



Government hospitals turn a blind eye to harmful effects of incinerators

Four years ago, Delhi had around 59 medical waste incinerators operating in the city. Because of the complexities involved in meeting the emission standards laid down for medical incinerators, most private hospitals decided to shut down their incinerators.

Government hospitals, however, continue to use incinerators which release large quantities of carcinogens that exceed emission standards by huge margins. It seems that the administration of government hospitals is oblivious to the economic and environmental dangers of incinerators.

By now, it is a well-established fact that burning of waste in incinerators leads to the emission of Persistent Organic Pollutants (POPs) such as dioxins and furans. Dioxin exposure is linked to a variety of health problems, including impairment of the nervous system, the endocrine system and

the reproductive system.

Both private and government hospitals are aware of these dangers but surprisingly the latter choose to ignore their responsibility towards the community.

The Central Pollution Control Board recently issued guidelines on common bio-medical waste treatment facility as well as the design and construction of bio-medical waste incinerators. The guidelines clearly discourage on-site incinerators. New incinerators are allowed only in certain unavoidable situations. Mindful of the dangers of burning waste, the guidelines also limit the categories of waste that require incineration.

While these guidelines exist on paper, the ground reality is different. Government hospitals continue to incinerate all categories of waste. They receive a helping hand from State Pollution Control Boards which have



With the new guideline issued by the CPCB, incineration has been limited to treatment of animal and human waste at off-site locations.

been encouraging hospitals to go for on-site incineration as a treatment option. Some state governments are also looking at unapproved technologies like plasma pyrolysis. The eagerness of government establishments to burn waste rather than look at alternatives demonstrates their short-sightedness and lack of concern for communities.

There are several environment-friendly alternatives to incineration. The Global Alliance for Incinerator Alternatives (GAIA), consisting of 227 groups and individuals from 61 countries has released a report: 'Resources up in Flames: The Economic Pitfalls of Incineration versus a Zero Waste Approach in the Global South'. The report compiles various alternatives to incineration and underlines the fact that incineration is not just an environmental, but also an economic disaster. (The report is available at: <http://www.no-burn.org/Ruif2/RuifPR.html>.)

Incineration technology is a threat to a sustainable future. Governments must, therefore, encourage the development of safer alternatives and limit incineration as a means of disposing of waste. ▲



INDIA FILE

Syringes that self-destruct after use

Studies show that an estimated 66 per cent of Indian children who are vaccinated develop infections due to inadequate sterilisation of syringes.

The Union Health Ministry has therefore decided to use auto-disabled syringes for vaccination programmes across the country.

Auto-disabled syringes, popularly known as AD syringes, are automatically rendered unusable after one injection. The auto-disposable mechanism of the syringe works by locking the plunger after the injection is administered. The next time there is an attempt to use the same syringe, the plunger breaks.

Prasanna Hota, Secretary, Family Welfare, says, "Over the last few years, the immunisation programme has shown some amount of stagnation because disinfecting the glass syringes takes too much time". He added that at present, with the use of glass syringes, only about 80-

100 kids can be vaccinated in a day. "With AD syringes we are hoping that the figure would go up significantly."

The AD syringes being introduced by the Union Health Ministry for vaccination programmes may be like a booster dose in the vaccination programme, but their disposal continues to remain a sore point.

The Ministry approached the CPCB for approval to open burn plastic syringes. This was summarily rejected after much debate, but it also set off alarm bells among environmentalists.

"Experience has shown that safety boxes which are used for storing used AD syringes can be very polluting, if burnt," claim officials at the CPCB who had earlier rejected the proposal claiming that it was against the laws passed for environmental protection. "We need to be aware of this issue since international agencies, including UNICEF and WHO, have been putting pressure on the Ministry of Health and subsequently the Ministry of Environment to re-examine and change its policy which currently disallows the open burning of plastics."

There are several safer

options, which include the use of needle pullers, needle cutters and the containment of sharps in pits.

Steam sterilisation, shredding and recycling are also undertaken in cases where immunisation waste is brought back to a central facility.

Recently Health Care Without Harm (HCWH), an international coalition of NGOs and individuals, carried out a successful campaign in collaboration with the Phillipines government. The campaign managed roughly 20 million syringes through non-burn options. ▲

Source: The Hindu,
June 17, 2004

Tripura government toughens stance on bio-medical waste

Alarming health hazards and increase in infectious diseases have prompted the Tripura government to initiate a panel action against non-compliance of the instructions of Bio-medical Waste Management by healthcare establishments in the State. Authorities have identified more than 400 private hospitals and nursing homes across the State, which have not yet complied with the BMW Rules.

