ENVIRONMENTAL AUDIT REPORT

1. Introduction

The environmental issue has become a world –wide concern in the last decades being the focus of discussions in a variety of forums both at national and international levels. Because environmental problems are rooted in economic and social policies, they occur at all levels from local to global, and success requires action by many players over long periods of time. The government is responsible for dealing with these problems and working towards solutions. Accordingly the government has tried to address this over the years by creating policies, and programs enacting environmental legislation, and through international institutions and treaties, laws and regulations and expenditures.

Although it is not the Auditor Generals function to question policy. It is however his responsibility to investigate the effect of policy and the management measures that lead to policy decisions. In this way the Auditor General can help the Government do a better job. Addressing environmental matters falls squarely within the above mandate more precisely because of the following reasons:-

- The Government spends significant public resources on managing environmental problems; the Auditor General needs to hold the government accountable for prudent financial management, reporting, and results.
- The Government has signed numerous international agreements and enacted domestic laws and regulations; the Auditor General needs to hold the government accountable for compliance.
- Government in its financial statements must account for environmental costs and liabilities created by its land holdings and operations – accounting standards require that there should be adherence to proper accounting practices.

Accordingly, this office has embarked on carrying out environmental audits in addition to the usual financial audits it has been carrying out. The audits will be carried out on any of the environmental issues facing the country and world at large (including waste

management, water and air pollution, forest loss, land degradation or impaired ecosystems). As a pilot environmental audit, a decision was made to audit waste management with particular emphasis on Medical waste generated by government hospitals. Two hospitals: Masaka and Jinja were audited. Waste that is not managed properly affects not only human health but the other aspects of the environment like water, air and biological diversity.

The purpose of this management report/environmental audit report was therefore to make known the findings of the audit regarding the handling, storage, disposal, and transportation of medical waste. The report was not intended to be exhaustive. In line with audits of this nature, the intention was to provide the reader with a general understanding of the current situation with regard to medical waste and in particular, the adequacy of the management measures with regard to the risks and applicable legislation, regulations and procedures associated therewith.

2. Audit Objectives

The following were the audit objectives:-

i. To ascertain whether the Hospitals Waste management system complies with international environmental treaty obligations, national environmental laws and regulations and government policies and programs.
ii. To ascertain whether the Hospitals Waste management system is economical, efficient and effective.
iii. Make a report of the findings to Parliament

3. Audit Findings

3.1 Lack of Medical Waste Policies and Strategies:-

It was noted that there is no comprehensive Medical Waste management policy both at national and individual hospital level. Such a policy would, as a matter of best management practice guide all the concerned parties (individual hospitals, and staff employed by them) as to what course of action to take on issues related to management of

medical waste. The policy would address issues like: identification of all the stages of the waste stream; measures to be undertaken to ensure waste prevention; the different types of waste and how to handle each type; segregation of waste; compliance with existing laws and regulations as well as a clear definition of principles to be followed. In addition, the policy would identify all the possible risks related with medical waste management and give guidance on how to manage those risks.

It was further noted that although a Draft National Hospital policy is available, the environmental section of the policy (which will also contain issues related with medical waste management) has not yet been compiled.

3.2 Lack of Awareness of the Legislation in Place

It has been noted that there is a lack of awareness by the concerned hospital staffs of the legislation relating to Medical waste. For example although there are the National Environment (waste management) regulations 1999, issued by NEMA, none of the hospitals audited was aware of these regulations. This implies that any adherence to the regulations in place is coincidental rather than planned. It is important that all staff are made aware of all the stipulated regulations to be followed while handling all types of waste so as to ensure compliance with the same.

3.3 Lack of Standards

It was noted in the National Environmental action Plan for Uganda (dated June 1995) that Uganda had not yet developed any national environmental standards in many areas of concern yet standards play a crucial role in environmental management. This has been the case until the issuance by the Ministry of Health of the Standards for Injection Safety and Health Care Waste Management practices in July 2004. However, by the time of audit in December 2004 the Hospitals had not yet been availed with those standards implying that they had not yet started enforcing the standards developed. It is important that the standards are circulated to all parties concerned to enable their appropriate enforcement.

3.4 Waste Management Records are Limited, Incomplete and almost Non-existent

It was noted that there are no waste management records maintained by each of the hospitals audited. As such there is no way in which one can ascertain the quantities of waste generated by the hospital and whether it has all been disposed of in the recommended way. It is should be remembered that the generator of waste bears all the responsibility of destroying it. The hospitals therefore are always faced with a risk of being penalised by the responsible regulatory body (NEMA) for failure to dispose off all the waste they generate since they have no records to show that they have appropriately disposed off all what has been generated (e.g. records in form of waste manifests/ledgers, etc).

