

S.L. No. 2/25

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
EASTERN ZONE BENCH, KOLKATA

IN

MA No. 44/2024/EZ

(In OA No. 120/2015/EZ)

IN THE MATTER OF

Subrato Mookherjee

...APPLICANT(S)

VERSUS

West Bengal Pollution Control Board and Ors.

.... RESPONDENT(S)

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Sl. No.	Particulars	Annexures	Page No.
1.	Reply on behalf of Respondent No. 2 i.e. Central Pollution Control Board.		



Mrinal Kanti Biswas

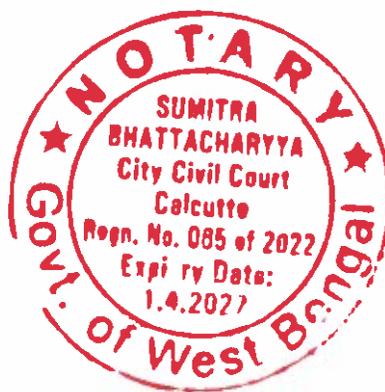
Regional Director &amp; Scientist E

CPCB, Kolkata

  
Filed through Counsel

Dated: \_\_\_\_\_, 2025

Place: Kolkata



19 MAR 2025

X

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
EASTERN ZONE BENCH, KOLKATA

IN

MA No. 44/2024/EZ

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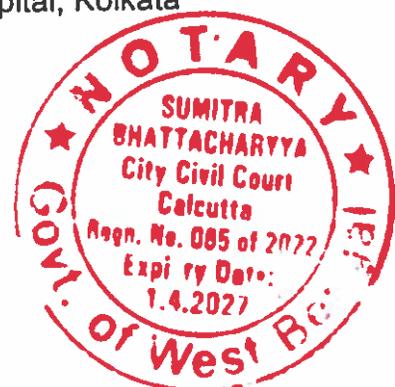
West Bengal Pollution Control Board and Ors.

.... RESPONDENT(S)

REPLY ON BEHALF OF RESPONDENT NO. 02 i.e. CENTRAL POLLUTION  
CONTROL BOARD

PRELIMINARY SUBMISSION:

1. That, the matter of Original Application No.120 of 2015 titled Subrato Mookherjee Vs West Bengal Pollution Control Board and Ors., listed before Hon'ble National Green Tribunal, Eastern Zone (hereafter will be referred as Hon'ble NGT, EZ) was related to the hospitals operating in the city of Kolkata without following the Bio-Medical Waste (Management and Handling) Rules, 1998, for disposal of medical waste in terms of the statutory provisions, thereby causing environmental hazards and a threat of diseases spreading.
2. That, in the said matter Hon'ble NGT vide order dated 12.10.2020 constituted a Joint Committee of Central Pollution Control Board (hereafter will be referred as CPCB) and West Bengal State Pollution Control Board (hereafter will be referred as WBPCB) and directed the Joint Committee to undertake Environmental audit of following six Government hospitals:
  - I. R.G. Kar Medical College & Hospitals, Kolkata
  - II. SSKM Medical College & Hospital, Kolkata
  - III. Nil Ratan Sarkar Medical College and Hospital, Kolkata
  - IV. ID & BG Hospitals, Belegkata, Kolkata
  - V. Medical College & Hospital, Kolkata
  - VI. Lady Dufferin Victoria Hospital, Kolkata





Accordingly, the Joint Committee submitted Environmental Audit Report of aforementioned hospitals before Hon'ble NGT on 18.02.2021.

3. That, Hon'ble NGT, EZ vide order dated 05.12.2024 in the matter of Miscellaneous Application No. 44 of 2024 in the Original Application No. 120 of 2015 impleaded WBPCB and CPCB as Respondent No. 1 & 2, respectively and directed to file affidavit of compliance.
4. That, Hon'ble NGT, EZ vide order dated 05.02.2025 in the present matter directed following:

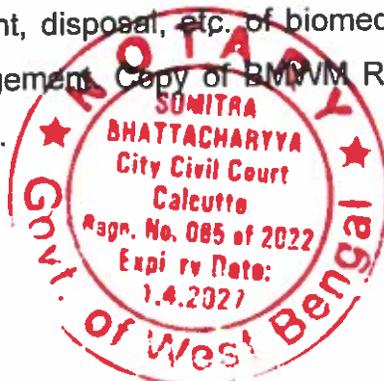
*".....We are of the view that the Central Pollution Control Board, Respondent No.2, should file its affidavit explaining the contents of para 6 of the affidavit filed by the West Bengal Pollution Control Board supported by rules showing as to why Health Care Facilities do not require installation of ETPs..."*

5. That, under the Para 6 of the affidavit filed by West Bengal Pollution Control Board in the instant matter, it is mentioned that: *"Central Pollution Control Board has informed (vide letter no. B-31011/BMW (58.II)/2020/WMD-I/14785 dated 29.12.2020) SPCBs/PCCs that Health Care facilities (HCFs) need not install ETP, in case discharge from HCF connected with City's/ Town public sewerage networking leading to Terminal STP. However, as per the submission received from six Government run hospitals it appears that process of installation of ETPs has been initiated. Hence, assessment of Environmental Compensation could not be done against the six Government run hospitals."*

Copy of affidavit filed by West Bengal Pollution Control Board is annexed as Annexure-I.

#### **SUBMISSIONS:**

6. That, Biomedical Waste Management Rules, 2016 (hereafter referred as BMWWM Rules, 2016) has been notified under Environment (Protection) Act, 1986 in suppression of the Biomedical Waste (Management and Handling) Rules, 1998, and lays down provisions for collection, segregation, processing, treatment, disposal, etc. of biomedical waste in an environmentally sound management. Copy of BMWWM Rules, 2016 is attached herewith as Annexure-II.



