obligations under their respective contracts, including statutory requirements (such as licences, project approval conditions, permits, standards, guidelines, and relevant laws), the contract and statutory requirements are to take precedence.

The information contained in this EMP has been based on the project description as provided in the environmental scoping report. Where the design or construction methods alter, this EMP may require updating and potential further assessment to be undertaken.

1.6 ENVIRONMENTAL CONSULTANCY

Environmental Compliance Consultancy (ECC), a Namibian consultancy with registration number 2013/11401, has prepared this EMP on behalf of the proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients across Southern Africa, in the public and private sectors. ECC is independent of the proponent and has no vested or financial interest in the proposed project, except for fair remuneration for professional services rendered.

All compliance and regulatory requirements regarding this document should be forwarded by email or posted to the following address:

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2 PROJECT MANAGEMENT PERSONNEL

This EMP provides measures, guidelines, and procedures for managing and mitigating potential environmental impacts. The EMP also indicates monitoring and reporting requirements and sets responsibilities for those carrying out management and mitigation measures. Mertens Mining and Trading (Pty) Ltd will provide a project team to oversee activities and responsibilities.

2.1 ORGANISATIONAL STRUCTURE, ROLES, AND RESPONSIBILITIES

The proponent will be responsible for:

- Ensuring all members of the project team, including contractors, comply with the procedures set out in this EMP
- Ensuring that all persons are provided with sufficient training, supervision, and instruction to fulfil this requirement, and
- Ensuring that any person allocated specific environmental responsibilities are notified of their appointment and confirm that their responsibilities are clearly understood.

Contractors will be responsible for ensuring and demonstrating that all personnel employed by them are compliant with this EMP, and meet the responsibilities listed above.

The key personnel and environmental responsibilities of each role are presented in Table 1.

TABLE 1 - KEY ROLES AND RESPONSIBILITIES

| ROLE | RESPONSIBILITY & DUTIES |
|------------------------|---|
| Proponent | <ul style="list-style-type: none"> – Overall responsibility for the implementation and management of this EMP – Ensure the environmental policy is communicated to all personnel throughout the proposed project and ensure that employees, contractors and visitors understand and adhere to the EMP – Responsible for providing the required resources (including financial and technical) to complete the required tasks – Appoint a project manager and a site manager (or nominated supervisor), and – Ensure that all employees, contractors and visitors are inducted on safety measures. |
| Project Manager | <ul style="list-style-type: none"> – Responsible for ensuring compliance with this EMP including overseeing all day-to-day activities during the duration of the project, including routine and non-routine maintenance works, as well as the decommissioning of the project – Ensure adequate resources are made available for implementation of this EMP – Responsible for the management, maintenance and revisions of this EMP – Ensure all personnel are aware of the commitments made in this EMP and any other relevant regulatory requirements applicable to the project |

| ROLE | RESPONSIBILITY & DUTIES |
|--|---|
| | <ul style="list-style-type: none"> – Ensure all employees and contractors participate in a site induction process prior to commencing work on the project – Maintain the community issues and concern register, and keep records of complaints – Ensure that best environmental practice is undertaken throughout the duration of the project, and – Report any non-compliance or accidents to the regulatory authority. |
| Site Manager (or nominated supervisor) | <ul style="list-style-type: none"> – Ensure that all employees, contractors and visitors to the site are conversant with the requirements of this EMP, relevant to their roles on site and adhere to this EMP at all times – Provide environmental awareness / management training and site inductions for all employees, contractors and visitors – Monitor daily operations and ensure adherence by personnel to the EMP – Receive, respond to and record complaints, and – Report any non-compliance or accidents to the project manager. |
| Employees (and contractors and visitors where applicable) | <ul style="list-style-type: none"> – Responsible for being compliant with this EMP throughout the project – Adhere to this EMP at all times – Ensure attendance of site inductions – Ensure appropriate briefings for certain activities have been provided and are fully understood, and – Report any operations and conditions that deviate from the EMP or any non-compliant issues or accidents to the site manager and project manager. |

2.2 CONTRACTORS

Any contractors hired during the project (including contractors appointed for maintenance activities) will be compliant with this EMP, and will be responsible for the following:

- Undertaking activities in accordance with this EMP as well as relevant policies, procedures, management plans, statutory requirements, and contract requirements
- Implement appropriate environmental and safety management measures
- Report environmental issues, including actual or potential environmental incidents and hazards, to the project manager, and
- Ensure appropriate corrective or remedial action is taken to address all environmental hazards and incidents reported.

2.3 EMPLOYMENT

The proponent (and all contractors) will comply with the requirements of the Regulations for Labour, Health and Safety, and any amendments to these regulations. The following will be complied with:

- In liaison with the relevant authorities, the proponent will ensure that local people have access to information about job opportunities and are considered first for contract employment positions
- The number of job opportunities will be made known together with the associated skills and qualifications
- The maximum length of time the job is likely to last for will be clearly indicated
- Foreign workers with no proof of permanent legal residence will not be hired, and
- Every effort will be made to recruit from the pool of unemployed workers living in the local area.

3 COMMUNICATIONS AND TRAINING

In order to ensure potential risks and impacts are minimised, it is vital that personnel are appropriately informed and trained on operational procedures that include the above mitigation measures. It is also important that regular communications are maintained with all the stakeholders and made aware of potential impacts and how to minimise or avoid them. This section sets out the framework for communication and training in relation to the EMP.

3.1 COMMUNICATIONS

During the entire project, the project manager and or site manager (or nominated site supervisor) will communicate site-wide environmental issues to the project team through the following means (as and when required):

- Site induction
- Audits and site inspections
- Toolbox talks, including instruction on incident response procedures, and
- Briefings on key project-specific environmental issues.

This EMP will be distributed to the project team, including contractors, to ensure that the environmental requirements are communicated effectively. Key activities and environmentally sensitive operations will also be briefed to workers and contractors.

During the entire project regular communications between the management team will include discussing any complaints received and actions to resolve them; any inspections, audits or non-conformance with this EMP and any objectives or target achievements.

3.2 ENVIRONMENTAL EMERGENCY AND RESPONSE

Table 2 contains a list of numbers to be contacted in case of an emergency. All personnel will be made aware of these numbers.