According to Health Minister Tapan Chakraborty, "Tripura is the only state in north-eastern India which gives emphasis on both bio-medical and solid waste management in spite of stiff financial conditions." The government has adopted the GB hospital in Agartala as a model for the project. ▲

Source: Deccan Herald,
Bangalore

WORLD NEWS

US HOSPITAL STOPS USE OF TWO INCINERATORS

The US Environmental Protection Agency (EPA) announced that the Guam Memorial Hospital would have to shut down its two incinerators, which burn used medical supplies, because of violations to emissions standards set by the Clean Air Act. Negotiations have been on between the hospital administration and the federal agency over the last year to figure out how the hospital would address the problem and what alternatives the hospital had to dispose of medical waste.

In late 2002, the US EPA tested the smoke coming out of one of the incinerators and found that it violated emission limits for lead, hydrogen chloride, dioxins and furans.

In order to deal with the issue, the hospital has now contracted Waste Management Services, who provide an industrial-scale autoclave service to sterilise medical waste. Medical waste is sterilised, and then ground into powder so that it is safe to dispose of in a landfill. According to the operator of the centralised facility, the autoclave process is used in most states as it is a more environment-friendly way to dispose of waste.

Contracting the services also should help the hospital save money because it won't incur the high fuel costs of operating its incinerators. The hospital should be saving anywhere between \$270 and \$360 a day. ▲

By Mark-Alexander Pieper
Pacific Daily News

Book your training manual now!

Srishti is producing a training manual on bio-medical waste management issues, targetted at healthcare workers. The manual is being produced to provide a convenient, up-to-date resource that will allow trainers to increase awareness on waste management and related issues at every level in their organisation.

The manual has six sections, each with slides on a particular topic. Descriptive notes have been provided with the slides as necessary, to help provide trainers with a narrative structure.

Please write to anu@toxicslink.org to book your copies of the manual now – we expect copies to be available from end-August 2004.

WISHARD TO SHUT DOWN MEDICAL WASTE INCINERATOR

An Indianapolis hospital – Wishard – will shut down its medical waste incinerator which has violated federal limits on dioxins for at least two years. Wishard Hospital officials say that attempts to fix the problem have failed.

In November 2003, a test showed that the incinerator was releasing two-and-a-half times the amount of dioxin allowed by its federal permit.

The incinerator has been in operation for about 10 years. Dioxin exposure has been linked to cancer, severe reproductive and developmental problems and damage to the immune system.

Wishard will contract with a private company to haul away its medical waste. ▲

HOSPITAL STICKING TO ONE-YEAR TIMETABLE TO CLOSE INCINERATOR

Evanson Hospital is on course to close a medical incinerator opposed by neighbours, but reiterated they would probably need 12 months to make the transition.

The hospital's president said in an official statement that "we will do all we can to move the process along so we can meet our target of shutdown in 12 months". A group of residents in the area are however pressing for immediate closure of the incinerator, in place since 1989, raising concerns about health and the incinerator's supervision.

Committee members will now present the hospital's message to the community. ▲

Source: Bob Seidenberg

INTERACTIVE

Hospital waste management skillshare in Lahore

On a trip to Lahore, Ratna Singh discovers that incineration is still the recommended method for bio-medical waste disposal in Pakistan

Travelled to Lahore with Dr Sudhir Joseph, Deputy Director of St Stephen's Hospital, New Delhi, for a healthcare waste management skillshare.

Organised by WWF, Pakistan, it was a great opportunity for us to present the work being done in India. This was also the first time that a hospital representative presented their institute's efforts to improve the bio-medical waste situation.

The audience appreciated that the message came from a doctor as he could present an insider's view of the whole process – from initiating the system to its sustenance till date.

The skillshare was done in collaboration with the Pakistan Medical Association, and the audience therefore consisted primarily of doctors. A manual prepared by WWF on hospital waste management was also launched during the skillshare.

The experience of St Stephen's Hospital was received with great enthusiasm. In Pakistan, the rules on bio-medical waste were framed in 2000, and are



Left: Ratna making a presentation on bio-medical waste rules in India. Below: Ratna with Saima Amin Khwaja of Pakistan Environmental Lawyers Association.



still pending enforcement. The only option suggested for disposal, in the rules, is through incinerators. WWF, in assistance with Health Care Without Harm, had submitted comments in 2002, but the draft has not yet been modified and therefore no action has been taken on implementing the rules.