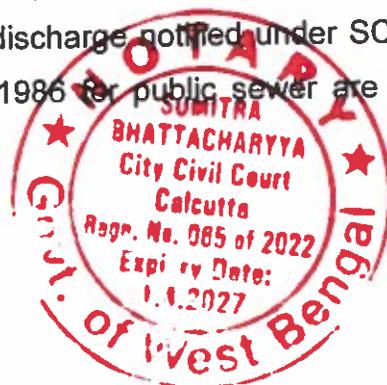


7. That, as per Rule 4(k) of BMWM Rules, 2016, it is the duty of occupiers to ensure treatment and disposal of liquid waste in accordance with the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974).
8. That, as per Standards for liquid waste prescribed under Schedule-II of BMWM Rules, 2016, the effluent generated or treated from the premises of occupier, before discharge into the sewer should conform to the following limits:

Parameters	Permissible Limits
pH	6.5-9.0
Suspended solids	100 mg/l
Oil and grease	10 mg/l
BOD	30 mg/l
COD	250 mg/l
Bio-assay test	90% survival of fish after 96 hours in 100% effluent

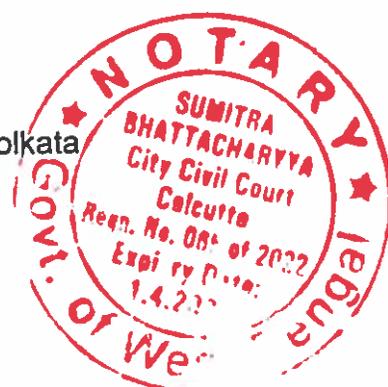
The said rules also stipulate that:

- I. Above limits are applicable to the occupiers of Health Care Facilities (bedded) which are either connected with sewerage network without terminal sewage treatment plant or not connected to public sewers.
  - II. For discharge into public sewers with terminal facilities, the general standards as notified under the Environment (Protection) Act, 1986 (29 of 1986) shall be applicable.
  - III. Health Care Facilities having less than ten beds shall have to comply with the output discharge standard for liquid waste (by 31st December, 2019).
  - IV. Non-bedded occupiers shall dispose infectious liquid wastes only after treatment by disinfection as per Schedule – II (6) of the BMWM Rules, 2016.
9. That, as per BMWM Rules, 2016, for discharge of effluent generated or treated from the premises of occupiers into public sewers with terminal facilities, the general standards for discharge as notified under the Environment (Protection) Act, 1986 (29 of 1986) shall be applicable. The prescribed standards for effluent discharge notified under SCHEDULE-VI of Environment (Protection) Act, 1986 for public sewer are annexed as Annexure-III.-



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10. That the CPCB issued letter no. B-31011/BMW (58.II)/2020/WMD-1/14757-14791 dated 29.12.2020 to all the State Pollution Control Boards/ Pollution Control Committees (hereafter referred as SPCBs/PCCs) regarding installation of Effluent Treatment Plant in Health Care Facilities. The copy of the letter dated 29.12.2020 is annexed as **Annexure-IV**.
11. That, to further clarify the requirement of Effluent Treatment Plant in Health Care Facilities, CPCB issued letter no. B-31011/BMW (58.II)/2022/WMD-1 dated 12.04.2022 to all SPCBs/PCCs regarding compliance of wastewater discharge standards by Health Care Facilities (hereafter referred as HCFs) as per BMW Rules, 2016, wherein it is clarified that "non-bedded HCFs may not necessarily install Effluent Treatment Plant and as per BMW Rules, 2016 they are required to dispose infectious liquid wastes only after treatment by disinfection as stipulated under Schedule II (6) of the said Rules. Further, bedded HCFs are required to comply with the standards prescribed for liquid discharge under Schedule-II of BMW Rules, 2016. In case, wastewater is discharged into a public sewerage network connected to terminal Sewage Treatment Plant, the bedded HCFs are required to meet general standards as notified under the Environment (Protection) Act, 1986 (29 of 1986)". The copy of the letter dated 12.04.2022 is annexed as **Annexure-V**.
12. That, CPCB vide letter dated 10.03.2025 requested Principal Secretary, Health and Family Department, Government of West Bengal to provide status of installation of Effluent Treatment Plant in following six government hospitals:
- I. R.G. Kar Medical College & Hospitals, Kolkata
  - II. SSKM Medical College & Hospital, Kolkata
  - III. Nil Ratan Sarkar Medical College and Hospital, Kolkata
  - IV. ID & BG Hospitals, Belegkata, Kolkata
  - V. Medical College & Hospital, Kolkata
  - VI. Lady Dufferin Victoria Hospital, Kolkata
- The said letter was also forwarded to West Bengal Pollution Control Board for follow-up of the same. Copy of letter dated 10.03.2025 is attached herewith as **Annexure- VI**.
13. That, in response of aforementioned letter dated 10.03.2025, West Bengal SPCB vide email dated 13.03.2025 forwarded status of installation of Effluent Treatment Plant received from Public Health Engineering



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Department, Government of West Bengal. The said letter indicates that work order for installation of Effluent Treatment Plant has been issued by Public Health Engineering Department, Government of West Bengal for following four government hospitals:

- I. R.G. Kar Medical College & Hospitals, Kolkata
- II. SSKM Medical College & Hospital, Kolkata
- III. Nil Ratan Sarkar Medical College and Hospital, Kolkata
- IV. ID & BG Hospitals, Belegkata, Kolkata

However, work orders are yet to be issued for remaining two hospitals namely Medical College & Hospital, Kolkata & Lady Dufferin Victoria Hospital, Kolkata and allotment of site for Effluent Treatment Plant is under process in these hospitals. Copy of email dated 13.03.2025 is attached herewith as **Annexure -VII**.