TABLE 2 - EMERGENCY CONTACT DETAILS

| TOWN | AMBULANCE (OANOB PRIVATE HOSPITAL) | POLICE | FIRE BRIGADE |
|----------|------------------------------------|----------------------------|-------------------|
| Rehoboth | +264 (62) 521 400 | +264 (62) 523 223 or 10111 | +264 (61) 250 084 |

3.3 COMPLAINTS HANDLING AND RECORDING

Any complaints received verbally or in writing by any personnel on the project site will be recorded by the receiver, including the name and contact details of the complainant, date and time of the complaint, and the nature of the complaint. The information will be given to the project manager who is overall responsible for the management of complaints and will provide a

written response to the complainant. The project manager will inform employees of issues, concerns or complaints.

The project manager will maintain a complaint register that will detail the name and contact details of the complainant, date and time of the complaint, nature of the complaint, action is taken to resolve issues, and date of complaint handover. The project manager will be responsible for nominating the correct personnel to coordinate and resolve the issue.

The workforce will be informed about the complaints register, its location and the person responsible, in order to refer local residents or the general public who wish to lodge a complaint. The complainant will be informed in writing of the results of the investigation and action to be taken to rectify or address the matter(s). Where no action is taken, the reasons are to be recorded in the register and reported to the complainant.

The complaints register will be kept for the duration of the project and will be available for government or public review upon request.

3.4 TRAINING AND AWARENESS

All personnel working on the project will be competent to perform tasks that have the potential to cause an environmental impact. Competence is defined in terms of appropriate education, training and experience.

3.5 SITE INDUCTION

All personnel involved in the project, contractors and visitors will be inducted to the site with specific environmental and social awareness training, and health and safety issues. The environment and social awareness training will ensure that everybody onsite is familiar with the principles of this EMP, the environment and social aspects and impacts associated with their activities, the procedures in place to control these impacts and the consequences of departure from these procedures.

The project manager will ensure a register of completed training is maintained.

The site induction should include, but is not limited to the following:

- A general site-specific induction that outlines:
 - o What is meant by “environment” and “social”
 - o Why the environment needs to be protected and conserved
 - o How operational activities can impact on the environment, and
 - o What can be done to mitigate against such impacts.
- The inductee’s role and responsibilities with respect to implementing the EMP
- The site environmental rules
- Details of how to deal with, and who to contact if environmental problems should occur

- Basic vegetation clearing principles and species identification sheets
- Focal themes such as compliance, contentious issues (e.g. stock theft, poaching), reporting of accidents and incidents, good housekeeping and standard procedures for waste management
- The potential consequences of non-compliance with this EMP and relevant statutory requirements, and
- The role of responsible people for the project.

4 REPORTING, COMPLIANCE, AND ENFORCEMENT

4.1 ENVIRONMENTAL INSPECTIONS AND COMPLIANCE MONITORING

4.1.1. DAILY COMPLIANCE MONITORING

A copy of this EMP will be on site throughout the duration of the project and will be available upon request. It is the responsibility of the project manager and site manager (or nominated site supervisor) to ensure this EMP is complied with through their daily roles. Daily, weekly and monthly inspections will be undertaken. Any environmental problems or risks identified will be notified to the project manager and actioned as soon as is reasonably practicable.

4.1.2. MONTHLY COMPLIANCE MONITORING

Monthly inspections will be undertaken by the site manager to check that the standards and procedures set out in this EMP are being complied with and pollution control measures are in place and working correctly. Any non-conformance will be recorded, including the following details: a brief description of non-conformance; the reason for the non-conformance; the responsible party; the result (consequence); and the corrective action is taken and any necessary follow up measures required.

4.2 REPORTING

There will be a requirement to ensure that any incident or non-compliance, including any environmental issue, failure of equipment or accident, is reported to the project manager.

4.3 ENVIRONMENTAL PERMITS

Whilst the Water Resources Management Act, No. 11 of 2013 is not enforced, it is best practice to adhere to its stipulations while ensuring compliance with the Water Act, No. 54 of 1956, which is maintained still. A licence to abstract and use water may be required if boreholes are to be drilled, although this is unlikely. If required, the proponent will apply for relevant permits and will operate in accordance with any conditions of the licence.

Some vegetation will be cleared on the EPL to allow exploration activities to commence. It is unlikely that an area greater than 15ha will be cleared, therefore a permit under the Forest Act, No. 12 of 2001 as amended by the Forest Amendment Act, No. 13 of 2005 and its regulations of 2015 is not required.

4.4 CHANCE FINDS PROCEDURES

A heritage site survey was conducted by Dr John Kinahan, an Archaeologist on a selected focus area (as identified by the proponent) on a portion of EPL 7699. Areas identified for proposed exploration activities are subject to a heritage survey and subsequent assessment. These surveys are based on surface indications alone, and it is therefore possible that sites or items of heritage

significance will be found in the course of development work. The procedure set out here cover the reporting and management of such finds.

Scope: The “chance finds” procedure covers the actions to be taken from the discovery of a heritage site or item, to its investigation and assessment by a trained archaeologist or other appropriately qualified person.

Compliance: The “chance finds” procedure is intended to ensure compliance with relevant provisions of the National Heritage Act (27 of 2004), especially Section 55 (4): *“a person who discovers any archaeological objectmust as soon as practicable report the discovery to the Council”*.

The procedure of reporting set out below must be observed so that heritage remains reported to the NHC are correctly identified in the field.

| ROLE | RESPONSIBILITIES & DUTIES |
|---|--|
| Operators and contractors | To exercise due caution if archaeological remains are found |
| Site manager | To secure site and advise management timeously |
| Proponent and Exploration managers | To determine safe working boundary and request inspection |
| Archaeologist | To inspect, identify, advise management, and recover remains |

4.4.1. PROCEDURES

Action by person identifying archaeological or heritage material:

- If operating machinery or equipment stop work
- Identify the site with flag tape
- Determine GPS position if possible
- Report findings to foreman

Action by site manager:

- Report findings, site location and actions taken proponent and exploration managers
- Cease any works in immediate vicinity

Action by proponent and exploration managers:

- Visit site and determine whether work can proceed without damage to findings
- Determine and mark exclusion boundary
- Site location and details to be added to project GIS for field confirmation by archaeologist

Action by archaeologist:

- Inspect site and confirm addition to project GIS
- Advise NHC and request written permission to remove findings from work area
- Recovery, packaging and labelling of findings for transfer to National Museum

In the event of discovering human remains, procedures are to be carried out as per the above. Moreover, a field inspection by archaeologist is to be actioned to confirm that remains are human, following a liaison with NHC and Police. Thereafter, the recovery of remains and removal to National Museum or National Forensic Laboratory, should be actioned as directed.

