

(2006) 11 OHC CK 0048
In the Orissa High Court

Maitree Sansad

APPELLANT

Vs

State of Orissa and Others

RESPONDENT

Date of Decision : 15-11-2006

Acts Referred:

Environment (Protection) Act, 1986 — Section 25, 6, 8

Citation : (2007) 103 CLT 191 : (2007) 1 OLR 246 Supp

Hon'ble Judges : S.B. Roy, C.J;M.M. Das, J

Bench : Division Bench

Judgement

M.M. Das, J.—The Petitioner, which is a voluntary organization registered as a society having the aim and object to raise awareness amongst the people in regard to their rights, has come up with the present writ petition filed in the nature of Public Interest Litigation, inter alia, alleging that the three Medical Colleges and Hospitals run by the Government in the State as well as various Nurshing Homes situated in the city of Cuttack and elsewhere in the State by not following the provisions of law and not taking appropriate steps for due disposal of Biomedical Waste are causing Air and Water pollution inasmuch as the same is hazardous to the health of the local people as well as the patients and their attendants who are treated in the said Hospitals/Nurshing Homes.

2. The Petitioner has alleged in the writ petition that the Biomedical Waste in the above mentioned Hospitals and Nurshing Homes are not being disposed of in accordance with the Biomedical Waste (Management and Handling) Rules, 1998 thereby causing air pollution which are of three types, i.e, Biological, Chemical and Radioactive. It is further alleged that such Biomedical Waste in the above Hospitals and Nurshing Homes are being mixed up with solid waste and not being done or treated by appropriate prescribed methods and, thus, posing/causing great threat to the environment, health and hygiene of the people.

3. A counter affidavit has been filed on behalf of the opp. parties denying the allegations made in the writ petition and, inter alia stating that the State Pollution Control Board has authorized one M/s. Sani Clean Pvt. Ltd. of

Bhubaneswar to set up a "Common Waste Treatment Disposal Facilities" Plant and such proposal is under active consideration of the State. It is, however, stated that such plant could not be installed due to strong public opposition and protest, for which, particularly, the S.C.B. Medical College & Hospital, Cuttack has planned to set up its own individual disposal system within the hospital campus for which communications have been made for financial assistance from the Government of India. It has been further asserted that the Bio-medical waste products in the hospitals are being meticulously segregated as per the prescribed norms in the various colour coded drums in different Wards and Operation Theatres in the hospital. The waste sharps are being destroyed by the needle syringe Terminator supplied to the different wards, Operation Theatres and Laboratories. Similarly, the IV. sets, Catheters and tubings are being disinfected by bleaching powder solution and cut into pieces and finally handed over to the Vendors. The anatomical wastes are being disinfected by 1 % hypochloride solution before being- deeply buried. The liquid wastes are being chemically treated at the source of their generation before being discharged. This counter affidavit was filed by the State on 8.7.2003.

4. A separate counter affidavit has been filed by the State Pollution Control Board wherein the letters addressed to the Superintendents of all the three Medical Colleges of the State have been annexed as Annexure-F series. By the said letters, the State Pollution Control Board gave last opportunity to the said hospitals to explain as to why the provisions of Biomedical Waste (Management and Handling) Rules, 1998 (for short, "the Rules, 1998) have not been complied with and if such explanation is found to be unsatisfactory or such Management and Handling practice is found to be inadequate un-authorization for two subsequent years under the provisions of the said rules, will be refused.

5. Being directed, the Superintendent of S.C.B. Medical College and Hospital, Cuttack has filed an affidavit on 25.1.2006 wherein it has been stated that out of the funds amounting to Rs. 49.05 lakhs received from the Government of India for management ,of Biomedical Wastes of the Medical College in the year 2004, certain instruments and apparatus have been purchased for treatment of such wastes, particulars of which, are given under AnnexureA/1 to the said affidavit.