14. That, in light of the above submissions, it is respectfully submitted that this answering respondent, i.e., CPCB, shall abide by any order(s) or direction(s) passed by this Hon'ble Tribunal in this Original Application.

**Mrinal Kanti Biswas**

Regional Director & Scientist 'E'  
CPCB, Kolkata



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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
EASTERN ZONE BENCH, KOLKATA

IN

MA No. 44/2024/EZ  
(In OA No. 120/2015/EZ)

IN THE MATTER OF  
Subrato Mookherjee

...APPLICANT(S)

VERSUS

West Bengal Pollution Control Board and Ors.

.... RESPONDENT(S)

AFFIDAVIT

I, Mrinal Kanti Biswas, S/o Saroj Kumar Biswas aged about 43 years, having office at the Regional Directorate, Central Pollution Control Board, Southend Conclave' Block No.502, 5th& 6th Floor,1582, Rajdanga Main Road, Kolkata-700107, do hereby solemnly affirm and sincerely state as follows: -

1. That the deponent is authorized representative to represent the Respondent CPCB in the present case, and as such, I am well conversant with the facts and circumstances of the present case on the basis of the information derived from the official records, and hence, I am competent and authorized to verify, sign and swear this affidavit on behalf of the Respondent CPCB.
2. That the accompanying reply may be read part and parcel of the present affidavit as I am competent to swear this affidavit.
3. That the accompanying reply has been drafted and filed under my instructions and authority the contents thereof are true and correct on the basis of the record maintained during ordinary course of business of CPCB and available records and documents and the contents of the same are read over and explained to me and are not repeated herein for the sake of brevity.

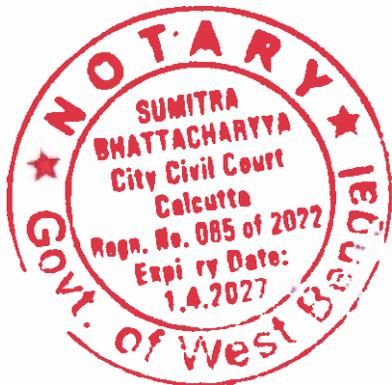
*Aditya Biswas*  
DEPONENT

Solemnly Affirmed and  
Declared before me  
U/S 139 CPC (C) Notary

*Sumitra Bhattacharyya*

Sumitra Bhattacharyya  
Notary, Govt. of W.B.  
Regd. No. 065 of 2022  
City Civil Court, Calcutta

Identified by me  
*Surenchandra Hans*  
Advocate  
*Advocate*



19 MAR 2025



Verified at Kolkata on this day of 19/03/2025 that the contents of the above reply are correct and true on the basis of the record of the cases as mentioned in the day-to-day affairs of the CPCB. Nothing has been concealed therefrom or mis-stated.

*[Handwritten Signature]*  
DEPONENT

Identified by me  
*[Handwritten Signature]*  
Advocate  
*[Handwritten Signature]*  
WB-535-A/1998



19 MAR 2025

BEFORE THE NATIONAL GREEN TRIBUNAL  
EASTERN ZONE, KOLKATA

ORIGINAL APPLICATION NO. 120/2015/EZ

BETWEEN

SUBRATO MUKHERJEE

..... APPLICANT(S)

VERSUS

THE WEST BENGAL POLLUTION CONTROL  
BOARD & ORS.

..... RESPONDENT(S)

AFFIDAVIT ON BEHALF OF THE RESPONDENT NO. 19, THE  
WEST BENGAL POLLUTION CONTROL BOARD.

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1.	Affidavit		1662-1665
2.	Copy of the Environmental Audit report conducted jointly by the WBPCB & CPCB.	R1	1666-1705

Filed by

*Dipanjana Ghosh*  
DIPANJAN GHOSH

ADVOCATE

18 FEB 2021

24663



BEFORE THE NATIONAL GREEN TRIBUNAL  
EASTERN ZONE BENCH, KOLKATA

ORIGINAL APPLICATION NO. 120/2015/EZ

BETWEEN

SUBRATO MUKHERJEE

..... APPLICANT(S)

VERSUS

THE WEST BENGAL POLLUTION CONTROL  
BOARD & ORS

..... RESPONDENT(S)

AFFIDAVIT ON BEHALF OF THE RESPONDENT NO. 19, THE  
WEST BENGAL POLLUTION CONTROL BOARD.

Most Respectfully Sheweth

I, Sri Amar Nath Goswami, aged about 54 years, son of Shri Madan Mohan Goswami, by Religion - Hindu, by Occupation - Service, residing at L-111/2, G-13, Baishnabghata Patuli Township, Kolkata - 700 094, do hereby solemnly declare and say as follows:-

01. That, I am the Senior Law Officer, West Bengal Pollution Control Board (hereinafter will be referred to as the 'State Board') and look after this case and as such I am well acquainted with the facts and circumstances of the case. I have been duly authorized by the Respondent No. 19 to affirm this Affidavit on its behalf and as such, I am competent to do so.

18 FEB 2021

21664 X

02. That, this affidavit is being affirmed in pursuance to the solemn order passed by the Hon'ble Tribunal dated 12.10.2020 and 21.12.2020.

03. That, earlier vide order dated 12.10.2020, the Honble NGT observed and directed as follows :

"4. Having regard to the entire facts and circumstances, we are of the considered opinion that an Environmental Audit is essential to be undertaken in respect of the six Government Hospitals in relation to the compliance of Bio-Medical Waste (Management and Handling) Rules, 2016. We accordingly direct so.