4.5 NON-COMPLIANCE

Where it has been identified that activities are not compliant with this EMP, the project manager will take corrective actions so that the activities return to being compliant as soon as possible. In instances where the requirements of the EMP are not upheld, a non-conformance and corrective action notice will be produced. The notice will be generated during the inspections and the project manager will be responsible for ensuring a corrective action plan is established and implemented to address the identified shortcoming.

A non-compliance event / situation, for example, is considered if:

- There is evidence of the contravention of this EMP and associated indicators or objectives
- The project manager and or site manager (or nominated supervisor) have failed to comply with corrective or other instructions issued by the project manager or qualified authority, or
- The project manager and /or site manager (or nominated supervisor) fail to respond to complaints from the public.

Activities causing non-compliance will be stopped in the event of a non-compliance until corrective action(s) has been completed.

4.6 INCIDENT REPORTING

The project manager must ensure that an accident and incident (including minor or near-miss) reporting system is maintained so that all applicable statutory requirements are covered. For any serious incident involving a fatality, or permanent disability, the incident scene must be left untouched until witnessed by a representative of the police. This requirement does not preclude immediate first aid being administered and the location being made safe.

The project manager must investigate the cause of all work accidents and significant incidents and must provide the results of the investigation and recommendations on how to prevent a recurrence of such incidents. A formal root-cause investigation process should be followed.

4.7 DISCIPLINARY ACTION

This EMP is a legally binding document and non-compliance with it will result in disciplinary action being taken against the perpetrator/s. Such action may take the form of (but is not limited to):

- Fines / penalties
- Legal action
- Monetary penalties imposed by the proponent on the contractor
- Withdrawal of license/s, and
- Suspension of work.

The disciplinary action will be determined according to the nature and extent of the transgression / non-compliance, and penalties are to be weighed against the severity of the incident.

5 ENVIRONMENTAL AND SOCIAL MANAGEMENT

5.1 ENVIRONMENTAL PERFORMANCE MANAGEMENT

The summary of a register of environmental risks and issues identifies mitigation and monitoring measures, as well as roles responsible. This register will be subject to regular review by the project manager and updated when necessary. The project manager and site manager (or nominated site supervisor) will use this register to undertake monthly inspections to ensure the project is compliant with this EMP.

5.2 OBJECTIVES AND TARGETS

Environmental objectives for the project are as follows:

- Zero pollution incidents
- Minimal vegetation clearing
- Protect local flora and fauna
- Minimise the generation of waste, and
- Minimal interruption to farm activities

5.3 REGISTER OF ENVIRONMENTAL RISKS AND ISSUES

An environmental review of the proposed project has been completed to identify all the commitments and agreements made within the environmental scoping report. From this a list of environmental commitments and risks has been produced, which details deliverables including measures identified for the prevention of pollution or damage to the environment during the project.

Table 3 provides a register of environmental risks and issues, which identifies mitigation and monitoring measures, as well as the responsible person. This register will be subject to regular review by the project manager and updated when necessary. The project manager will use this register to undertake monthly inspections to ensure the project is compliant with this EMP.

5.4 IMPACTS IDENTIFIED FOR FUTURE ACTIONS

5.4.1. IMPACTS ON GROUNDWATER

Wastewater is produced during operational activities of the mine, for the current small scale mining activities, wastewater is contained in a Stormwater Return Dam (SWRD). The SWRD is unlined but it is equipped with a pump in order to ensure that no freestanding water remains for a long duration within the SWRD, thereby reducing potential seepage to groundwater. The effectiveness of these management and mitigation measures, to reduce the potential impact of groundwater contamination, should be monitored on a monthly basis, by taking groundwater level measurements and water quality sampling. A water sample was taken in June 2009 at the

Merten's borehole no. 3 and it showed that the overall classification of the water was in Group B, which is good quality water. In January 2020, a similar control sample was taken, confirming the same quality water.

An environmental audit was conducted at the Mertens site in August 2020, to verify the on-site compliance with various pieces of Namibian environmental legislation and international environmental best practice.

As per the environmental audits and recommendations, it is suggested that Applied behaviour Analysis (ABA) time sampling and analyses be completed for the Waste Rock Dumps (WRD) and Tailing Storage Facilities (TSF) with complementing leach tests to understand and analyse the extent pollution potential of the site. The development of a formal storm water management plan is suggested to manage stormwater run-off and reduce the impacts of soil erosion and the drilling of at least one groundwater monitoring borehole down-gradient of the site. The return water facility should be lined or operational procedures should clearly indicate that no water should be stored in the facility to reduce the risk of seepage losses.

The potential pathways for contamination include some of the following aspects:

- Seepage of heap leach facility and/or tailings water;
- Operational leaks and spills;
- Failure of TSF integrity;
- Seepage or overflow from decant and evaporation ponds;
- Drainage from and erosion of WRD surfaces; and
- Saline final void surface water contaminating surrounding ground water.

It is further suggested that any open water accumulating in the pits be sampled on a monthly basis and analysed for chemical constituents highlighted from the leach tests to track any potential risk of causing harm to animals drinking the water. Some tailings spillage were observed near the fence along the tailings slurry pipeline route, the site should be cleaned and a spillage clean-up procedure be written and implemented by the proponent.

The implementation of the suggested corrective action for each finding will enable the mine to improve the environmental performance and ensure future legal compliance.

5.4.2. IMPACTS ON AVIAN FAUNA AND HIGH VALUE CONSERVATION SPECIES

Protected species such as the rhino are occasionally present in the area, poaching of high value conservation species in Namibia is illegal. The proponent and business partners should avoid the disruption of protected and threatened species (rhinos that occur in the area) and birds such as the Ludwig's Bustards and Kori Bustards. The extensions of exploration and mining operation

were found to have potential impacts on biodiversity namely birdlife due to the effects of vibration and ambient noise. These birds are ground nesting and they may be susceptible to ground vibrations and therefore could potentially be directly affected by the project activities. The mining and hauling process will be restricted to daylight, whilst processing and drilling may continue at night. Mitigation measures identified possible relocation of species at risk (if viable), ongoing monitoring to determine if activities are impacting birds, altering exploration or mine plans to avoid activities that impact on nesting during nesting periods (egg-laying season is from February-May in Namibia).

