



Mercury: the threat is rising

Currently, India is the second largest user of mercury in the world (170-190 tonnes a year) after the USA. While the USA has strict norms for controlling the use of mercury in various products, in India they hardly exist. The Ministry of Environment and Forests issued a draft notification in 2000 for a phased elimination of mercury from consumer products, but so far no action has been taken on it.

According to the Canadian Global Emissions Interpretation Centre, which has published data on the spatial distribution of mercury emissions in air, India is one of the world's mercury hotspots, with mercury being released into the air uniformly at a rate of 0.1-0.5 tonnes per year.

Therefore, with sufficient global evidence of the adverse impacts of mercury to warrant action, we should start reducing consumption of mercury-based products in hos-

pitals and opt for safer alternatives like digital thermometers and sphygmomanometers.

Take the case of dental amalgams. Commonly known as 'silver filling', each filling contains half a gram of mercury. Studies suggest that one gram of mercury is enough to contaminate 20 acres of a water body, so one can imagine the extent of damage caused to patients with multiple fillings if it leaks into the body. Patients risk consuming high levels of mercury, while dentists face the danger of exposure to the highly toxic substance from daily handling.

Dental amalgam has been used extensively as a restorative material in teeth for more than 150 years. Amalgam is a metallic alloy consisting primarily of four metals – mercury, silver, copper and tin – with mercury comprising around 50% of the amalgam material. Though recommended for ban in Western countries such as Sweden,



With mercury being used in dental amalgam, having a tooth filling is more likely to be a cause to grimace than smile!

mercury amalgam continues to be used in India. This is because over two decades of its use has given silver filling wide acceptability. Also, the regulation of mercury products is not up to the mark.

Mercury and compounds such as methyl mercury are persistent, bio-accumulative toxins that can, even in minute quantities, pose a risk to human health, wildlife and the environment. A potent neurotoxin, mercury causes damage to the central nervous system, immune system, liver and kidneys of human.

Hospitals should also have a mercury waste management plan in place in case of spills and breakages. The staff should be adequately trained to manage a mercury spill. Perhaps what is most important is raising awareness among policy makers so that regulatory infrastructure and resources can be upgraded to protect the public and the environment from mercury. Stringent regulations need to be in place to enforce prohibition, and to control import, export, sale and use of this toxic substance. ▲



Discarded mercury thermometers lying broken in a junkyard pose a serious threat to public health.

INDIA FILE

Panel for bio-medical waste management

On December 23, 2003, a delegation from the Indian Medical Association met the chairman of the Haryana Pollution Control Board, Rana K.P. Singh, at Ropar to apprise him of the alleged hurdles created by certain board officials to the efforts of small hospitals on managing liquid waste generated by them.

The delegation complained that only a few hospitals were granted authorisation, though a year had passed since all hospitals in the state had applied for it. The delegation constituted a five-member committee under the chairmanship of S.E. Babu Ram to review the bio-waste situation in the state. ▲

Source: Hindustan Times, Chandigarh, Dec 25, 2003

Pollution control board serves notices on 74 nursing homes and clinics in Chandigarh

After waiting for years, the Chandigarh Pollution Control Board decided to come down heavily on nursing homes and clinics in the city with regard to disposal of bio-medical waste. The board issued notices to 74 nursing homes, dispensaries and medical laboratories, giving them 15 days to make ar-



rangements for the proper disposal of the bio-medical waste. Failing to do so would invite prosecution under the Bio-medical Waste (Management and Handling) Act.

The officials said that under the Act, the offenders could be imprisoned for 1½ years, besides being fined Rs 1 lakh for throwing bio-medical waste into open dustbins.

In fact, only 36 nursing homes and clinics in the city have so far made arrangements as per the recommendations of the board. The Chandigarh city administration has constructed an incinerator in an industrial area for the proper disposal of bio-medical waste. ▲

By Manoj Kumar

Hospital throws up 'health hazard' issue

In Bangalore, hospitals have been flouting the Bio-medical Waste Rules without any qualms. In a case which has recently come to light, the disposal of medical waste of the Ramakrishna Hospital is carried out in a suspicious manner. M. Jayprakash, the Karnataka State Pollution Control Board (KSPCB) official in charge of bio-medical waste, said, "We are going to issue a show-cause notice to Ramakrishna Hospital." There are around 30 hospitals in the city which have received show-cause notices for not obtaining authorisation under the Bio-medical Waste Rules.