5. Let the joint Committee of the CPCB and the State PCB undertake the Environmental Audit and submit report before the next date."

04. The Environmental Audit carried out jointly by the State Board and Central Pollution Control Board is being filed.

The copy of the said Environmental Audit report is annexed hereto and marked with the letter 'R-1'.

05. It is therefore respectfully prayed that Hon'ble Tribunal may pass such order/orders as it deems fit and proper in the interest of justice.

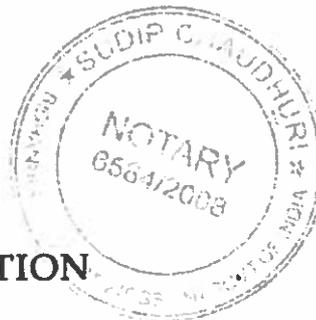
*Amar Nath Gupta*  
DEPONENT

18 FEB 2021



\*1665 X

SL. NO. 648 2021..



### VERIFICATION

Verified at Kolkata by the deponent above named on this the  
 day of February, 2021 and say that the contents of this  
 affidavit made in paragraph nos. 1 is true to my knowledge and  
 those made in paragraphs no. 2 to 4 are true to my information  
 derived from records and rest are my respectful submission  
 before this Hon'ble Tribunal.

*(Signature)*  
 S. CHAUDHURI  
 \* NOTARY \*  
 GOVT. OF INDIA  
 Regd. No - 6564/08  
 Bidhannagar Court  
 Dist.-North 24 Pgs.

*(Signature)*  
 Amar Nath Goswami

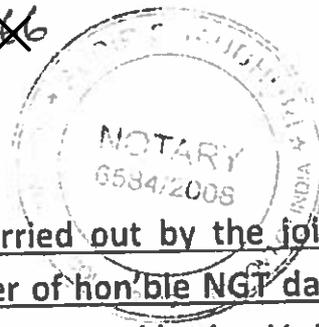
DEPONENT

Identified By Me  
*(Signature)*  
 Manoj Basu  
 ADVOCATE

18 FEB 2021

16/6

Annexure - R-1



/X

Summary of Environmental Audit carried out by the joint Committee of the CPCB and the WBPCB as per the order of hon'ble NGT dated 12.10.2020 in the matter of O.A. No. 120/2015/EZ (Subroto Mookherjee-Vs West Bengal Pollution Control Board & Ors.)

Hon'ble NGT in its order dated 07/08/2020 in O.A. No 120/2015/EZ (Subroto Mookherjee vs West Bengal Pollution Control Board) directed to install ETP at six govt. medical college hospitals namely IPGME&R and SSKM, NRS Medical College and Hospitals, Kolkata Medical College & Hospitals, R.G. Kar Medical College & Hospitals, ID & BG Hospital & Lady Dufferin Victoria Hospital.

West Bengal Pollution Control Board in its affidavit (Date of hearing-12.10.2020) submitted that the sampling & analysis of waste water done by PHE shows the concentration of BOD of the untreated waste water in above mentioned hospitals were within the permissible limit for discharge of waste water into sewer line having terminal treatment facilities as per Bio-Medical Waste Management (Amendment) Rules, 2018 (amended on 16<sup>th</sup> March, 2018). Under the circumstances installation of effluent treatment plant at hospital sites may not be considered as necessary.

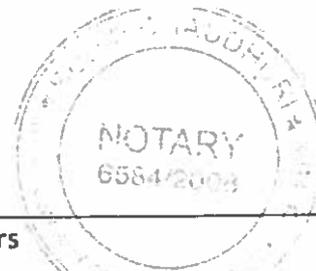
Hon'ble NGT had directed a joint Committee of CPCB and SPCB would undertake an Environmental Audit and submit report.

As per the above order of hon'ble NGT joint Committee of CPCB & WBPCB have inspected the aforesaid hospitals with waste water sampling from hospital discharge points. The detail inspection reports are enclosed. The analysis reports of waste water are tabulated below.

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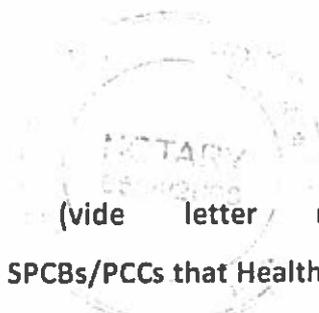
Hospitals	Parameters				
	pH	TSS (mg/l)	COD (mg/l)	BOD (mg/l)	O & G (mg/l)
	Standard for liquid waste discharge as per Schedule-II(Sl. No-8) of Biomedical Waste Management Rules, 2016				
	Standard limit (6.5-9.0)	Standard limit 100	Standard limit 250	Standard limit 30	Standard limit 10
R.G. Kar Medical College and Hospital	7.49	26.0	60.68	25.95	BDL
IPGME&R and SSKM Hospital, Kolkata	7.43	54.0	207.26	68.30	1.20
NRS Medical College and Hospitals	7.29	50.0	120.0	55.80	1.0
ID & BG Hospitals, Belegkata, Kolkata	7.7	98.0	128.32	35.8	1.8
Medical College & Hospital, Kolkata	7.45	6.0	10.0	4.18	1.3
Lady Dufferin Victoria Hospital, Kolkata	7.55	10.0	14.0	6.08	BDL

As per Schedule-1 of BMWM Rules, 2016, Liquid waste generated due to use of chemicals in production of biological and used or discarded disinfectants, Silver X-ray film developing liquid, discarded Formalin, infected secretions, aspirated body fluids, liquid from laboratories and floor washings, cleaning, housekeeping and disinfecting activities etc. shall be treated in ETP before discharge.