6. While considering the aspect of improper biological waste management in the Hospitals and Nurshing Homes of the State relying on available datas, we would like to state that:

According to the WHO, the global life expectancy is increasing year after year. However, deaths due to infectious disease are increasing. A study conducted by the WHO in 1996, reveals that more than 50,000 people die everyday from infectious diseases. One of the causes for the increase in infectious diseases is improper waste management. Blood, body fluids and body secretions which are constituents of bio-medical waste harbour most of the viruses, bacteria and parasites that cause infection. This passes via a number of human contacts, all of whom are potential "recipients" of the infection. Human Immunodeficiency Virus

(HIV) and hepatitis viruses spearhead an extensive list of infections and diseases documented to have spread through biomedical waste. Tuberculosis, pneumonia, diarrhoeal diseases, tetanus, whooping cough etc., are other common diseases spread due to improper waste management.

The health hazards due to improper waste management can not only affect the occupants in institutions, but also spread in the vicinity of the institutions. Occupational health concerns exist for janitorial and laundry workers, nurses, emergency medical personnel, and refuse workers. Injuries from sharps and exposure to harmful chemical waste and radioactive waste also cause health hazards to employees in institutions generating bio-medical waste. The problem of occupational health hazards due to bio-medical waste is "not publicized as there is lack of information. Hence, the Bio-Medical Waste (Management and Handling) Rules, 2000 prescribes a form under schedule VI to report such incidences in order to develop a database. There is plenty of scope for research in this field. Proper management of waste can solve the problem of occupational hazards to a large extent.

The general public's health can also be adversely affected by biomedical waste. Improper practices such as dumping of bio-medical waste in municipal dustbins, open spaces, water bodies etc., leads to the spread of diseases. Emissions from incinerators and open burning also leads to exposure to harmful-gases-which can cause cancer and respiratory diseases. Exposure to radioactive waste can in the waste stream can also cause serious health hazards. An often-ignored area is the increase of in-home healthcare activities. An increase in the number of diabetics who inject themselves with insulin, home nurses taking care of terminally ill patients etc., all generate bio-medical waste which can cause health hazards.

Earlier in India, medical waste was considered a part of municipal waste till the problems associated with medical waste were realized. There was no legislation on medical waste or biological waste management in our country till 1995 when the first draft rules were proposed by the Ministry of Environment and Forest, which recommended on site incinerators for all hospitals with more than fifty beds. At the same time in 1996, the Supreme Court in a case, ordered the inclusion of alternate technologies and their standards in the rules. The second draft rules were notified in 1997 and the final rules were notified on 20.7.1998 being Biomedical Waste (Management and Handling), Rules, 1998. In the meantime, two amendments have been brought into the said rules in March, 2000 known as Bio-medical Waste (Management and Handling) (Amendment) Rules, 2000. This amendment only changed schedule VI of the rules concerning Waste Management Facilities for treatment of waste. As within the first deadline for eight Cities with a population of more than three millions, these Cities were unable to achieve anything significant, the said period was extended by a second amendment brought to the rules on 2.6.2000. Some of the major changes made, included defining the role of the municipal body of a particular area, nominating Pollution Control Boards as the prescribed authorities and addition of forms for

seeking authorization to operate a facility and for filing an appeal against order passed by the prescribed authority. The entire country now comes under the purview of the said rules in which 31 st December, 2002 was fixed as the deadline for the last phase of implementation of the rules covering all the health care institutions, cities, towns and villages. Initially, the states were given the option to decide the Prescribed Authority. Most of the states either nominated State Pollution Control Boards or the department of health as the Prescribed Authority. However, since the work involved a lot of technical intervention like monitoring the air emission from the incinerators, monitoring of the waste water effluent etc. eventually it was felt that Pollution Control Departments would be appropriate as the Prescribed Authority and an amendment (Second Amendments to the Rules, June 2000) was made to this effect.

7. The salient features of the Rules 1998 as amended are as follows:

The rules apply to all persons who generate, collect, receive, transport, treat, dispose, store or handle Bio-Medical waste in any form. It is the duty of the occupier, where required to set up requisite Bio-Medical waste treatment facilities like incinerator, autoclave, microwave for treatment of waste, or ensure requisite treatment of waste at a common waste treatment facility. Bio medical waste is to be treated and disposed in accordance with Schedule. Bio medical waste has to be segregated at the point of generation in accordance with schedule II before its storage, transportation, treatment and disposal. The containers are to be labeled as per Schedule MI. No untreated Bio-Medical waste can be kept beyond a period of 48 hours.

