



Bio Medical Waste: No time to waste

Biomedical waste in India is a serious health and environmental hazard. Despite having a separate legislation for last ten years to handle this kind of waste, it is surprising to note that most medical facilities have failed to manage their waste in a safe and environmentally sound manner. The article looks at the reasons for this failure and also the role that the government can play in setting it on course.

"Medical waste disposal in a mess".... "The problem with bio medical waste"-such headlines screaming out of the national dailies regularly must have caught your attention lately. These newspaper reports have been expressing serious concern over the treatment and disposal of bio medical waste in the country. A recent study report by an NGO on the waste disposal mechanism of the high profiled hospitals in Delhi also indicates that the situation is grim in the national capital and needs to be addressed urgently. Plastic syringes and gloves are being recycled by unscrupulous elements while the hospitals and other agencies responsible for its sound disposal are at best silent spectators to this mismanagement.

This is only an indicator of the ground reality of medical waste management after 10 years of the promulgation of Bio-Medical Waste Rules.

Bio medical Waste in India

According to the available data the country produces around three million tonnes of biomedical waste annually and every year there is 8% growth in the generation of medical waste. A closer look also makes it clear that not even half of this total waste generated is being treated and disposed off in an environmentally sound manner. This calls for some serious soul searching and should be a cause for concern for all directly connected with its management but unfortunately only a handful of NGOs and media persons are constantly trying to investigate and bring the issue in public domain.

The data published by Central Pollution Control Board (as presented below) noticeably reflects that out of 73, 975 health care facilities in India, over 40000 hospitals/facilities are not in possession of the required

Continued on page 2



IN THIS ISSUE

1 LEADER

- ▲ Bio Medical Waste: No time to waste

2 EDITORIAL

3 FEATURES

- ▲ E-waste recycling in India: From vicious to virtuous circle!
- ▲ Zero waste Community: Not a dream but a reality

6 UPDATES

- ▲ IPEN General Assembly at Trivandrum: An Overview
- ▲ Workshop on E-Waste and Climate Change
- ▲ Delhi's future citizenry vows to show mercury the door
- ▲ National Workshop on "Emerging issues in Chemical safety and management"
- ▲ 'Quotes from Earth'-Environmental film festival in December

10 INTERVIEW

- ▲ POPS: A threat to the generations to come

12

- ▲ News

13

- ▲ Resources

14

- ▲ Profile

Medical Waste – The trap of poor implementation

According to data analyzed by Toxics Link, less than 50% of the bio medial waste generated in the country is collected and treated.

Despite over a decade of attention to the issue, new rules and various guidelines, the situation is still dismal even in the more aware urban centers. No doubt there has been a scaling up of new infrastructure like the over 160 common waste treatment plants in operation, their quality of service offered leaves much to be desired. The current policy of the Government discourages incineration as a polluting treatment technology, however often this method is still preferred over other safer ones in an attempt at expediency and dangerous and expensive quick fix solutions. In rural centers, the Central Government has included waste management in its Reproductive and Child Health Program, but again at the primary health centers there is almost no implantation of waste management. Alongside there are several excellent training resources, including an exhaustive training manual developed by Toxics Link and a long distance WHO backed certification course offered by the Indira Gandhi National Open University, however health care workers are yet to receive proper training in many states. Also training has to be an ongoing practice.

Lack of a proper regulatory oversight by the State Pollution Boards has resulted in less than a small number of health care waste generators being even registered in some States, despite this being mandatory under the Rules.

Once again the bottlenecks in implementation are coming up as the main hurdle. It is difficult to pinpoint who is responsible and how this can be improved. Once again poor governance, lack of oversight, poor accountability, poor quality practices offered emerge as issues. It seems that such systemic problems need better leadership for things to move ahead at any acceptable pace. Else it will only slip back to where we began – medical waste lying openly in every garbage bin in the city. In this case the champions have to be from the medical community itself. There is no shortcut or substitute to take pride on doing a job well, and self motivation is key.

Ravi Agarwal

Continued from page 1

permission or the authority to generate such waste but they continue to function with impunity. The government figure itself indicates that approximately half of the waste generated daily is left untreated, meaning more than **5 lakh tonnes of untreated bio medical waste annually**.

The issue of poor or non-management of medical waste has very serious implication on both human health and environment due to the nature of the waste and its ability to infect any other waste coming into its contact. This can be a potential cause for serious health risk to larger population and in many cases is responsible for an epidemic.

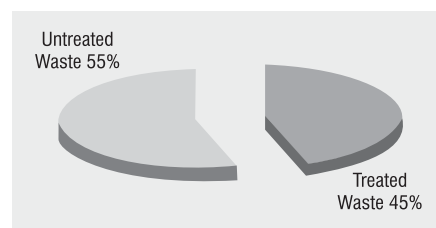
Where does the legislation fail?

