

CENTRAL POLLUTION CONTROL BOARD
(Hazardous Waste Management Division)
DELHI -110 032

Minutes of 14th Meeting of the Expert Committee for Evaluation of the new State-of-the-Art-Treatment Technologies for Treatment of Bio-medical Waste held on January 07, 2013 at CPCB, Delhi

1. The list of the participants of the meeting is enclosed at **Annexure I.**
2. **Opening remarks by the Chairman of the Expert Committee:**

Dr.T.K.Joshi, Chairman, Expert Committee welcomed all the members of the Expert Committee with new year wishes and sought views / comments if any w.r.t. the minutes of the 13th meeting of the Expert Committee, which were already circulated by CPCB to the individual member. As no changes were raised or changes suggested by the members, minutes of the last meeting held on June 28, 2012 were treated as confirmed. Thereafter, Dr.Joshi requested CPCB to apprise the members on the issues to be discussed in this meeting.

3. **Briefing by Shri B.Vinod Babu, I/c HWMD and Member Convener of the Committee:**

Shri B. Vinod Babu informed the members regarding the follow-up action taken by CPCB as follow-up of the minutes of the last meeting of the Expert Committee. He informed that the members were requested to provide queries if any with regard to 'Placenta Anaerobic Bio-Reactor (PABR) technology' proposed by M/s Krishna Hospital, Cochin and also informed that the matter of W.P (C) No. 35951 of 2007 before the Hon'ble High Court of Kerala and the affidavit filed by CPCB in the said matter which was heard on 23/05/2012.

He also informed that the proponent M/s Surgikit, Chandigarh has submitted the additional information on behalf of M/s ECODAS, France as sought by CPCB. Shri Babu also stated that CPCB is in receipt of the new proposal namely 'OMPECO's Converter Technology' for treatment of bio-medical waste' from 'M/s Officine Meccaniche Pejrani, Italy' and the proponent was requested to make presentation before the committee.

Shri J.Chandra Babu, Scientist "C" informed that the proponent 'M/s Officine Meccaniche Pejrani, Italy' via e-mail has expressed their inability to attend the meeting, in view of the very short notice as well as most of their officials are on Christmas / New Year Holidays.

4. Discussion & Recommendations:

i) ECODAS System:

Shri Arun Khullar of M/s Surgikit, Chandigarh representing M/s ECODAS, France presented himself before the committee for discussion. Shri Khullar circulated the compiled point-wise replies on the queries raised by the members. Replying to the query of Dr. Joshi regarding installation of the ECODAS system in India & other countries and willingness of any hospital to install the equipment in India. Shri. Khullar informed that ECODAS system is already in use at two Health Care Facilities located in Goa & Sholapur in India and world-wide about 65 countries have adopted this technology. He also informed that PGIMER, Chandigarh will be floating tender for installation of the equipment of M/s Ecodas, France subject to permission from CPCB as well as Chandigarh Pollution Control Committee (CPCC).

To the queries of the members regarding regeneration of microbial contamination in the treated waste (including treatment of categories 1 & 2) and the subsequent likely impacts in absence of controlled disposal through municipal sanitary landfill, Shri Khullar explained that the final treated waste may be disposed off through waste to energy plant also.

Dr. B. K. Das and Shri J.Chandra Babu raised their concern on the aspect of segregation of bio-medical waste in accordance with the BMW Rules and suggested that while considering the proposal the condition of segregation of bio-medical waste as per BMW Rules at source of generation should be complied by the proponent.

The Committee after discussion on pros and cons, agreed in principle to allow for treating the bio-medical waste in 3 'pilot plants' installed at Health Care Facilities (HCFs) which include the HCFs at Goa & Sholapur which have already installed and one more facility i.e, PGIMER, Chandigarh for a period of six months and same shall be assessed or monitored by the sub-committee comprising Dr. D. K. Sharma, Dr. B. K. Das, Dr. Anita Arora and officials of CPCB.

ii) PABR technology:

With regard to PABR technology, Dr. T. K. Joshi was of the view that the proposed system was not foolproof as it may have harmful pathogens and also referred to the views of the team comprising Dr. Anita Arora, Microbiologist, Escort Heart

Research & Institute, New Delhi & CPCB that visited some of the HCFs in Cochin that have adopted PABR technology during 2005, and also considering their assessment, the PABR technology was not recommended by the Committee as it is unhygienic and emanates bad odour around the area.

It was decided that few installations of PABR Technology already adopted by some of the HCFs in and around Cochin be visited again by a team comprising officials from CPCB, Shri Ravi Agarwal, Toxic Links, Dr. D.K.Sharma, MS, AIIMS & Dr. Anita Arora for re-assessment of the PABR technology. The Committee also suggested that CPCB may obtain additional information including improvements made by the proponent w.r.to the last visit findings / observations.

iii) **Miscellaneous:**

Instllation of Captive Incinerators by the HCFs in Kerala: An issue with regard to the floating of tender for installation of on-site incinerator in 200 HCFs in Kerala, as raised by Dr. B K Das was also discussed. The committee suggested that CPCB shall ask Kerala SPCB to provide information with respect to the action taken by Kerala SPCB for ensuring compliance with the provisions of BMW Rules in the State including present compliance status of the HCFs having on-site / captive incinerators for treatment of bio-medical waste.

Plasma Pyrolysis: As regards to the proposal received from GPCB vide letter dated 30/12/2012 regarding grant of approval of the Plasma Pyrolysis Technology for treatment of the bio-medical waste categories (01), (02), (05), (06) and (7) [not consisting of chlorinated plastics) as listed under Schedule 1 of the BMW Rules. The members have opined that installation of plasma technology may be permitted for treatment of bio-medical waste at CBWTFs with a minimum stack height of 30 m and complying with the CPCB guidelines. Comments on the Gujarat Pollution Control Board (GPCB) proposal be prepared by CPCB and same be forwarded to GPCB.

OMPECO's Converter Technology: As regards the proposal on "OMPECO's Converter Technology" received from M/s Officine Meccaniche Pejrani, Italy, it was decided that the proposal be examined by CPCB and any additional information required be communicated to the said proponent.

The meeting ended with vote of thanks to the chair.



List of Members / Participants

Sl. No.	Name of the Member / Participants
1.	Dr. T.K. Joshi, Chairman, Expert Committee & Director, Moulana Azad Medical College, Delhi
2.	Shri J.S.Kamyotra, Member Secretary, CPCB, Delhi
3.	Dr. D.K.Sharma, Medical Superintendent, AIIMS, New Delhi- 110 029
4.	Dr. Anil Kumar, Chief Medical Officer (NFSG), Directorate General of Health Services, Ministry of Health & Family Welfare, Nirman Bhawan, New Delhi - 110 108.
5.	Sh. Ravi Aggarwal, Member, Toxics Link, New Delhi
6.	Prof. (Dr.) B.K.Das, Member & Professor, SCB Medical College & Hospital, Cuttack.
7.	Shri Arun Khullar, CEO, Surgikit, Chandigarh
8.	Shri B.Vinod Babu, Sc.'D' & I/c HWMD, CPCB, Delhi
9.	Sh. J.Chandra Babu, Sc. 'C', CPCB, Delhi
10.	Sh. R. N. Pankaj, Sc. 'B', CPCB, Delhi
11.	Ms. Youthika, Sc. 'B', CPCB, Delhi