



# SAI NAMIBIA - COUNTRY PAPER



## **BACKGROUND AND AUDIT PLANNING**

The audit topic “monitoring of pollutions and environmental rehabilitation in terms of mining activities in Namibia by the Ministry of Mines and Ministry of Environment and Tourism” was important because significant problem indicators were identified during the preliminary study. These are discussed as follows:

- Mineral Right Holders in Namibia were not fully complying to laws and regulations:
  - Tailing dams at mining sites were leaking harmful substances into the ground; and
  - Accessory works were not removed from mining sites by Mineral Right Holders at mine closure;
- The Minerals (Prospecting and Mining) Act No.33 of 1992 is outdated; and
- There is a shortage of Mine Inspectors to conduct inspections at the mining sites within the Ministry of Mines and Energy and the Ministry of Environment and Tourism.

### **Audit Scope**

The audit focused on the Ministry of Mines and Energy and the Ministry of Environment and Tourism. The Ministry of Agriculture, Water and Forest was also engaged as a stakeholder because it is issuing effluent disposal and abstraction exemption water permits to protect water resources from pollutions.

19 mining sites dealing in Nuclear Fuel Minerals, Base and Rare Metals, Precious Stones, Dimension Stones and two abandoned mines were visited in six of the 13 regions during the main study.

Four financial years 2011/12-2015 were covered in order to establish the trends as well as for comparison purposes.

### **Targets**

The Directorates of Geological Survey and Mines within the Ministry of Mines and Energy together with the Department of Environmental Affairs at the Ministry of Environment and



Tourism are responsible for monitoring pollutions and environmental rehabilitation at the mining sites.

### **Objectives**

To assess whether the Ministry of Mines Energy and Ministry of Environment and Tourism are effective in monitoring pollutions and environmental rehabilitation in terms of mining activities in Namibia.

### **Audit Criteria**

The Minerals (Prospecting & Mining) Act No. 33 of 1992 and the Environmental Management Act, No.7 of 2007 empowers the Minister of Mines and Energy and Minister of Environment and Tourism to conduct inspections at the mining sites to monitor compliance.

Furthermore, Section 5.2 of the Minerals Policy of 2002 states that, “the Ministry of Mines and Energy will also cooperate and coordinate its endeavors more effectively with Ministry of Environment and Tourism and other stakeholders in implementing environmental policy.”

Section 26, Subsection 2 of the Environmental Management Act No 7 of 2007 states that, “every organ of State identified and listed in terms of section 24 (1) must report annually to the Minister on the implementation of its adopted environmental plan.

Subsection 1 of Section 27 of the Environmental Management Act, No. 7 of 2007 states that, “the Minister after the consultative process referred to in Section 44, (*see appendix I*) may list, by notice in the Gazette, activities which may not be undertaken without an Environmental Clearance Certificate”.

Furthermore, Subsection 3 of Section 27 states that, “despite any other law to the contrary, a person may not undertake a listed activity (*see appendix II*), unless the person is a holder of an Environmental Clearance Certificate in relation to that activity.”

Paragraph 2.2.5 of the Minerals Policy of 2002 states that, “before a mining license is granted, there should be a final Mine Closure Plan together with a funding mechanism that describes how the company will deal with matters like groundwater pollution, soil degradation, wind pollution and infrastructure. Furthermore, Government will monitor mine



closures to ensure that the mining industry has mechanisms to rehabilitate closed mines for the purpose of sustained land use.”

Paragraph 5.3 of the Minerals Policy of 2002 states that, “Government, with relevant stakeholders, will investigate the establishment of financial mechanisms for environmental rehabilitation and aftercare. These will be achieved through the development and implementation of internationally benchmarked Environmental Trust Fund or Bonds, which should be driven by the Ministry of Mines and Energy, the Chamber of Mines and other stakeholders”.

## **METHODOLOGY**

Interviews, document reviews and physical observations were used to collect data.

### **Major Findings**

- ❖ There is inadequate environmental monitoring by the Directorate of Geological Survey under the Ministry of Mines and Energy because only one active mining site was inspected during the 2012/13-2015 financial periods due to shortage of staff. At the time of the audit, 5 of 9 (56%) key positions were vacant. As a result, the extent of pollution at mining sites not inspected will not be determined which could pose a risk or harmful to the environment.
  