If we step back and take a good look at the rules on biomedical waste, which came in to existence in 1998, we realise that it is perhaps a very concise and enabling regulation dealing with a particular kind of waste. The rules, evolved after wide consultation with many stakeholders, have articulated and assigned responsibilities to all connected with this waste. The Rules have clearly spelt out the roles and responsibilities of the three important functionaries - the generator of the waste (hospitals, nursing homes), operators of centralized facility and the regulators (State Pollution Control Boards). In addition, it also defines the technologies accepted and allowed for treatment of the waste. The mechanism for its effective implementation has been also spelt out clearly but as usual all involved and responsible find escape routes.

Even after the legislation, in many occasion various courts have been required to intervene on the issue of biomedical waste and give directions to the state bodies. Proper and effective implementation of the rules is only possible with increased awareness from grass root level to the top. It is time that health care facilities allocate specific fund for waste management and involved the senior management in formulating systems and changing practices as stipulated in the rules. There is a need for training and continuous updation of knowledge among the health care facility staff members, not only to ensure

State of Medical waster in India

Total No of Health Care Facilities (HCF)	: 73,975
Total number of Beds	: 912,258
The quantum of waste generated	: 319,493 Kg/day
Total quantity of waste treated	: 143,952 Kg/day
Number of HCF utilizing CBWTF	: 27,317
Number of HCF applied for authorisation	: 33,202
Authorizations Granted	: 28,980



effective waste management but also to safeguard their health. Moving beyond this, we need to work towards creating awareness among any commoner visiting any of the healthcare facilities- this will ensure greater accountability and responsibility.

Though in last few years, we have witnessed private hospitals coming forward and trying to address this issue, government facilities have been mostly found lacking on this aspect. The issue of government hospitals not falling in line and citing resource as a constraint does not hold much water. The inability of the State Pollution Control Boards (SPCBs) to reign in the government hospitals has been an old and perpetual issue. The hierarchy and powers of the SPCBs does not allow them the flexibility to act independently and initiate action on government facilities not conforming to the rules.

The inability of the Pollution Control Boards to regulate and enforce also requires understanding and correction. It has been

gradually losing its shine and its capacity to contribute effectively in environmental management on account of lack of technical capacity and adequate resource. The issue of governance and transparency are perhaps most critical for the current state of affairs and its close door policy is one of the issues which needs immediate attention. It certainly is baffling to note that even after making an application for authorization, the hospitals do not get the requisite permission related to Bio medical waste management. Also, the inability of the PCBs to carry out regular mandatory audits of the 157 centralized facilities across the country is a reflection of its lack of capacity and resource. Because of this apathy, the functioning of many of these facilities is a serious cause of concern on various accounts.

As we progressed in time and experience the country should have witnessed consolidation and evolution of better maintenance practices and management systems but unfortunately these standards are absent. The

treatment facilities by their geographical location have gained a monopoly and at times exploit the situation to their advantage.

The existing trend needs to be corrected with involvement of all stakeholders and meaning full dialogue among them. There is also a need to expand and include key players like Ministry of Health which can play a substantial role in addressing this. While the Ministry of Environment and Forest (MOEF) sets out the rules and standards, the Ministry of health being the generator is consciously absent and does not own much responsibility. An inter ministerial forum will perhaps be a good starting point for the issue to receive better attention. NGOs have played an important role in the evolution and formulation of rules, training and capacity building and creating awareness. Some of these are key to success of any program and their involvement will only help improve situation and overall compliance.

By Satish Sinha

FEATURES

E-waste recycling in India: From vicious to virtuous circle!

In the present era of globalized economy, rapid urbanization and high consumption trend the world confronts a set of new challenges related to sustainable development. While increased production and consumption push growth there are also reasons for rapid depletion of natural resources and larger waste generation. It is to find a solution to the issues of resource conservation and waste management that recycling is fast evolving as an effective solution. The environmental and economic benefits of recycling are better understood by all and is proving to be an important tool contributing to local revenue, job creation and safeguarding of environment. The recycling at the end of life goods, especially electronics, can contribute in saving depleting natural resources and also result in considerable energy savings.

India has had a very long history of recycling, which has continued to be practiced in an informal set up mostly by

urban poor. From paper, old bottles, plastics, clothes to old machineries- all are seen as potential income source and have been reused and recycled to earn revenue. E-waste is relatively new entrant to this long list of profitable, recyclable items. Though currently, as with the other wastes, this is being mainly processed in the informal, unorganized sector in India- there is a gradual shift with formal, authorized recyclers setting up facilities. This has been mainly prompted by two reasons; firstly E-waste recycling is being perceived as good business opportunity and secondly the

environmental and health hazards of processing E-waste in the unorganized sector being recognized and acknowledged as a major concern.

India generated 3.3 lakh tonnes of e-waste in 2007, which is going to touch 4.7 lakh tonnes by 2011, as per a study released by MAIT-GTZ. And the same study also projects that only 19000 tonnes of this generated waste is being recycled, with the formal recyclers processing a paltry 5%. But with aggressive marketing by the formal recyclers, many of them with international partners, this is expected to change.