TABLE 3 - ENVIRONMENTAL RISKS AND ISSUES, AND MITIGATION AND MONITORING MEASURES

| ACTIVITY | POTENTIAL IMPACTS | MANAGEMENT / MITIGATION MEASURES | MONITORING REQUIREMENTS | RESPONSIBILITY |
|---|---|---|-------------------------|---|
| <p>Access and site preparation</p> | <ul style="list-style-type: none"> - Limiting access to the farms, - Disruption of farm operations (leaving gates open, loss of farming area, interference at feeding areas and water points) - Potential conflict with farm owners and neighbours (suspicious movement, poaching, stock theft, field fires, etc.) | <ul style="list-style-type: none"> - Ensure documented permission to enter farms, - Farmers should have access to all farm areas at all times, - Residents will be provided at least two weeks' notice of exploration operations within 1 km of their property - Ensure appropriate supervision of all activities, - Existing water points and feeding area need to be left, unaffected, - Raise awareness and sensitize employees about contentious issues such as stock theft and poaching - Use existing roads for access to avoid new tracks, - Restrict movements to areas of activities only, - Restrict vehicle and equipment movements to daytime hours, - Make workers aware and notify them on avoiding some areas, - No driving off designated access routes / off-road driving, - No animals or birds may be collected, caught, consumed or removed from site, - Compliance with all applicable laws | <p>Daily</p> | <p>Project manager and or site manager (or nominated site supervisor)</p> |

| ACTIVITY | POTENTIAL IMPACTS | MANAGEMENT / MITIGATION MEASURES | MONITORING REQUIREMENTS | RESPONSIBILITY |
|----------|---|---|-------------------------|----------------|
| | | and agreement, – Develop and implement an operations manual or procedures to work on private farms and implement monitoring programmes thereafter, – Accidents and incidents need to be reported to project manager and recorded in incident register – Continuous engagement with residents and I&APs to identify any concerns or issues, and mitigation and management measures agreed upon | | |
| | Potential damage to cultural heritage sites | – Implement a Chance Find Procedure – Raise awareness about possible heritage finds – Report all finds that could be of heritage importance – In case archaeological remains to be uncovered, cease activities and the project manager has to assess and demarcate the area – Project manager to visit the site and determine whether work can proceed without damage to findings, mark exclusions boundary and inform ECC with GPS position – If needed, further investigation have to be requested for a professional assessment and the necessary | Monthly | |

| ACTIVITY | POTENTIAL IMPACTS | MANAGEMENT / MITIGATION MEASURES | MONITORING REQUIREMENTS | RESPONSIBILITY |
|--|---|---|--|---|
| | | <p>protocols of the Chance Find Procedure have to be followed,</p> <ul style="list-style-type: none"> – Archaeologist will evaluate the significance of the remains and identify appropriate action, for example, record and remove; relocate or leave premises (depending on the nature and value of the remains), – Inform the police if the remains are human, – Obtain appropriate clearance or approval from the competent authority, if required, and recover and remove the remains to the National Museum or National Forensic Laboratory as directed. | | |
| <p>General exploration activities</p> | <ul style="list-style-type: none"> – Potential grievances and complaints, – Social discomfort and anxiety | <ul style="list-style-type: none"> – Develop and implement an operations manual or procedures to work on private farms and implement monitoring programmes thereafter, – Residents will be provided at least two weeks' notice of exploration operations within 1 km of their property – Continuous engagement with residents and I&APs to identify any concerns or issues, and mitigation and management measures agreed upon, | <p>Weekly and monthly</p> <p>Quarterly meetings with the I&APs</p> | <p>Project manager and or site manager (or nominated site supervisor)</p> |

| ACTIVITY | POTENTIAL IMPACTS | MANAGEMENT / MITIGATION MEASURES | MONITORING REQUIREMENTS | RESPONSIBILITY |
|----------|-------------------|---|-------------------------|----------------|
| | | <ul style="list-style-type: none"> - Compliance with all applicable laws and agreements - Training and raise awareness to sensitize employees about contentious issues such as stock theft and poaching - Restrict movements to areas of activities only, - Restrict vehicle and equipment movements to daytime hours, - Make workers aware and notify them on avoiding some areas, - No animals or birds may be collected, caught, consumed or removed from site - Ensure appropriate supervision of all activities - Accidents and incidents need to be reported to project manager and recorded in incident register - Proposal for better communication, as suggested by the proponent to hold quarterly meetings on the mine with the I&APs | | |

| ACTIVITY | POTENTIAL IMPACTS | MANAGEMENT / MITIGATION MEASURES | MONITORING REQUIREMENTS | RESPONSIBILITY |
|----------|--|---|-------------------------|----------------|
| | <ul style="list-style-type: none"> - Conflict with farmers and neighbours about ambient noise | <ul style="list-style-type: none"> - Restrict excessive noise to areas of activities only, - Restrict excessive noise to daytime hours (7 am to 5 pm weekdays and 7 am until 1 pm on Saturday), - No activities between dusk and dawn, - Exploration equipment will be suitably positioned to ensure that noisy equipment is away from receptors, - Residents will be provided at least two weeks' notice of exploration operations within 1 km of their property, - All equipment to be shut down or throttled back between periods of use, - Respect civic aviation regulations about the use of a drone | Daily and weekly | |
| | <ul style="list-style-type: none"> - Visual disturbances - Loss of sense of place | <ul style="list-style-type: none"> - Limit trenching and bulk sampling as far as possible - Position heavy equipment in such a way that it is out of sight from human receptors, - Barriers or fences will be used if exploration occurs in, locations that may affect residents or livestock, - Residents need to be informed at least two weeks in advance that | Daily and weekly | |

| ACTIVITY | POTENTIAL IMPACTS | MANAGEMENT / MITIGATION MEASURES | MONITORING REQUIREMENTS | RESPONSIBILITY |
|----------|---|--|-------------------------|----------------|
| | | drilling operations are within 1km of their property, – Maintain good housekeeping, – Restrict speed of vehicles (<30km/h) – Apply dust suppression where possible (loading, hauling, tipping), – Continuous engagement with residents and I&APs to identify any concerns or issues, and appropriate mitigation and management measures agreed upon | | |
| | – Dust and emissions | – All vehicles and machinery / equipment to be shut down or throttled back between periods of use, – Use existing access roads and tracks where possible, – Apply dust suppression where possible (drilling, trenching / excavating, loading, hauling, tipping), – Restrict speed of vehicles (<30km/h), – Specific activities that may generate dust and impact on residents will be avoided during high wind events. | Daily | |
| | – Loss of soil quality due to mixing of earth matter, trampling, compaction and pollution, – Enhanced soil erosion | – Where possible, plan access routes and exploration activities outside of existing drainage lines – Where necessary, install diversions to curb possible erosion – Restore drainage lines when | Weekly and monthly | |

