

**Country Paper by SAI Pakistan**

**AUDIT ON THE IMPLEMENTATION OF ENVIRONMENTAL POLICIES**

**Environmental Audit of Hospital Waste Management at PIMS**

**Audit Year 2010-2011**

by

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Islamabad, Pakistan

**ENVIRONMENTAL AUDIT REPORT**

**1. Introduction and Background**

The environmental issues have gained great importance world-wide in recent past and remained the focus of discussions at different forums both at national and international levels. The environmental problems impact the economic and social life of common man, thus the governments try to address them by making appropriate policies and enacting environmental legislation to respond to international institutions and treaties agreed upon as global partners. Although it is not the Auditor General’s function to question the policy, however it is 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 mandate of any SAI because of the following reasons:-

1. The Government spends significant public resources on managing environmental problems, so the Auditor General needs to hold the government accountable for prudent financial management by reporting the results to parliament.
2. The Governments sign numerous international agreements and the International agencies collaborate with them to control the environmental degradation through technical and financial support. The Auditor General is mandated to carry out the audit of such expenditures to provide assurance to all stakeholders that the financial statements portray true and fair picture of environmental costs and liabilities.

The purpose of this environmental audit report was therefore to make known the findings of the audit regarding the handling, storage, disposal, and transportation of medical waste in a big public sector hospital in capital city, Islamabad. 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 compliance of applicable legislation.

**2. Audit Objectives**

The following were the audit objectives:-

1. To ascertain whether the Hospitals Waste management system complies with international environmental treaty obligations and compliance of following Legislation / Rules:
* Pakistan Environnemental Protection Ordinance 1983
* Pakistan Environmental Protection Act, 1997
* Pakistan Environnent Protection Agency Regulations ,2000
* Hospital Waste Management Rules, 2005
1. To ascertain whether the Hospitals Waste management system is efficient and effective as envisaged in rules
2. To divert the attention of hospital management for bringing improvement in their processes and practices to strengthen their Internal control systems
3. To report of the findings to Parliament.

**3. Audit Methodology**

During planning phase, a permanent file was created which contained legislation, standards and available good practices in the field of hospital waste management. Audit evidence was gathered from available SOPs and other related documents in the record of hospital. However unconventional tools were also used to satisfy the assertions through interviews and questionnaires. Pictures were also taken where necessary to be used as evidence. Auditors were sensitized about hospital waste management practices in the private sector hospitals as well for making recommendations which could be implemented by management. The audit output was discussed with hospital management to have an agreed report at the forum of Departmental Accounts Committee.

**4. Audit Findings**

a) Non-constitution of the waste management team, its job description and responsibilities of the team members according to the provisions of Rules, 2005:

It was noted that there is no comprehensive Medical Waste management policy at hospital level based on the available set of rules framed in 2005. A coherent policy could have guided all the concerned as to what course of action to take on issues related to management of medical waste

b) Non-Existence of Waste Management Plan:

During scrutiny of record, it was noticed that mandatory review or analysis about waste streams and practices to be followed by the workers were not notified. An analysis if carried out, would have addressed issues such as identification of all the stages of the waste streams; 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.

c) Lack of Awareness about the Legislations/Rules on HWM among the staff:

It was noted that there was a lack of awareness in the concerned hospital
staff about the legislation relating to Medical waste. For example, the HWM Rules, 2005 were available but there was no awareness of the same in the concerned employees. This implies that any adherence to the regulations in place is coincidental rather than planned. It is important that only top management was aware of all the stipulated regulations to be followed while handling staff was not given orientation about their duties and associated risks. Interviews revealed that sufficient training and awareness was not given to concerned staff for handling, segregation and transportation of hospital waste

d) In-adequate number of staff employed on waste management:

Since no proper assessment was made, there was a considerable shortage of sanitary workers in wards to handle an average of 150 to 200 KG of hazardous waste. Even the staff declared surplus in various other cadres was not utilized for this purpose.

e) Non provision of protective clothing to staff handling hazardous medical waste:

It was found that contrary to HWM Rules, 2005 no protective clothing was provided to handlers of infectious waste. In absence of protective clothing, sanitary staff and sweepers are at risk of being infected with diseases and viruses while handing risk waste.