"Family-run clinics and hospitals make up the grey area where bio-medical waste disposal has not been satisfactory," points out Dr S. Pruthvish, Director, Health Care Waste Management Cell, M.S. Ramaiah Medical College. While major hospitals in the city have installed incinerators, others make do with one of the common treatment facilities at Kanakapura or Dobspeet. ▲

Source: The New Indian Express, Bangalore, Dec 30, 2003

Kerala ignores Stockholm Declaration

The Kerala government's decision to install incinerators in 17 district hospitals and medical college hospitals in the state will go against the Stockholm Declaration to phase out incinerators.

Dr A.K. Sabapathy, of the Qualified Private Medical Practitioners and Hospitals Association (QPMPHA), informed the media that a study team from the Cochin University of Science and Technology had developed four methods to dispose hospital waste – placenta anaerobic bio-reactor; body parts anaerobic reactor; laboratory liquid waste disinfectant and microbe eliminator. These were cost-effective and can be installed at the hospital premises itself, he said, adding that 25 hospitals were already using these methods. ▲

Bio-medical alarm after BMC shuts Sewri incinerator

With the Brihanmumbai Municipal Corporation (BMC) bio-medical waste incinerator shut down, city activists are concerned that highly toxic medical waste is being sent to dumping grounds without treatment.

The BMC had set up the facility in Sewri in 2000 to handle all the bio-medical waste from public and private hospitals which did not have any waste treatment facility themselves. However, the incinerator was found to be

functioning poorly and polluting the surroundings. After making some effort to repair it, the BMC shut it in October 2003, and is now sending the bio-medical waste to dumping grounds. Officials with the Maharashtra Pollution Control Board (MPCB) said the BMC could send the waste to the incinerator at Taloja instead. The MPCB has issued a show-cause notice to the BMC for shutting the incinerator without consulting it, as well as for the air pollution the incinerator was causing earlier.

ANTI-INCINERATOR PETITION SENT TO MAHATHIR MOHAMAD

More than 230 civil society groups and individuals from 39 countries have asked Dr Mahathir Mohamad, past Prime Minister of Malaysia, to scrap the mega-incinerator project proposed in Broga. In an open letter, the petitioners said it was unfortunate that the government favoured a “costly and deadly technological non-solution” instead of adopting proven, safe and sustainable discard management systems.

“By pushing for this incinerator, the government is guilty of imposing a mistake committed by western industrialised nations on the people of Broga,” said Von Hernandez, of Manila-based Global Alliance for Incinerator Alternatives. “This is truly regrettable, considering that Malaysia has led environmental issues,” he added. ▲

By Claudia Theophilus, in an online newspaper in Malaysia

HUNDREDS OF WASTE DISPOSAL CENTRES PROPOSED IN CHINA

The State Environmental Protection Administration (SEPA), China, has submitted a plan to the State Council, which involves the setting up of 200-300 medical waste disposal centres over the next two to three years. Officials and experts at the Ministry of Health and the Beijing Municipal Government said that the move is in response to lessons learnt from the outbreak of SARS.

An existing sub-standard incinerator was too inefficient to eliminate harmful and poisonous substances in medical gar-

Hospital waste reduction in South Africa

In November 2003, I had the opportunity to travel to South Africa and Mozambique on the invitation of groundWork (gW), a non-profit environmental justice service and development organisation working in South Africa and in Southern Africa. In 2001, gW initiated a greening hospitals campaign to help selected facilities reduce the amount of waste generated. Two hospitals- Edendale Hospital and



Ratna Singh (centre) at a South African hospital.

bage as it produced particles that polluted the air, said Nie Yongfeng, a professor with the Department of Environmental Science and Engineering of Qinghua University. “We believe that medical wastes are no less dangerous to human health than things like radioactive waste and toxic particles discharged by some industries,” Wang Shancheng, a SEPA official, told Xinhua.