But this provision of the Rules was amended in 16<sup>th</sup> March, 2018. In Rule-8(2). of Bio-Medical Waste Management (Amendment) Rules, 2018, there is a provision as-"For discharge into public sewers with terminal facilities, the general standards as notified under the Environment (Protection) Act, 1986 (29 of 1986) shall be applicable."

General standard of BOD for discharge into public sewer as notified under the Environment (Protection) Act, 1986 (29 of 1986) is 350 mg/l.

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Central Pollution Control Board has informed (vide letter no-B-31011/BMW(58.11)/2020/WMD-I/14785 dated 29.12.2020) that SPCBs/PCCs that Health care facilities (HCFs) need not install ETP, in case discharge from HCF connected with City's/Town public sewerage networking leading to Terminal STP. (Copy of the letter annexed).

It appears from the analysis reports, concentration of BOD of the untreated waste water in above mentioned hospitals are within the permissible limit for discharge of waste water into sewer line having Terminal Treatment Facilities as per Bio-Medical Waste Management (Amendment) Rules, 2018 (amended on 16<sup>th</sup> March, 2018).

Handwritten signature of B. Pan.

B. Pan, AEE, WBPCB

Handwritten signature of T. Aslam.

T. Aslam, Sc-B, CPCB

Handwritten signature of S. Roy.

S.Roy, Sc-D, CPCB

18 FEB 2021

3/16/21

IX

## INSPECTION REPORT

**Reference of the inspection:** Inspection is conducted for undertaking Environmental Audit by the joint committee of CPCB & SPCB as per the direction of honourable NGT in the matter of O.A. No.120/2015/EZ (M.A. No. 1187/2016/EZ) dated 12/10/2020.

1. **Name of the unit:** Lady Dufferin Victoria Hospital
2. **Address:** 1 No Raja Rammohan Roy Sarani, PO-Amherst Street, PS-Muchipara, Kolkata-700073
3. **Date and time of inspection:** 22/01/2021 (2-15PM to 16-00 PM)
4. **Inspected by:** S. Roy, Sc-D, CPCB, B. Pan, AEE, WBPCB,
5. **Person met:** Sayani Chatterjee, Asst. Super, Asst. Super.
6. **Bed Capacity:** 678 nos.
7. **Observations:**
  - **Biomedical waste management:** Biomedical waste management system exists there. BMW are segregated & segregated BMW are stored in designated colour coded bags/containers as per schedule-1 of Biomedical Waste Management Rules, 2016. (Pic-1, Pic-2)
  - **Mutilation & disinfection:** Needle cutters are used for destroying needle. Disposable syringes & sharps are mutilated & stored in Puncture Proof Containers (PPC) containing disinfectant. Saline bottles are punctured before disposal. (Pic-3 & 4)
  - **Storage of biomedical waste:** The bags containing segregated BMW are stored in a properly ventilated intermediate storage room marked with Bio-hazard symbol before handing over to CBMWTF. (Pic-5)
  - **Bar code system:** Bar Code system exists there.
  - **Pre-treatment of laboratory waste/microbiological waste:** Laboratory and microbiological waste/blood samples & blood bags are pretreated through disinfection as per Rule 4(c) of

18 FEB 2021

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BMW Rules, 2016 before handing over to Common Biomedical Waste Treatment Facility,

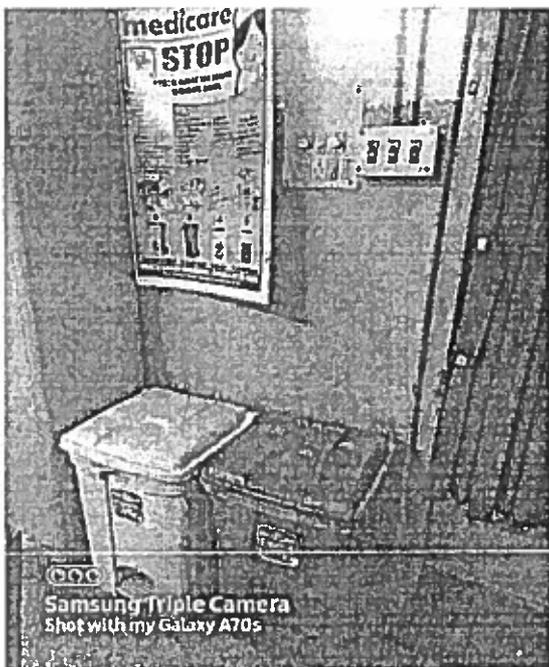
- **Immunization of health care workers:** Health care workers & others involved in handling of bio-medical waste are immunized for protection against diseases including Hepatitis B and Tetanus that are likely to be transmitted by handling of bio-medical waste as per Rule 49(h) of BMW Rules, 2016.
  - **Record maintenance:** Bio-medical waste generation register and manifest for disposal are maintained. (Pic-6)
  - **Awareness about BMW management among staffs:** Staffs involved in management & handling of Bio-medical waste are trained & aware about BMW management methodology.
  - **Submission of Annual Report:** Annual Report for the year of contention (2019) has been submitted.
  - **Effluent and Liquid biomedical waste:** Liquid biomedical waste from laboratory is discharged into Kolkata Municipal Corporation (KMC) sewer after being pretreated with disinfectant. Other effluent from the hospital is discharged into KMC sewer.
- 8. Statutory Compliances:**
- Both 'Bio-medical Waste Authorization' & 'Consent to Operate' of the unit is valid up to 30/01/2021.
- 9. Sampling:** Effluent sample was collected from the hospital outlet point. Analysis Report is enclosed-Annexure-1.