- ❖ The Ministry of Mines and Energy did not adequately communicate the findings of inspections on significant environmental impacts to the Ministry of Environment and Tourism and other stakeholders due to a lack of expertise because positions such as chief inspector and engineers under the Division Mine Safety & Services were vacant at the time of the audit. The findings of the inspections reported by the Directorate of Geological Survey on Otjihase and Oamites mines were not formally communicated to the Ministry of Environment and Tourism and were not acted upon by both the Ministry of Environment and Tourism and Ministry of Agriculture and Water Forestry. These are discussed as follows:
  - Contaminated seepage from Otjihase Copper Mine tailings dams were released into the Kuruma river system;



- The pyrite dumps at Otjihase Copper Mine caused water pollution in the river streams; and
  - The surface water in the Oamites River is polluted with sewage due to discharge from the waste water treatment plant at Oamites abandoned mine.
- ❖ The Directorate of Environmental Affairs under the Ministry of Environment and Tourism does not adequately ensure that Mineral Right Holders complies with Environmental Management Plans due to lack of inspections at the mining sites. As a result, Mineral Rights Holders continue to pollute the environment i.e. general waste mixed with hazardous waste, fuel spills at fuel bays and leakage of oil from drums into the soil.
- ❖ There is a lack of monitoring by the Ministry of Environment and Tourism (MET) and the Ministry of Agriculture, Water and Forestry (MAWF) because the Sand Miners were operating without Environmental Clearance Certificate which is one of the requirements of the permit conditions issued by the MAWF which have to be acquired from the MET. In addition, Sand Miners were not adhering to other permit conditions such as excavation of sand that should be at least 10 meters away from the river banks and excavation which shall under no circumstances expose the groundwater table. As a result, underground water and the river beds were polluted and mining pits were not rehabilitated when operations ceased which encouraged dumping of waste into the rivers.
- ❖ The Directorate of Mines under the Ministry of Mines and Energy did not establish financial mechanisms for environmental rehabilitation and aftercare and issues Mining Licenses to Mineral Right Holders without them providing Final Mine Closure Plans together with funding mechanisms. As a result, approximately 157 mining sites were left abandoned after closure which will risk Government funding the cost of rehabilitation.

## **Recommendations**

- ❖ The Ministry of Mines and Energy should also put measures in place to ensure that the Directorate of Geological Survey adequately conduct environmental monitoring at active mining sites in Namibia.



- ❖ The Ministry of Mines and Energy should also put measures in place to effectively communicate findings of inspections on significant environmental impacts to the Ministry of Environment and Tourism and other stakeholders as stipulated in the Minerals Policy of 2002.
- ❖ The Ministry of Environment and Tourism should put measures in place to ensure Mineral Rights Holders comply with Environmental Management Plans.
- ❖ The Ministry of Agriculture, Water and Forestry should put measures in place to ensure Sand Miners adheres to permit conditions.
- ❖ The Ministry of Mines and Energy should put measures in place to ensure financial mechanisms are established for environmental rehabilitation and aftercare.

## **IMPACTS AND RESULTS**

The report is not yet finalised and is still under review.

## **CHALLENGES AND BARRIERS**

- ❖ Lack/ delay of information;
- ❖ Voluminous data analysis;
- ❖ Lack of expertise to sufficiently test the impacts on the environment; and
- ❖ Could not visit the Small Scale miners due to budget constraints and time.

## **LESSONS LEARNED**

- ❖ ISO certified mines are generally protecting the environment because they are required to comply to national and international laws;
- ❖ The Minerals (Prospecting & Mining) Act No. 33 of 1992 does not differentiate between large and small-scale miners. This makes regulation difficult because the small-scale miners do not comply with the set requirements i.e. most do not have funds to rehabilitate mining sites after closure;
- ❖ There is no Act to regulate the treatment and disposal of waste; and
- ❖ The INTOSAI WGEA guideline on mining was used during the audit and was very helpful.



## **APPENDIX I: SECTION 44 OF THE ENVIRONMENTAL MANAGEMENT ACT, NO. 7 OF 2007**

When in terms of this Act the Minister or the Environmental Commissioner is required to consult, the Minister or the Environmental Commissioner, as the case may be –

(a) must consult the organ of state whose area of responsibility may be affected by the performance of the function or duty or the exercise of the power; and

(a) may, where appropriate, consult any other interested or affected person.

(2) When in terms of this Act the Minister or the Environmental Commissioner is required to consult any person or organ of state, such consultation is regarded as having been satisfied if a written notification of intention to act has been made to that person or organ of state and no response has been received within a reasonable time.”

## **APPENDIX II: LISTED ACTIVITIES IN TERMS OF THE ENVIRONMENTAL MANAGEMENT ACT OF 2007**

Subsection 1 of Section 27 of the Environmental Management Act No.7 of 2007 relating to Mining and Quarrying Activities as a listed activity is further explained clearer within the Government Gazette No.4878 and is as follows:

Subsection 3.1 states that, “the construction of facilities for any process or activities which requires a licence, right or other form of authorization, and the renewal of a licence or right in terms of the Minerals (Prospecting and Mining Act), (No 33 of 1992).