Sources with the Beijing Municipal Government said

Ngewelezana Hospital were selected for pilot studies. My visit was intended to do an audit of the work carried out in these hospitals since the launch of the campaign.

This programme has resulted in positive outputs as the hospitals have shown steady improvements. Through improved segregation the number of red bag waste produced has declined steadily, sharps management practices in the hospital have improved, storage areas have been demarcated and their on-site incinerators have been shut down. The centralised facility also treats the waste through non-combustion methods.

The system of segregation in South Africa is different from that of India. In the former, waste is segregated in two categories. The red bag holds all the infectious waste as well as the disposable items like IV bag tubings, etc, while the black bag



In Mozambique, incinerators are viewed as a quick-fix solution.

is for segregating general waste. A centralised facility operator collects the waste from the hospitals. At the facility, the red bag waste is autoclaved and sent to landfills while the municipality collects the general waste.

The situation in Maputo, Mozambique, on the other hand, is quite different. There is no colour-coding and black bags are used to dispose of all the waste generated. Education and awareness regarding the hazards of incineration for the people of Maputo is urgently needed. ▲

By Ratna Singh

FURORE OVER WASTE INCINERATOR IN SOUTH AFRICA

Green activists are up in arms over a proposal by waste disposal company Enviroserv to build a medical waste incinerator at Shongweni outside Durban. Last year, South Africa ratified the Stockholm Convention, an agreement to reduce the emission of the pollutants emit-

Continued on next page

that the Chinese capital is to build two new medical waste disposal centres by the end of 2004, which are expected to dispose of 60 tonnes of medical waste per day. ▲

Source: People’s Daily Instances such as these illustrate the level of misinformation among people and government bodies with respect to the harmful effects of incineration. The authorities are unaware of the worldwide shift away from incineration technology.

Continued from previous page

ted by incinerators. The World Health Organization also recommends against the burning of medical waste.

Environmentalists claim a draft environmental report (EIR) about the impact of the incinerator is flawed and misleading, that the incinerator will release deadly chemicals into the landscape and that existing incinerators operated by rival company Compass Waste are 40 per cent under-utilised. More than 5,600 objection letters have been sent to NGOs and the provincial department of agriculture and environmental affairs. Concerns include ineffective control over emission of dioxins and mercury. ▲

Dr Mark Chernaik, staff scientist at the US office of the Environmental Law Alli-

ance Worldwide, conducted a critical evaluation of the draft EIR and Air Quality Impact Study. He concluded that Enviroserv's justification for building an incinerator to treat pharmaceutical and chemical wastes could be likened to justifying the use of a gun to kill a mosquito.

VOTING INCINERATORS OUT

Residents of the Hsiaokang District of Kaohsiung City, Taiwan, voted overwhelmingly against allowing a medical-waste incinerator to undergo a trial run, marking the first time that an advisory referendum has been held in southern Taiwan.

Sixty-one percent of the 11,778 qualified voters from the six boroughs near the incinerator cast ballots on December 7,



2003. The result revealed that 97.8 per cent of the 7,187 votes cast were opposed to the incinerator. Tsao Chih-kuan, an activist from the Fengpitou Cultural Association, said that the referendum's results would be sent to the Kaohsiung City Mayor to persuade him to close the incinerator. ▲

Source: Chiu Yu-Tzu, Taipei Times

HuMAN AFFAIRS

In continuation of this standard feature of UPDATE, we are profiling HuMAN members to increase awareness about member organisations and their activities.

Consumer Action Group (CAG)

CAG came into existence in 1985 as a non-profit, non-political, voluntary and professional citizen's group. CAG's declared objectives are to provide a platform for citizens to represent consumer and environmental problems, to monitor the performance of public utilities, and to take up issues of public health, development and safety.

For more info, visit www.cag.org.in or contact cag@xlweb.com

Goa Desc Resource Centre

Set up in 1998, Goa Desc Resource Centre is an activist collective based in Goa, that aims to stimulate the process of pro-people reform. It works to catalyse sustainable social development and enable democracy at the grassroots level through people's participation.

For more info, visit www.goadesc.org or contact goadesc@sancharnet.in

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

If you have suggestions or require information, please contact:

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