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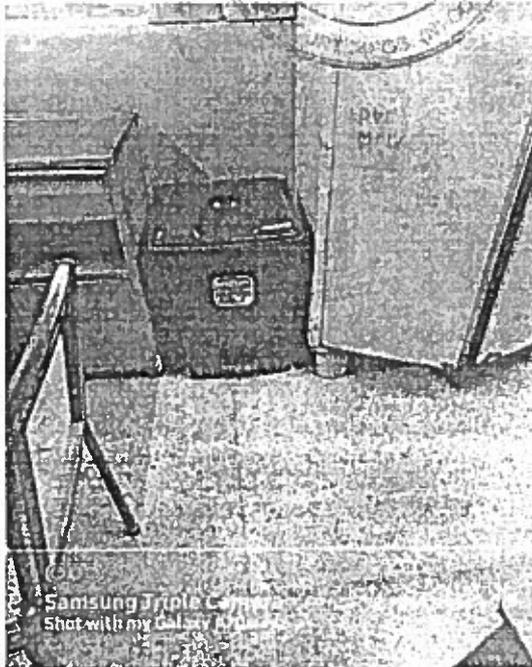
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Photographs taken during inspection on 22/01/2021



Pic-1



Pic-2



Pic-3

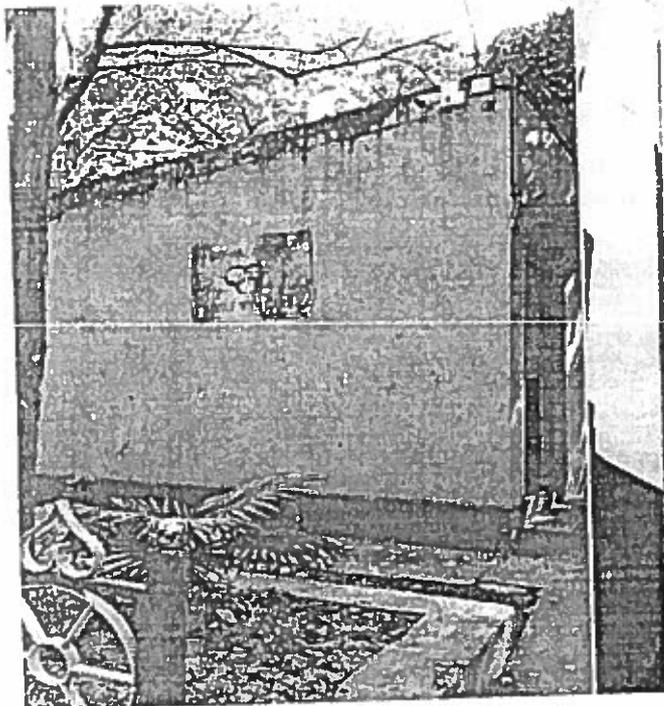


Pic-4

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Pic-5



Pic-6

*[Handwritten signature]*

*[Handwritten signature]*

B. Pan, AEE, WBPCB

S. Roy, Sc-D, CPCB

18 FEB 2021

Analysis Report of Grab Water / Waste Water Samples

Sample Identification  
Code: 250120210831

Analysis done at:

1683



**WEST BENGAL POLLUTION CONTROL BOARD**  
Central Laboratory, **PARIBESH BHAWAN**, Salt Lake, Kolkata - 700 106

Sri. S. Roy &amp; Sri. B. Pan

Sample Collected by (First name only in short) (As indicated in the label affixed to the sample container)	Sampling Date⇒	22.01.2021	Office Code⇒	HO
Name of Industry / Source:	Lady Dufferin Victoria Hospital			
Address:	1, No: Raja Ram Mohan Roy Sarani, P.O.- Amherst Street, P.S.- Muchipara, Kolkata-700009			
Sl. No.	Sampling Details (Collection / Discharge)	T#U#	Collection Time	
1.	Hospital Outlet Point	U	14:10 hrs	

Treated/Untreated

Sample Serial Number

Parameters	Sample Serial Number
pH	1
TSS	7.55
COD	10.00
BOD	14.00
O&G	6.08
	BDL

Remarks: 1. Results expressed in mg/l excepting pH

03/02/2021

Date of Reporting

Signature of Scientist

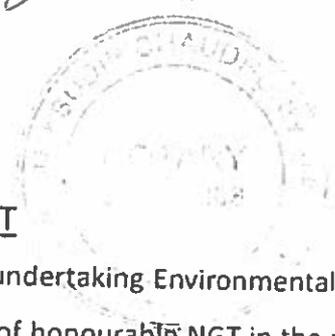
Signature of Senior Scientist

Copy To-

1. Chief Engineer - O & E, WBPCB
2. Sr. Environmental Engineer - Planning/EIM Cell, WBPCB
3. Head Office, WBPCB (2 copies)

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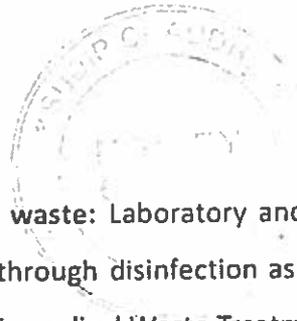
**INSPECTION REPORT**

Reference of the inspection: Inspection is conducted for undertaking Environmental Audit by the joint committee of CPCB & SPCB as per the direction of honourable NGT in the matter of O.A. No.120/2015/EZ (M.A. No. 1187/2016/EZ) dated 12/10/2020.

