## EXERCISE-1

The purpose of Exercise 1 is to test the knowledge of participants regarding the mining performance audit process especially the data analysis in interpreting the primary observations. So exercise one in order for it to test the knowledge of the participants, a Pre-study memo has been extracted in the form of a case study which was done by NAOT.The question here is one wants to know what were the messages / lessons learnt from the preliminary findings included in the Pre-Study extract.

Participants are required to comment on the questions emanating from the Pre-Study memo.

# PRE-STUDY MEMO AND WORK PLAN ON POLLUTANTS MANAGEMENT AT GOLD MINES

## 1.0 INTRODUCTION

### 1.1. **Audit Mandate**.

The Controller and Auditor General is required to carry out performance Audit (Value for Money Audit) for the purpose of establishing the economic, efficiency, and effectiveness of any expenditure pursuant to section 33 (1) of Public Finance Act No. 6 of 2001.

### 1.2 Audit Process and Aim of this Memo.

The audit process includes an initial data collection, a pre-study and main study on monitoring of mining environmental impacts.

The aim of this pre-study memo is to gather information in order to acquire knowledge in particular problems of environmental pollutions resulting from mining activities. This document is for the consumption of the Controller and Auditor General and other decision makers within the NAO. It also informs and solicits views from the auditee on the main direction of the pre study.

## 2. BACKGROUND TO THE PRE-STUDY

### 2.1 MOTIVATION

The main reason for carrying out a pre-study on pollutants management in Geita Gold Mining follows the immense public outcry on environmental devastation caused by economic activities. This concern was also expressed by the President of the third phase government His Excellency

President Benjamin William Mkapa[1] at Geita Gold Mine. His emphasis was basically on environmental protection and preservation with emphasis on management, handling and control of hazardous materials. It was also alleged that poor governance, exploration and exploitation of mines contribute to the environmental degradation[2].

The seriousness of the environmental problem was also reflected by the fact that the government came up with the national environment policy. This policy identified a number of environmental problems and these were to be tackled through sectoral policies.

Therefore, this pre-study is motivated on one hand by the fact that it wants to evaluate as to whether these sectoral policies on mining which include minimization of risk, management of disposal of hazardous wastes, other wastes and emissions, are being transformed into ministerial objectives and targets with due regards to integration into procedures and controls to enable performance measurement.

On the other hand, this pre-study is motivated by the fact that right now addressing environmental issues is one of the ten core issues of the fourth phase government i.e. to ensure environmental conservations so that future generations may inherit a beautiful country with a secure base for sustainable development[3].

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[1] The Guardian, Tuesday December 27th , 2005
[2] Guardian, Saturday July 1, 2006
[3] Daily News Monday January 2, 2006

## 3. METHODS APPLIED IN THE PRE-STUDY

### 3.1 SELECTION OF AUDIT OBJECTS

Reasons for selecting these audit objects i.e. Kahama Gold Mine (now Barrick Bulanhulu Gold Mine under Barrick Tanzania), Resolute Lusu Nzega Gold Mine, North Mara and Geita Gold Mine were

- They are big gold mines that are material as regards to this audit
- Easier to collect data than small mines

### 3.2 METHODS OF DATA COLLECTION

In carrying out this pre-study, a number of techniques were applied including meetings and interviews. The audit team carried out deliberations with the Ministry of Energy and Minerals on 17th June 2005 with the head of inspectorate subsection (Chief Inspector of Mines).

The team also had discussions with the management of the Vice President's Office including the Director of Environment. The team had interviews with the scientists at the National Environment Management Council (NEMC) on 9th September 2005.

Another interview was held with the members of the Journalists' Environmental association of Tanzania (JET) on 30th November 2005. The team also conducted an interview with the research fellow Dr. Kassim Kulindwa of the University of DSM on 10th January, 2006. Discussions were made with Mr.Tundu Lissu from LEAT (Legal Environmental Activists of Tanzania). Currently Member of the Parliament in Tanzania.

The data collections also included review of the following documents:

- Environmental Management Act of 2004.
- The Mining Act No. 5 of 1998 and regulations 1999.
- National Environmental Policy of 1997.

- National Strategy for Growth and Reduction of poverty, 2005.
- International Standards ISO 14001 Environmental Management System.

Another data collection technique to be undertaken but yet to be done is the physical observations inspection of the mining sites. The pre-study tries to explore the existence of the protection and management of the environment as stipulated by law upon the ministry of Energy and Minerals, compliance with International Standard organization (ISO) 14001 of 2004 as regards to Environmental Management System recognized by the International Community.

The pre-study focuses on the management of the environmental effects which are likely to be caused by the mining activities in Tanzania particularly the gold mining industry.

## 3.3. DESCRIPTION OF THE AUDIT AREA

The major actors according to the legal framework of the mining sector are Ministry of Energy and Minerals, Vice President's Office –Environment, other ministries, National Environment Management Council, and Local Authorities. The way they interact is depicted in the system graph (in Appendix One of this document). Functions of these actors are as narrated in the legal text in Appendix Four attached to this document.

## 4.0. FINDINGS OF THE PRE- STUDY:

After meeting a good number of stakeholders in the area of mining and environment a number of weaknesses were noted which would amount to environmental pollution with negative consequences to human beings and habitats. These weaknesses include the following:-

1. Non-compliance with Mining Environmental Management Regulations, delayed Environmental Impact Assessment, and lack of Environmental Management Plan as shown in the following table:

| MINE | DATE OF LICENCE | DATE OF COMMENCEMENT | DATE OF E.I.A. | EMP | REMARKS |
|---|---|---|---|---|---|
| Kahama Gold Mine | 5/9/1994 | 2001 | 1998/1999 | - | E.I.A. after issuance of license. |
| Resolute Lusu Nzega Gold Mine | 1993/1997 | 1998 | - | - | E.I.A Not Available |
| North Mara Gold Mine | 1996 | Inaugurated in 2002 | - | - | E.I.A Not Available |
| Geita Gold Mine | 1999 | 2000 | - | - | E.I.A Not Available |

**Source: Interview with MEM and LEAT Officials**

**Question 1 (a).** From the above table what was the lesson learnt? What does it signify?

**Question 1(b).** In the course of data collection it was learnt that In North Mara Mining liquid effluent was discharged without an authorization from the water officer under section 15A of water utilization (Control and Regulations Act of 1974). This polluted water used to flow into river Mara, did this tendency cause any environmental threat? If yes mention two of them

**Question 2.** Seepage of harmful cyanide sludge into the river water was reported at Geita Gold mine along the walls of the tailing dams, seepage cyanide sludge seeped into the river and people utilized the river water domestically. What were the likely consequences of this incident to support the pollution of the environment/evidence to confirm the allegations? Mention them.

**Question 3.**

From the above observations what do you think was the likely decision to be taken by the NAOT's management regarding the findings in this Pre-study memo?

**Question 4.**Mention any audit criteria which is likely to be adopted by the auditors of this project