f) Non- arrangement to have vaccination program for employees:

There was no vaccination program for sanitary workers at PIMS who are at high risk of being infected with respiratory infections, skin infections, Human Immunodeficiency Virus (HIV) and hepatitis B and C.

g) Improper and inadequate maintenance of record:

Waste Management record maintained was Limited, Incomplete and almost non-existent. It was noted that there was no authentic waste management record to show the quantity of each type of waste. As such there was no way to ascertain the quantities of waste generated by the hospital and verify whether it was disposed of in the recommended way or not?

h) Absence of warning signs for General public:

It was found that Infectious waste was not disposed off in strong yellow bags as envisaged in Rules. The waste was found scattered all over the space designated for collection. Even the harmful medical waste was found in space where the visitors parked their vehicles. Warning signs were not found to warn general public to avoid contact with hazardous waste or the entry of general public was not restricted where waste was dumped before transportation.

i) Non-issuance of license from regulator:

In contravention of rules, PIMS management did not apply to the Federal Agency for issuance of license for handling hazardous substances required under Section 14 of the Pakistan Environmental Protection Act, 1997. As a result, no regulatory body was there to penalize hospital management for failure to dispose of all the waste they generated and transported according to the requirements of legislation.

j) Improper practices to segregate different categories of hospital waste before collection and transportation:

The Hospital Waste Management Rules 2005, required that ‘all risk waste other than sharps, large quantities of pharmaceuticals, or chemicals, waste with a high content of mercury or cadmium such as broken thermometers or used batteries, or radioactive waste shall be placed in a suitable container made of metal or tough plastic, with a pedal type or swing lid, lined with a strong yellow waste bag. The bags shall be removed when it is not more than three quarters full and sealed, preferably with self locking plastic sealing tags and not by stapling. Each bag shall be labeled, indicating date, point of production, ward and hospital, quantity and description of waste and prominently displaying the biohazard symbol. The bags removed should be immediately replaced with a new one of the same type. But no such practices were followed while handling the various categories of waste.

k) Non implementation of the provisions of section 12 of Pakistan Environmental Protection Act, 1997:

Audit noted that PIMS management has entered into a contact for disposal of hospital hazardous waste to National Cleaner Production Center-Foundation (NCPC-F) for incineration on daily basis but the PIMS management while making a contract for waste disposal with NCPC-F for incineration did not ensure whether NCPC-F had obtained an Initial Environmental Examination from the Federal Agency or the Environmental Impact Assessment (EIA). Upon request the PIMS management could not provide to audit any such documentation for review.

**5. Recommendations**

Audit made the following recommendations to the Management of PIMS:

1. Environmental Awareness may be created in a phased manner among the
workers who are engaged in collection, segregation and transportation of
medical waste.
2. Internal Waste Management Systems of the hospital must have clear duties and responsibilities for all concerned. This way, it will always be possible to identify which individual has failed to perform his or her assigned responsibilities. The team may be notified after proper identification of role as required in Rules.
3. The workers employed for handling of hospital waste must be vaccinated against infectious diseases periodically. They may be provided with protective clothing and equipment to ensure safety of them as well as of air and water.
4. Risk Evaluation is the prime responsibility of Medical superintendent of PIMS. 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 to devise ways and means of managing those risks.
5. PIM’s Management may fulfill the requirements of domestic legislations as well as those of International agreements and treaties which had been ratified by the Government of Pakistan on the protection of environment. They must obtain license for handling of hazardous waste.
6. Increased Monitoring by the regulatory bodies can also help in guiding management of the 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 environment.

**6. Impact**

This Environmental Audit will be pioneer report discussing the difficulties in the field of medical waste management. The statutory report when discussed in the PAC, will divert the attention of policy makers towards the weak areas regarding policy and implementation in management of hospital waste.

**7. Experiences and Challenges**

The Environmental Audit of medical waste was a difficult task as the management of medical waste remained ignored area in public sector hospitals. But the experience of this audit report will provide very valuable guidance for the management of hospitals and policy makers will improve policy guidelines for the future legislations on the environmental issues.