1. Name of the unit: Medical College & Hospital, Kolkata
2. Address: 88, College Street, Kolkata-700073
3. Date and time of inspection: 20/01/2021 (2-30PM to 4-20 PM)
4. Inspected by: S. Roy, Sc-D, CPCB; T. Aslam, Sc-B, CPCB; B. Pan, AEE, WBPCB.
5. Person met: Swarup Saha, Asst. Super, Qazi, Asst. Super.
6. Bed Capacity: 2534 nos.
7. Observations:
  - Biomedical waste management: Biomedical waste management system exists there. BMW are segregated & segregated BMW are stored in designated colour coded bags/containers as per schedule-1 of Biomedical Waste Management Rules, 2016. (Pic-2, Pic-3)
  - This is a dedicated Covid hospital. COVID 19 waste is stored in double layered (using 2 bags) non-chlorinated colour coded bags and handed over to CBWTF operator bags as per guidelines of CPCB.
  - Mutilation & disinfection: Needle cutters are used for destroying needle. Disposable syringes & sharps are mutilated & stored in Puncture Proof Containers (PPC) containing disinfectant. Saline bottles are punctured before disposal. (Pic-4)
  - Storage of biomedical waste: The bags containing segregated BMW are stored in a properly ventilated intermediate storage room marked with Bio-hazard symbol before handing over to CBMWTF. (Pic-5)
  - Bar code system: Bar Code system exists there.

18 FEB 2021

1075  
X



- **Pre-treatment of laboratory waste/microbiological waste:** Laboratory and microbiological waste/blood samples & blood bags are pretreated through disinfection as per Rule 4(c) of BMW Rules, 2016 before handing over to Common Biomedical Waste Treatment Facility.
- **Immunization of health care workers:** Health care workers & others involved in handling of bio-medical waste are immunized for protection against diseases including Hepatitis B and Tetanus that are likely to be transmitted by handling of bio-medical waste as per Rule 49(h) of BMW Rules, 2016.
- **Record maintenance:** Bio-medical waste generation register and manifest for disposal are maintained. (Pic-6)
- **Awareness about BMW management among staffs:** Staffs involved in management & handling of Bio-medical waste are trained & aware about BMW management methodology.
- **Submission of Annual Report:** Annual Report for the year of contention (2019) has been submitted.
- **Effluent and Liquid biomedical waste:** Liquid biomedical waste from laboratory is discharged into Kolkata Municipal Corporation (KMC) sewer after being pretreated with disinfectant. Other effluent from the hospital is discharged into KMC sewer.

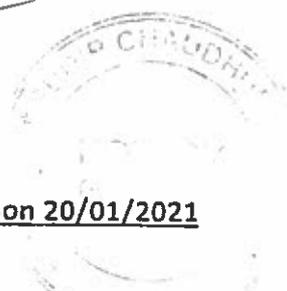
#### 8. Statutory Compliances:

- Both 'Bio-medical Waste Authorization' & 'Consent to Operate' of the unit is valid up to 30/06/2021.

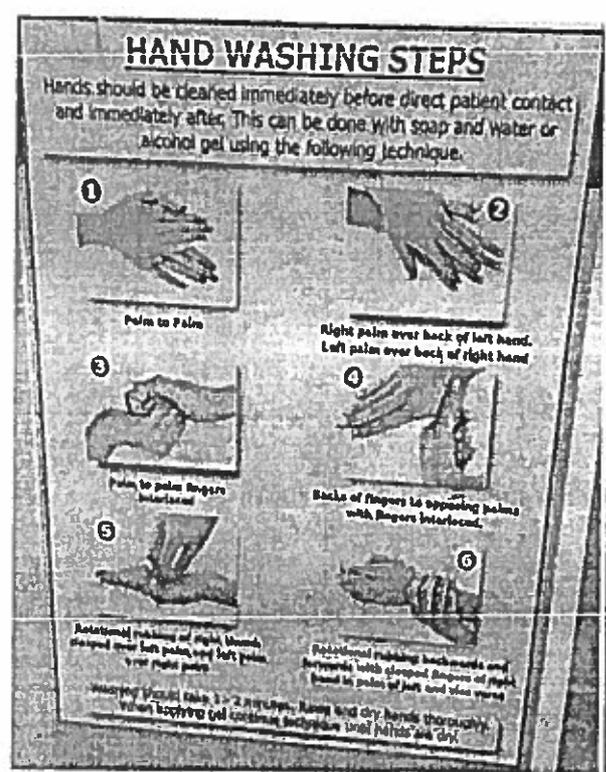
9. **Sampling:** Effluent sample was collected from the hospital outlet point. Analysis Report is enclosed-Annexure-1.

18 FEB 2021

1676 22



Photographs taken during inspection on 20/01/2021



Pic-1



Pic-2



Pic-3



Pic-4

18 FEB 2021

1687

X3



Pic-5

Pic-6

*B. Pan*

B. Pan, AEE, WBPCB

*T. Aslam*

T. Aslam, Sc-B, CPCB

*S. Roy*

S. Roy, Sc-D, CPCB

18 FEB 2021

Analysis Report of Grab Water / Waste Water Samples

1678

Sample Identification  
Code: 210120210822

X

Analysis done at:



**WEST BENGAL POLLUTION CONTROL BOARD**  
Central Laboratory, PARIBESH BHAWAN, Salt Lake, Kolkata - 700 106

S. Roy &amp; Sri. B. Pan

Sample Collected by (First name only in short) <i>(As indicated in the label affixed to the sample container)</i>	Sampling Date⇒	20.01.2021	Office Code⇒	HO
Name of Industry / Source:	Medical College & Hospital, Kolkata			
Address:	88, College Street, Kolkata - 700073			
Sl. No.	Sampling Details (Collection / Discharge)	T#U#	Collection Time	
	Hospital Outlet Point	U	13:55 hrs	