Prescribed Authority: The State Pollution Control Boards have been nominated as the Prescribed Authority for granting authorization and implementing the rules. (As per the second amendment, June 2000).

Authorization: Every occupier, except those providing treatment/ service to less than 1000 patients a month, and every operator of a bio-medical waste facility, needs to take authorization from a prescribed authority.

Advisory Committee: The Government of every State/Union territory has to constitute an advisory committee. The committee will include experts from medical and health fields, from the municipal department and other related departments.

Annual Report: Every, occupier/operator has to submit an annual report to the Prescribed Authority in Form II by January 31st every year. The report will include information about the categories and quantities of bio-medical waste handled during the preceding year.

Maintenance of Records: Every authorized person shall maintain records related to the generation, collection, reception, storage, transportation, treatment" disposal and/ or any form of handling of biomedical waste in accordance with the Rules and any guidelines issued.

Accident Reporting: When any accident occurs at any institution or facility or at any other site where bio-medical waste is handled or during transportation of such waste, the authorized person has to report the accident in Form III to the prescribed authority.

Appeal: Any person aggrieved by an order made by the Prescribed Authority under these rules may, within 30 days from the date on which the order is communicated to him appeal to the Government of State/Union territory.

Schedule I: Describes different categories of bio-medical waste and their treatment options.

The rules categorize sharps in Category No. 4., Sharps are defined as comprising of needles, syringes, scalpels, blades, glass, i.e., anything that may cause puncture and cuts. These include both used and unused sharps.

The types of containers prescribed for waste sharps have to be puncture-proof and can be blue, white or translucent in colour. Sharps need special attention while being segregated and stored because needles can act as a pool where pathogens may survive for a long time because of the presence of blood. Also the sharps can provide a direct route into the bloodstream by puncturing the skin. Syringes and needles must be damaged before they are put in containers, to prevent their re-use/resale. Sharps must always be kept in puncture-resistant containers to avoid injuries and infection to those handling them.

The rules provide for disinfection and mutilation of sharps by either chemical treatment using at least 1 % hypochlorite solution or any other equivalent chemical reagent. Treatment by autoclaving/ advanced autoclaves/microwaving is also approved. Mutilation prior to disposal is mandatory to prevent any unauthorized re-use. Mutilation can be carried out at the point of generation by using needle cutters/ destroyers or centrally in the hospital by using shredders after disinfection of sharps.

After disinfection and mutilation of sharps they should be disposed in secured landfills as per the rules. As secured landfills are not available everywhere alternate systems are recommended.

Previous statistics show that each year, an estimated 16 billion injections both preventive as well as curative, are administered worldwide. This amounts to almost 44 million injections per day out of which 95% are therapeutic in nature. For 20 therapeutic injections given, one vaccination is administered. Injections are prescribed for a wide variety of reasons. Injections are certainly essential to administer vaccines and for many types of treatment. Unsafe injections are reported to have the potency of transmitting infections from patient to patient, patient to health workers and, more rarely, from health workers to patients and to the community at large. Sharps from immunization injections are found to be unsafe with almost 30% of the sharps being either re-used or recycled as documented by WHO (WHO Bulletin, October 1999). Realizing the problems

associated with re-usables, and to ensure safety in immunization programmes, WHO, UNICEF and UNFPA issued a joint statement in 1999 on the need for use of auto-disable (AD) syringes and safety boxes to contain them in immunization campaigns. The joint statement urged that by the end of 2003, all countries should use only auto-disable syringes for immunizations. Working towards that goal, all partners decided to finance not only the vaccine but also safe administration devices and disposal units and support related training, supervision and sensitization activities to ensure safe vaccinations. The major challenge associated with the use of AD syringes is the volume of waste that will be generated in the process, and its management. The absence of a sound health care waste management system, the risks linked to re-use of waste sharps from immunization waste and the environmental impact of improper disposal are major concerns. There is thus an urgent need to find solutions. The growing use of non AD disposable syringes increases the quantity of waste generated in the rural settings and, due to their lucrative resale value in the market, the problem is magnified. With India's growing urbanization, rural settings are becoming semi-urbanized and would soon encounter the problem faced in urban areas.