| ACTIVITY | POTENTIAL IMPACTS | MANAGEMENT / MITIGATION MEASURES | MONITORING REQUIREMENTS | RESPONSIBILITY |
|----------|---------------------|--|-------------------------|----------------|
| | | <p>disturbed</p> <ul style="list-style-type: none"> - Where possible, topsoil should be stockpiled separately, and re-spread during rehabilitation - Limit the possibility of compaction and creating of a hard subsurface - Limit the possibility of trampling - During exploration activities with heavy equipment oil absorbent matting should be placed under and around the equipment - Equipment must be in a good condition to ensure that accidental oil spills do not occur and contaminate soil - In the event of spills and leaks, polluted soils must be collected and disposed of at an approved site, - Limit the possibility to mix mineral waste with topsoil | | |
| | Water contamination | <ul style="list-style-type: none"> - Ensure spill kits and preventative measures (e.g. drill pads) are in place at exploration sites, - Consider alternative sites when the water table is too high, - Exploration equipment should be dug to direct any accidental spills into sumps, - Waste water will be contained, - Extraction volumes of water will be minimal during exploration and | Weekly | |

| ACTIVITY | POTENTIAL IMPACTS | MANAGEMENT / MITIGATION MEASURES | MONITORING REQUIREMENTS | RESPONSIBILITY |
|---|--|--|-------------------------|---|
| | | <p>where possible, water from existing water sources will be used</p> | | |
| <p>Vegetation clearance for access routes, drill pads and temporary contractor camps</p> | <ul style="list-style-type: none"> - Loss of plant species - Loss of habitat - Create landscape scars - Loss of sense of place | <ul style="list-style-type: none"> - Use existing roads for access to avoid new tracks and cut lines - Minimise clearance areas through proper planning of the exploration activities - Route new tracks around established and protected trees, and clumps of vegetation - Identify rare, endangered, threatened and protected species. - During toolbox talks and induction, highlight to workers so that the removal of significant plants are avoided - Where possible rescue and relocate plants of significance - Promote revegetation of cleared areas upon completion of exploration activities | <p>Daily</p> | <ul style="list-style-type: none"> - Employees, contractors - Site manager (or nominated site supervisor) |
| | <ul style="list-style-type: none"> - Alien plants and weeds can accidentally be introduced | <ul style="list-style-type: none"> - All project equipment arriving onsite from an area outside of the project or coming from an area of known weed infestations (not present on the project site) should have an internal weed and seed | <p>Monthly</p> | <p>Site manager (or nominated site supervisor)</p> |

| ACTIVITY | POTENTIAL IMPACTS | MANAGEMENT / MITIGATION MEASURES | MONITORING REQUIREMENTS | RESPONSIBILITY |
|--|---|---|-------------------------|---|
| | | inspection completed prior to equipment being used – Ensure the potential introduction and spread of alien plants is prevented, and – Ensure the correct removal of alien invasive vegetation and prevent the establishment and spread of alien invasive plants. – Eradicate weeds and alien species as soon as they appear – Make workers aware about alien species and weeds | | |
| Fuel handling and storage, maintenance on equipment, machinery and vehicles | – Soil contamination – Water contamination | – Good housekeeping – Training through toolbox talks and induction – All stationary vehicles and machinery must have drip trays to collect leakages of lubricants and oil – Spill kits and absorption material available during fuel delivery, storage or use – Accidental spills and leaks (including absorption material) to be cleaned as soon as possible – Spills to be reported to the project manager – Fuel spills of greater than 200L to be reported to the authorities – Plant and equipment to be well maintained and serviced regularly | Daily | – Employees, contractors – Site manager (or nominated site supervisor) |

| ACTIVITY | POTENTIAL IMPACTS | MANAGEMENT / MITIGATION MEASURES | MONITORING REQUIREMENTS | RESPONSIBILITY |
|--------------------------------|--|---|-------------------------|---|
| | | (maintenance and service schedules in place), – In the field, use of hydrocarbons under 200L can be used for mobile refuelling or servicing – Bulk fuel will be stored in adequate containment areas (on a non-porous floor, in a bunded area, capable to contain 110% of the volume stored, fenced-in) – Ensure integrity of containment with regularly inspections – Preventative measures will be in place when service and maintenance activities are done (drip trays, non-porous surfaces, funnels, non-damaged containers) – Refuelling and de-fuelling in designated areas (with adequate preventative measures in place) only | | |
| Small mining activities | <ul style="list-style-type: none"> – Soil contamination – Water contamination – Dust – Noise | <ul style="list-style-type: none"> – Good house keeping – Training through toolbox talks and induction – At the plant - all processing activities are containerized and water is recycled – At the tailings dam - install toe paddocks, and if necessary, cut-off trenches. In the worst case, establish a monitoring borehole – Ensure prompt clean-up of | Daily | <ul style="list-style-type: none"> – Employees, contractors – Site manager (or nominated site supervisor) |

| ACTIVITY | POTENTIAL IMPACTS | MANAGEMENT / MITIGATION MEASURES | MONITORING REQUIREMENTS | RESPONSIBILITY |
|-----------------------------------|--|--|--|---|
| | | <ul style="list-style-type: none"> processing and tailings spills – In the event of spills and leaks, polluted soils must be collected and disposed of at an approved site – Wastewater discharges will be contained – no disposal of wastewater or processing or tailings effluent – Apply dust suppression where possible (loading, hauling, tipping, crushing, milling) – Restrict excessive noise to areas of activities only – Restrict excessive noise to daytime hours (7 am to 5 pm weekdays and 7 am until 1 pm on Saturday) – No activities between dusk and dawn | | |
| <p>Generation of waste</p> | <ul style="list-style-type: none"> – Soil contamination – Water contamination – Nuisance (visual impacts, litter) – Ecological risks | <ul style="list-style-type: none"> – Good housekeeping – Training and awareness through toolbox talks and induction – Implement a Standard Operational Procedure on waste management, from cradle to grave for all kinds of waste possible onsite (e.g. hydrocarbons, domestic, waste water) – Implement a culture of correct waste collection, waste segregation and waste disposal, complimentary to the waste hierarchy – avoid, re- | <ul style="list-style-type: none"> – Daily and weekly | <ul style="list-style-type: none"> – Employees, contractors – Site manager (or nominated site supervisor) |