3.5 Monitoring

The National Environment Management Authority (NEMA) is a body that was established by an Act of parliament as the principal agency in charge of coordination, monitoring and supervision of all environmental management issues in the country. This it does in coordination with the district Environmental officers resident in every district in the country. However it was noted that both hospitals had not received any monitoring visits either directly by NEMA or by the District Environment Officers. It was explained that NEMA was largely relying on a system of 'self compliance' by the concerned bodies since it can not monitor each and every institution in the country due to several technical reasons. The hospitals audited have therefore not received the necessary technical guidance that would be derived from the monitoring visits to enable them take corrective or preventative action where possible.

3.6 Incinerators

It was noted that incinerators at both hospitals are out-of-date with no mechanical refuse feeding or dust-catching devices. Although it is a requirement under regulation 13 of the National Environment (waste management) Regulations 1999 to obtain a licence for operating a waste treatment/disposal facility from NEMA, no operational licences were availed for verification. In their current state (refer to photographs below), the incinerators can not burn up to the required temperatures resulting in noxious fumes,

smoke and incomplete burning of waste (especially sharps/needles and glasses). In addition, there are no operational instructions given to the operators of the incinerators (who are contracted). This obviously poses a health risk.

Fig.1: Opening to the incinerator (Masaka Hospital)

Fig.2: Spillage of waste behind the incinerator -Broken glasses and half-burnt needles

The incinerator - not buried. (**Jinja Hospital**)

Fig.3: Incinerator entrance-steps (**Masaka Hospital)**

Fig.4: Incinerator as seen from behind – un-burnt waste mixed with burnt waste **(Jinja Hospital)**

It was also noted at the Jinja Children's hospital that a shallow burning pit was being used as an 'incinerator' **(Refer to photo 5 below)** since the main incinerator is located about a kilometre away at the main hospital premises.

Fig.5: Pit used for burning medical waste at the children's hospital – Jinja. (Note the unrestricted access)

This is not only a violation of the laws in place but also a threat to the people and the environment at large.

3.7 No Strict Internal Medical Waste Control Systems

It was noted that there are no documented internal medical waste control systems in any of the hospitals audited. All staff interviewed acknowledged the fact that there were no written uniform guidelines by the hospital management regarding the management of waste. Such a system would guide staff on issues like waste segregation, storage, transporting, and disposal and also allocate responsibilities to specific staff members regarding their respective roles concerning the management of medical waste. It was therefore noted in some instances that medical waste (including sharps and used gauze) would not be separated from the general waste that would eventually be transported to the general landfill sites controlled by the municipal authorities. This poses a serious threat of harm to the communities nearby. (Refer to photos showing people scavenging the landfill site and animals grazing on the same site where the un-separated waste in dumped)

Fig.2: People scavenging waste at the municipal dumping site (Masaka).

3.8 Lack of a Waste Recycling System

It was noted that the system of waste recycling was not encouraged in both hospitals. This would reduce the volume of waste and hence the amount of land available for landfill sites. It is recommended that management should try to identify the waste types that could be recycled so as to reduce on the quantities of waste to be generated and dumped at the land fill sites.

4. Recommendations

4.1 Environmental Awareness

In order to create environmental awareness amongst staffs of the hospitals in the country it is recommended that the Ministry of Health (MoH) should play a leading role in emphasising the importance of observing environmentally sound practices and in particular in management of medical waste. Through its routine health education campaigns in the country, it should incorporate environmental issues so as to increase environmental awareness. MoH should encourage all hospitals in the country to access and adhere to the environmental regulations in place. Since it (the Ministry) is charged with the responsibility of developing and running all government hospitals and health training institutions it follows that the same institutions should be operated/run following laid down laws and regulations that will not adversely affect the health of the population.

4.2 Risk Evaluation

In order to mitigate the risks associated with medical waste, it is important that management should always try to identify and evaluate the nature of the risks involved and then try to devise ways and means of managing those risks. Currently there have not been any attempts to identify the risks posed by medical waste a fact which contributes to it being not given the attention it deserves.

4.3 Policies and Strategies

As already pointed out, a draft National Hospital Policy is available. It is important that the environmental sections of the policy are drafted which will address issues to do with medical waste management. The individual hospitals can then base on this national policy to make their own policies to be followed by staff in the respective hospitals.

4.4 Internal Waste Management Systems

It is important that management of the individual hospitals set up strict internal waste management systems with clear duties and responsibilities to all concerned. This way, it will always be possible to identify which individual has failed to perform his or her assigned responsibilities.

4.5 Increased Monitoring

Increasing monitoring by the ministry staff, NEMA staff and the district environmental officers can also help in guiding management of individual hospitals in areas they are found to be lacking. The interaction between the monitoring staff and hospital staff will also increase environmental awareness and possibly lead to adherence to environmental laws and regulations, thus contributing to conservation of our environment.