The main concerns regarding sharps waste are:

(1) Occupational Safety: Nurses, Auxiliary Nurse Midwives (ANMs), health care workers and recyclers can suffer from needle stick injuries. This can happen either just after the injection has been administered, during the disposal of the used syringe or even after disposal to those involved in recovering them. Of all the potential sources of infection transmission from bio-medical waste, needle sticks are of prime concern to the health staff and the community at large.

(2) Re-use potential: In India, the sale of used, superior quality non AD syringes is lucrative. Therefore, there is a potential risk of illegal reuse, posing a risk to the entire community. The process of re-use of syringes involves a chain of recovery ,of intact and un-mutilated syringes, cursory cleaning in appearance, in some cases repacking, and reentrance into the user chain. Clean looking syringes are known to command a higher price in the recycling market than mutilated ones, supporting the fear of their intrinsic public health risk.

(3) Safe disposal: Used syringes need to be disposed of in an environmentally safe and pollution-free manner. Often, plastic syringes that contain polyvinyl chloride (PVC) are incinerated. Dioxins and furans and other toxic air pollutants are produced as emissions and/or in bottom fly ash. Exposure to dioxins and furans leads to significant adverse health effects. To ensure safe disposal, recycling after disinfection and mutilation or containment in pits are the possible options. Any solution to handle sharps waste needs to encompass all three concerns and keep in mind the environmental and human health perspectives. The issue assumes added importance due to the quantum of waste generated from immunization programmes. In the context of developing countries, the nature of immunization programmes, delivery in poorly equipped primary health

centres scattered across the countryside or through door-to-door service provided by grass root workers such as ANMs requires a simple, workable and affordable sharps management system. As an example, if the ANM is required to carry back the used syringe from the village back to the primary or the district health centre, adequate storage needs to be available.

(Retrieved from <http://en.wikipedia.org/wiki/>)

8. The Biomedical Waste (Management and Handling) Rules, 1998 was framed in exercise of the powers conferred by Sections 6, 8 and 25 of the Environment (Protection) Act, 1986 and disposal of such waste in the various Hospitals and Nurshing Homes of the" State are to be periodically checked by the State Pollution Control Board.

9. Giving our anxious thought to what has been narrated above, the law on the point, the present scenario existing in this State, of which judicial notice can be taken and on considering the affidavits by the respective parties in the present writ petition, we are unable to come to a definite conclusion as to whether the three Medical Colleges of the State as well as various Nurshing Homes are acting in accordance with the Rules, 1998 and whether the authorized persons of the respective Hospitals are submitting annual reports as per Rule 10 and maintaining records as per Rule 11 thereof. We are also unable to ascertain from the pleadings of the respective parties as to whether Biomedical Waste of the above Hospitals and various Nurshing Homes are being really treated as prescribed in the Rules, 1998 by the help of instruments or are still continuing to pose danger to the health of the general public.

10. Considering the seriousness of the matter, instead of disposing of this writ petition finally, we issue direction to the Chairman, State Pollution Control Board-Opp. party no. 6 to cause enquiry in the three Medical Colleges and Hospitals of the State, namely, S.C.B. Medical College & Hospital, Cuttack, V.S.S. Medical College & Hospital, Burla and M.K.C.G. College & Hospital, Berhampur as well as the Nurshing Homes which are operating in the City of Cuttack and the Capital Hospital at Bhubaneswar and submit a detailed report before this Court within a period of three months from the date of communication of this order specifically stating therein regarding the steps taken by the institutions mentioned above for treatment/ disposal of Biomedical Waste in the said institutions and as to whether such disposal is effective in preventing water and air pollution and preventing infectious diseases from spreading and further as to whether the above institutions are strictly complying with the provisions of the Rules, 1998 and if not, what steps in this regard have been taken by the State Pollution Control Board in curbing such menace.

This matter shall be listed in the first week of February, 2007 for further hearing.

S.B. Roy, C.J.

11. I agree.