As there are no guidelines for the hospitals to follow, tonnes of waste produced every day by the city hospitals end up in the city's solid waste containers, posing a health risk for the citizens.

The regulatory agencies should ensure that measures are taken to bring bio-medical waste management into the system. Pakistan should not repeat the mistakes made by India, but

should learn from our experience.

Alternative technologies should be promoted in the guidelines and rules. Due emphasis should also be given to training and awareness-raising programmes which would ensure segregation and waste management at source.

Ratna Singh

HUMAN AFFAIRS

WORKSHOP ON MERCURY USAGE IN HEALTHCARE ESTABLISHMENTS

On June 30, 2004, Toxics Link organised a workshop to raise the issue of mercury usage in the healthcare sector, at the India International Centre. The panelists included Dr M. Subba Rao Additional Director, Ministry of Environment and Forests; Dr T.K. Joshi, Director, Centre for Occupational and Environmental Health; Dr Sudhir Joseph, Deputy Director, St Stephen's Hospital and Ravi Agarwal, Director, Toxics Link.

The panelists and audience were mainly concerned with the lack of awareness regarding mercury poisoning in the country.

While developed countries have recognised the risk involved in using mercury-based medical instruments and have replaced them with digital alternatives, several hospitals in our country still use mercury thermometers and BP instruments.

St Stephen's Hospital, Delhi, has taken some useful measures to lower the risks of mercury poisoning. Serving as a model for other healthcare establishments, the hospital has succeeded in removing all mercury thermometers and replacing them with digital ones.

Their annual mercury spillage has been reduced to 0.9 kg from 2-3 kg. The hospital authorities hand-over collected mercury to a thermometer manufacturer for reuse.

You or your organisation can be a part of the Health & Us – Medwaste Action Network (HuMAN) by becoming an Active Member (involved with HuMAN on a regular basis) or a Member in Principle (no active participation but endorsing HuMAN principles).

Contact us at the Delhi address given alongside, and provide us with the following information:

1. Name
2. Occupation and designation
3. Address, phone, fax and e-mail
4. Past experience of / interest in medical waste

Once we have this information, we will send you more details on membership

Publications released at the mercury usage workshop

▲ **Lurking Menace – Mercury in the Healthcare Sector:** A report that documents the usage pattern of mercury in five large hospitals of New Delhi and presents the views of leading dentists in the city regarding dental amalgam. The report presents, through case studies, the annual consumption of mercury in thermometers and sphygmomanometers in an average-sized hospital, based on which a conservative estimate has been made regarding the release of mercury by hospitals and dental clinics.



▲ **Information flyer for dentists:** A four-page information sheet, which highlights the dangers of mercury to the dentists as well as their families.

▲ **Information flyer for hospitals:** This document highlights the places at which mercury is used in healthcare institutions and urges them to move away from its usage.

▲ **Poster:** This A4-size poster is targeted at nurses. It aims to increase their awareness regarding the dangers associated with mercury as well as to help them in knowing the correct procedures in safely managing and containing it.

Dr Joshi presented facts and case studies on lead and mercury poisoning. Differentiating between the two, he said that while lead poisoning can be treated completely, mercury poisoning cannot.

Mercury has various levels of toxicity in the human body. Being highly permeable and soluble, it passes all the three barriers of the body, seeping into blood and brain tissues. Once this happens, it becomes extremely difficult to remove it from the body. No medicine has yet been discovered that can cure mercury poisoning. In addition, it is very hard to diagnose a case of heavy metal poisoning.

If you have suggestions or require information, please contact:

RATNA SINGH

ratna@toxicslink.org

Srishti / Toxics Link – Delhi

H2 Jungpura Extension (Ground Floor)
New Delhi 110 014.

Tel: +91-(0)11-24328006/24320711

E-mail: srishtidel@vsnl.net,

tldelhi@toxicslink.org

Toxics Link – Mumbai

4th Floor, CVOD Jain School
84, Samuel Street
Dongri

Mumbai 400 009.

Tel: +91-(0)22-23435058/23439651

E-mail: tlmumbai@toxicslink.org

Toxics Link – Chennai

8, Fourth Street
Venkateswara Nagar
Adyar

Chennai 600 020.

Tel: +91-(0)44-24914358/24460387

E-mail: tlchennai@toxicslink.org

Website: www.toxicslink.org