| ACTIVITY | POTENTIAL IMPACTS | MANAGEMENT / MITIGATION MEASURES | MONITORING REQUIREMENTS | RESPONSIBILITY |
|--|--|---|--|---|
| | | <ul style="list-style-type: none"> use, recycle – Avoid hazardous waste onsite | | |
| Wastewater, flow back water storages, surface and stormwater run offs | <ul style="list-style-type: none"> – Groundwater contamination | <ul style="list-style-type: none"> – Diversion of surface water and stormwater runoff away from the groundwater drainage system – Maintenance of a running inventory of flowback water recovered, present on site, and removed from the site – Location of return water within secondary containment, away from high traffic areas and as far as is practical from surface waters – Establish protocols for checking/testing stormwater in the containment area prior to discharge – Inspection and preventative maintenance protocols for storage facilities, pumping systems and piping systems, including manned monitoring points during operations, – Inspect groundwater quality through water levels and sampling for early indicatives of any potential heavy metals presence | <ul style="list-style-type: none"> – Daily and Weekly | <ul style="list-style-type: none"> – Employees, contractors – Site manager (or nominated site supervisor) |
| Ambient noise and vibrations during small scale mining | <ul style="list-style-type: none"> – Birdlife disturbance and habitans disruption | <ul style="list-style-type: none"> – Exploration equipment must be suitably positioned to ensure that | <ul style="list-style-type: none"> – Weekly | <ul style="list-style-type: none"> – Employees, contractors – Site manager (or |

| ACTIVITY | POTENTIAL IMPACTS | MANAGEMENT / MITIGATION MEASURES | MONITORING REQUIREMENTS | RESPONSIBILITY |
|---|--|--|-------------------------|----------------------------------|
| <p>activities and exploration operations</p> | <ul style="list-style-type: none"> - High value conservation species that are residing, ground nesting and slow moving can be disturbed as a result of increased in ambient noise from operations and movements of vehicles | <ul style="list-style-type: none"> noisy equipment is away from receptors, - Restrict movements to areas of activities only - Use existing tracks and routes only - Minimise clearance areas through proper planning of the exploration activities, - Restrict excessive noise to daytime hours - Identify rare, endangered, threatened and protected species in advance (such as the rhinos, and birds (Ludwig's bustard and Kori bustard)) - Route new tracks around protected species and sensitive areas - Training and raise awareness to sensitize employees and notify them on avoiding some areas where protected species reside - No driving off designated access routes / off-road driving - No animals or birds may be collected, caught, consumed or removed from site - Communicate and send out notices to stakeholders when carrying out noisy activities in the area | | <p>nominated site supervisor</p> |

| ACTIVITY | POTENTIAL IMPACTS | MANAGEMENT / MITIGATION MEASURES | MONITORING REQUIREMENTS | RESPONSIBILITY |
|--|---|---|-------------------------|-----------------|
| Job creation, skills development and business opportunities | Beneficial socio-economic impacts on a local and regional scale | <ul style="list-style-type: none"> - Maximise local employment and local business opportunities - Enhance the use of local labour and local skills as far as reasonably possible - Ensure that goods and services are sourced from the local and regional economy as far as reasonably possible. | - Monthly | Project manager |

6 IMPLEMENTATION OF THE EMP

Exploration work will be carried out in compliance with the relevant requirements of the Minerals (Prospecting and Mining) Act, 1992. No significant impacts are anticipated for the activities that have been identified and management and mitigation measures are in place for potential risks.

This EMP:

- Has been prepared pursuant to a contract with the proponent
- Has been prepared on the basis of information provided to ECC up to June 2020
- Is for the sole use of the proponent, for the sole purpose of an EMP
- Must not be used (1) by any person other than the proponent or (2) for a purpose other than an EMP, and
- Must not be copied without the prior written permission of ECC.

ECC has prepared the EMP on the basis of information provided by the proponent and the environmental scoping report

APPENDIX A - APPLICATION FOR A WASTEWATER DISCHARGE LICENCE



DEPARTMENT OF WATER AFFAIRS & FORESTRY

FAX: (061) 208 7160 PRIVATE BAG 13184
 TEL: (061) 208 7111 WINDHOEK
 REFERENCE NO: NAMIBIA

**APPLICATION FOR A WASTEWATER DISCHARGE LICENCE, IN TERMS
OF PART XIV OF THE WATER RESOURCES MANAGEMENT ACT, 2004**

(Act No. 24 of 2004 - as published in the Government Gazette of the Republic of Namibia, No. 3357, of 23 December 2004, Government Notice No. 284)

A. GENERAL INSTRUCTIONS

1. Applications must be submitted in duplicate to:
 The Permanent Secretary
 Attn.: Law Administration
 Ministry of Agriculture, Water and Forestry
 Private Bag 13184
 WINDHOEK
2. Application Fee (to accompany this document): N\$ _____
3. The various sections have to be completed as follows:
Section B & C - All applicants
Section D - Complete only the part relevant to technology employed in your works.
Section E - All applicants (compulsory!)
4. Only the relevant Sections that have been filled in need to be submitted with this application.
5. A separate application needs to be filled in for each different plant/works.

NAME OF TREATMENT PLANT/WORKS: _____

PLACE: _____ **GPS Coordinates:** _____
 (e.g. town, settlement)

B. GENERAL INFORMATION

1. Name of applicant:

2. Address - Contact Person:

- Postal:

- Physical:

- Tel No.:

- Fax No.:

- E-mail:

3. Region in which plant is situated:

4. Constituency in which plant falls:

5. Type of establishment:
(e.g. school, town, industry)

6. Source of water supply:
(e.g. borehole, river, sea)

7. Total water consumption:

m³/day ADWF*

(*ADWF = Average Dry Weather
Flow)

m³/day ADWF*

- Consumption based on the average usage over a 12-month period.

m³/day ADWF*

- List different sources separately

m³/day ADWF*

8. Application:

- Prepared by:

Name :

Position:

(e.g. Consultant)

Signature:

Date:

- Responsible Executive:

Name :

Position:

Signature:

Date:

C. TECHNICAL DETAILS - GENERAL

Answers to the following information must be contained in this application either from the questionnaire or as an attachment thereto (see also details in Appendix A):

NAME OF TREATMENT PLANT/WORKS: _____

1. Type of effluent (please also refer to Section D for classifications): _____

2. Site of works:

2.1 Submit a site plan indicating the exact location (or intended location) of the works. This plan should indicate (as a minimum):

- 2.1.1 General location of the works with regards to settlements, main roads, boreholes, rivers etc.
- 2.1.2 Layout plan of property showing all existing and proposed water pipes and effluent and drainage lines in distinctive colours.
- 2.1.3 Topographical plan/area photograph/contour plans showing the property and effluent treatment plant in relation to residential areas, rivers, pans, dams, lakes and boreholes.
- 2.1.4 Contour plans indicating the exact location of the effluent treatment works and point of discharge of final effluent in relation to watercourses that drain the area.
- 2.1.5 Give the following information:
 - 2.1.5.1 Distance to nearest inhabitants: _____m
 - 2.1.5.2 Distance to nearest water abstraction point (e.g. river, borehole): _____m
 - 2.1.5.3 Distance to nearest watercourse (e.g. dry river) and specify: _____m
 - 2.1.5.4 Wind direction (main/normal) _____

2.2 Submit overall details of works:

- 2.2.1 Type of effluent treatment system and a brief description of its method of operation. (If domestic effluents are dealt with by the local authority please enclose a letter from the authority confirming this agreement).
- 2.2.2 Flow diagram/mass balances to show the present average quantities of incoming water, recycled water, final outflow, seepage and evaporation losses (all in m³/day).
- 2.2.3 Layout orientation drawing indicating all major treatment units and fence around works.
- 2.2.4 Complete flow diagram and key design parameters to include:
 - 2.2.4.1 Dimensions and design capacities of each unit process;
 - 2.2.4.2 Process Flow Diagram(s) and major instrumentation employed, e.g. water meters;
 - 2.2.4.3 Loadings on the system (e.g. hydraulic, COD, BOD, nitrogen, phosphate);
- 2.2.5 Indicate allowances that have been made for future expansion and increased loads (if any).
- 2.2.6 Methods of sludge disposal or recirculation.
- 2.2.7 Disinfection of the final effluent (indicate dosing type, method, retention period and optimum disinfectant level in final effluent).

3. Monitoring boreholes for monitoring groundwater pollution over time must be available within 500 m of the point of final effluent discharge.

4. Please note: Additional information is required for new treatment plants (e.g. an environmental impact assessment) - details can be obtained from the Department of Water Affairs and Forestry.

5. All relevant information must be included with this application. **It is a criminal offence to deliberately withhold vital information relevant to this application.** Where applicants are found to be in contravention with this requirement, they may/will be prosecuted.

D. TECHNICAL DETAILS - SPECIFIC

Applicants should only complete sections relevant to their specific effluent (please tick relevant box):

- | | |
|--------------------------|--|
| <input type="checkbox"/> | D-1: Domestic Effluent - Includes wastewater collected in towns (excluding industrial effluent!), villages, schools, lodges, administration buildings. |
| <input type="checkbox"/> | D-2: Industrial Effluent - Includes wastewater generated by any industry, factory, etc. |
| <input type="checkbox"/> | D-3: Mining Effluent - Includes wastewater accumulated or collected due to mining operations (e.g. Acid mine wastewater) |
| <input type="checkbox"/> | D-4: Combination/mix of various effluents (list major effluent streams on page 11) |

Final Effluent Reuse

The pressure on Namibia's existing fresh-water supplies can, to a great extent, be eased by the sensible reuse of effluents for a variety of purposes including dust control, agriculture and industrial processes. Therefore, reuse of effluent after suitable treatment is encouraged.

The allowable reuse of an effluent is dependent upon its quality as well as many local circumstances and hence each application in this category needs careful and individual scrutiny, which should be undertaken by a specialist in this field and must be supported by an environmental impact assessment study.

A separate licence for effluent reuse is required and more details in this regards can be obtained from the Department of Water Affairs and Forestry.

D-2. INDUSTRIAL EFFLUENTS

Plant Name:

| | | | |
|-----|---|--|---------------------|
| 2.1 | Describe industry and major activities resulting in effluent generation | | |
| | | | |
| | | | |
| 2.2 | Capacity / Flowrates : | | |
| | Design - Average daily flow | | m ³ /d |
| | - Peak hourly flow | | m ³ /h |
| | Actual (if in operation) - Average daily flow | | m ³ /d |
| | - Peak hourly flow | | m ³ /h |
| | If ponds are employed, state total surface area | | m ² |
| 2.3 | List only major contaminants (also attach full analysis of typical effluent sample) | | |
| | | | |
| | | | |
| 2.4 | Type of treatment employed (give short overview of process): | | |
| | | | |
| | | | |
| 2.5 | List major treatment chemicals* employed in the unit process(es): | | |
| | | | |
| 2.6 | Final effluent quality after treatment (put envisaged final quality for a new plant): | | |
| | | | |
| | | | |
| 2.7 | Sludge generation: | | |
| | - Volume generated | | m ³ /d |
| | - Mass | | kg/d (dry solid) |
| | - Method of disposal | | |
| | - Place of disposal | | |
| | - Major constituents | | |
| | - If sludge ponds, state frequency of cleaning | | |
| 2.8 | Do you employ cleaner production principles (CPP)? | | Yes/No |
| | If "yes", elaborate: | | |
| | | | |
| | | | |
| 2.9 | Is the following documentation included (give reason if not)? | | |
| | ▪ Water (and waste) management plan: | | Yes/No |
| | ▪ Decommissioning plan: | | Yes/No |

* For the chemicals employed, proper mass balances should be included that show chemical usage, movement and discharge within the factory/process(es). All safety aspects related to handling, storage and disposal of chemicals on site must be followed at all times.

D-4. COMBINATION OF VARIOUS EFFLUENTS

Plant Name:

| | | | | | |
|-----|--|---|---|---|---------------------|
| 4.1 | Describe major activities resulting in effluent generation (e.g. type of industry): | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| 4.2 | Capacity / Flowrates of different streams (major only) | 1 | 2 | 3 | |
| | Type (e.g. domestic, industrial, mining, others) | | | | |
| | Design - Average daily flow | | | | m ³ /d |
| | - Peak hourly flow | | | | m ³ /h |
| | Actual (if in operation) - Average daily flow | | | | m ³ /d |
| | - Peak hourly flow | | | | m ³ /h |
| 4.3 | List only major contaminants (also attach full analysis of typical effluent sample) | | | | |
| | | | | | |
| 4.4 | Type of treatment employed (give short overview of process) | | | | |
| | | | | | |
| 4.5 | List major treatment chemicals employed in the unit process(es): | | | | |
| 4.6 | Final effluent quality after treatment (put envisaged final quality for a new plant) | | | | |
| | | | | | |
| 4.7 | Sludge generation: | | | | |
| | - Volume generated | | | | m ³ /d |
| | - Mass | | | | kg/d (dry solid) |
| | - Method of disposal | | | | |
| | - Place of disposal | | | | |
| | - Major constituents | | | | |
| | - If sludge ponds, state frequency of cleaning | | | | |

E. FINAL EFFLUENT DISPOSAL

| | | |
|-------|--|-------------------|
| 1.4.1 | Where is the final effluent discharged to? (E.g. French drain, pumped out by Local Authority, dry river course, perennial river, etc.) | |
| 1.4.2 | IF soakaway, state: - Type of soil - Suitability/porosity of soil - Size of soakaway area - Include topography and plan of soakaway area | |
| 1.4.3 | Is there any post-treatment applied? (e.g. disinfection, filtration) | |
| 1.4.4 | Is the final effluent re-used? (Yes/No) | |
| | If "Yes", complete: | |
| | - Do you have a reuse licence? | |
| | - Amount of water that will be re-used: | m ³ /d |
| | - For what application: | |
| | - Type of irrigation used (if applicable): | |
| | - What crops are grown: | |
| 1.4.5 | - Area of land that will be irrigated: | ha |
| | Name (if any) downstream users (downstream of discharge point). | |
| 1.4.6 | Past records of complaints or objections by people living close to works: | |
| | | |

Reuse:

A reuse licence is required – details can be obtained from the Department of Water Affairs and Forestry.

Irrigation:

The crops allowed to be irrigated are dependent upon effluent quality (details will be supplied on request by the Department of Water Affairs and Forestry).

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10. Type of petroleum product involved in petroleum product spill

.....
.....

11. Quantity of the petroleum product spill

.....
.....

12. Indicate whether the petroleum product has or will have any negative effect on the environment and the safety and health of person or the property of persons

.....
.....
.....
.....
.....
.....

13. Provide full details of all remedial actions taken to minimise risks associated with petroleum product spills and all cleaning-up operations taken in connection therewith

.....
.....
.....
.....
.....
.....
.....
.....

DECLARATION

I,,
hereby declare that the information submitted by me in this application is true and correct.

.....
Signature

.....
Place

.....
Date

APPENDIX C - TEMPLATE FOR MONITORING

INSPECTION DATE: _____

INSPECTION COMPLETED BY: _____

SUMMARY OF ACTIVITIES OCCURRING:

| Ref No. | Item | Requirements | Responsibility | Compliant | Notes / Action Taken / Corrective Action Required |
|---------|-------|--|----------------------|---|---|
| 1 | Noise | <ul style="list-style-type: none"> - Is the facility avoiding noise generating activities at night? - Is scheduling of works to avoid disturbance between the hours of 22pm and 5 am in place? - Are Saturday operational periods from 8 am – 12 noon, when near residential areas? - Are procedures for receiving complaints from nearby land users or residents in place and mitigation measures implemented should operations generate excessive noise? | - SHE Representative | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> | |

| Ref No. | Item | Requirements | Responsibility | Compliant | Notes / Action Taken / Corrective Action Required |
|---------|--|--|--|---|---|
| 2 | Operations of mechanical equipment and engines | <ul style="list-style-type: none"> - Are regular checks of all equipment conducted routinely? - Are equipment services up to date? - Are spill kits and/or drip trays available? | <ul style="list-style-type: none"> - SHE Representative, and - General Manager | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> | |
| 3 | Production and effluent discharge | <ul style="list-style-type: none"> - Is the domestic and industrial effluent discharged off into approved systems? - If not, are regular water quality samples taken to ensure the treated wastewater complies to the prescribed general standards as set out in the Water Resources Management Act, 2004 (Act No. 24 of 2004)? | <ul style="list-style-type: none"> - SHE Representative, and - General Manager | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> | |
| 4 | Solid waste generation | <ul style="list-style-type: none"> - Has the waste management plan and the application of the waste management hierarchy implemented? - Are suitable collection points in place for waste collection at the factory? - Is waste collected regularly and transported correctly? - Is hazardous waste such as waste oil/lubricant stored in a hazardous waste storage area and disposed of by accredited hazardous waste handlers such as Rent A Drum? | <ul style="list-style-type: none"> - SHE Representative, and - General Manager | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> | |
| 5 | Lighting | <ul style="list-style-type: none"> - Are energy-efficient light bulbs installed? - Is unnecessary lighting avoided where possible? - Are lights switched off at night? | <ul style="list-style-type: none"> - SHE Representative, and - General Manager | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> | |
| 7 | Air Emissions | <ul style="list-style-type: none"> - Are the dust extractors cleaned regularly? - Are vehicles serviced regularly to reduce emissions? - Is there dust monitoring system in place? | <ul style="list-style-type: none"> - SHE Representative | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> | |

| Ref No. | Item | Requirements | Responsibility | Compliant | Notes / Action Taken / Corrective Action Required |
|---------|------|--|----------------------|--|---|
| 8 | PPE | <ul style="list-style-type: none"> - Are personnel wearing the correct PPE? - Is PPE in good condition? - Are there any complaints on the health of workers | - SHE Representative | Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | |

APPENDIX D - COMPLAINTS REGISTER TEMPLATE

| NAME | CONTACT DETAILS | DATE AND LOCATION OF COMPLIANT | NATURE OF COMPLIANT | ACTION TAKEN TO RESOLVE | NOMINATED PERSON TO RESOLVE ISSUE <i>(Signature)</i> | DATE OF RESOLUTION/ CLOSED OUT COMPLAINT |
|------|-----------------|--------------------------------|---------------------|-------------------------|---|---|
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APPENDIX E - MONTHLY INTERNAL COMPLIANCE CERTIFICATE

FOR THE PERIOD TO

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| MANAGEMENT REPRESENTATIVE: | SIGN: |
| SHE Representative: | SIGN: |
| Date of Submission: | |
| Key activities on site during the month: | |
| | |
| | |
| NON-CONFORMANCE: | |
| Area of activity: | |
| | |

| | |
|--------------------|--|
| Reason: | |
| | |
| Responsible party: | |
| | |
| Results: | |
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|--------------------------|--|
| Correction action taken: | |
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| Intended follow-up: | |
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GOOD PERFORMANCE:

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|---|
| Description of activity or action in which the area/person went beyond compliance towards responsible care for the environment: |
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ADDITIONAL COMMENTS:

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