Treated/Untreated

Parameters	Sample Serial Number
H	1
SS	7.45
COD	6.00
BOD	10.00
TDS	4.18
Oil & Grease	1.30

Remarks: 1. Results expressed in mg/l excepting pH

03/02/2021

Date of Reporting

Signature of Scientist

Signature of Senior Scientist

Copy To-

1. Chief Engineer - O & E, WBPCB
2. Sr. Environmental Engineer - Planning/EIM Cell, WBPCB
3. Head Office, WBPCB (2 copies)

18 FEB 2021

1679 X

## INSPECTION REPORT

Reference of the inspection: Inspection is conducted for undertaking Environmental Audit by the joint committee of CPCB & SPCB as per the direction of honourable NGT in the matter of O.A. No.120/2015/EZ (M.A. No. 1187/2016/EZ) dated 12/10/2020.

1. Name of the unit: ID & BG Hospital
2. Address: 57, Beliaghata Mail Road PO & PS: Beliaghata, Kolkata-700010
3. Date and time of inspection: 19/01/2021 (12-PM to 2-00 PM)
4. Inspected by: S. Roy, Sc-D, CPCB; T. Aslam, Sc-B, CPCB; B. Pan, AEE, WBPCB.
5. Person met: Prof: Anima Halder, Principal, Medical Education, Chaitali Sengupta, Asst. Super.
6. Bed Capacity: 660 nos.
7. Observations:
  - **Biomedical waste management:** Biomedical waste management system exists there. BMW are segregated & segregated BMW are stored in designated colour coded bags/containers as per schedule-1 of Biomedical Waste Management Rules, 2016. (Pic-1, Pic-2)
  - This is a dedicated Covid hospital. COVID 19 waste is stored in double layered (using 2 bags) non-chlorinated colour coded bags and handed over to CBWTF operator bags as per guidelines of CPCB.
  - **Mutilation & disinfection:** Needle cutters are used for destroying needle. Disposable syringes & sharps are mutilated & stored in Puncture Proof Containers (PPC) containing disinfectant. Saline bottles are punctured before disposal. (Pic-3 & 4)
  - **Storage of biomedical waste:** The bags containing segregated BMW are stored in a properly ventilated intermediate storage room marked with Bio-hazard symbol before handing over to CBMWTF. (Pic-5)

18 FEB 2021

1680

3/6



- **Bar code system:** Bar Code system exists there.
- **Pre-treatment of laboratory waste/microbiological waste:** Laboratory and microbiological waste/blood samples & blood bags are pretreated through disinfection as per Rule 4(c) of BMW Rules, 2016 before handing over to Common Biomedical Waste Treatment Facility.
- **Immunization of health care workers:** Health care workers & others involved in handling of bio-medical waste are immunized for protection against diseases including Hepatitis B and Tetanus that are likely to be transmitted by handling of bio-medical waste as per Rule 49(h) of BMW Rules, 2016.
- **Record maintenance:** Bio-medical waste generation register and manifest for disposal are maintained. (Pic-6)
- **Awareness about BMW management among staffs:** Staffs involved in management & handling of Bio-medical waste are trained & aware about BMW management methodology.
- **Submission of Annual Report:** Annual Report for the year of contention (2019) has been submitted.
- **Effluent and Liquid biomedical waste:** Liquid biomedical waste from laboratory is discharged into Kolkata Municipal Corporation (KMC) sewer after being pretreated with disinfectant. Other effluent from the hospital is discharged into KMC sewer.

#### 8. Statutory Compliances:

- Both 'Bio-medical Waste Authorization' & 'Consent to Operate' of the unit is valid up to 31/03/2022.
- 9. **Sampling:** Effluent sample was collected from the hospital outlet point. Analysis Report is enclosed - Annexure-1.

18 FEB 2021

X 1681



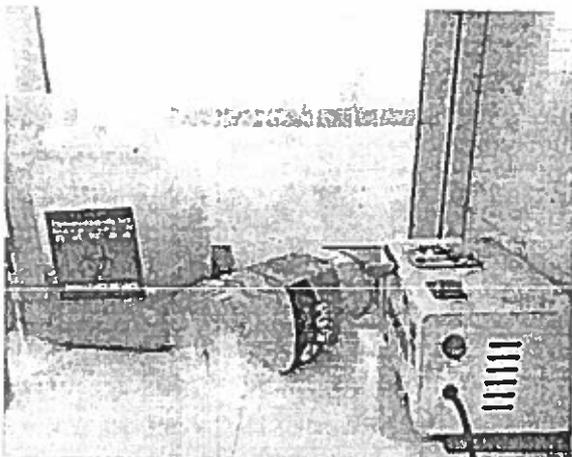
Photographs taken during inspection on 19/01/2021



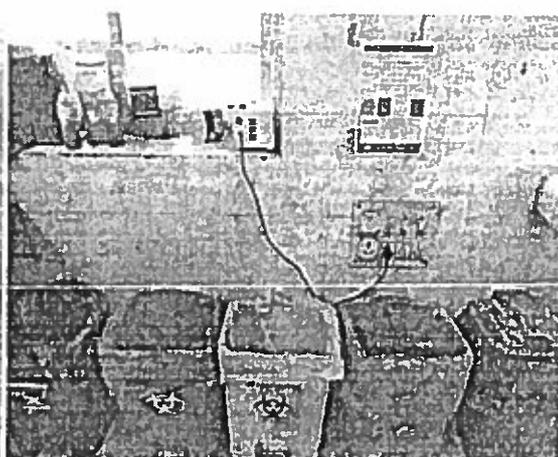
Pic-1



Pic-2



Pic-3



Pic-4

18 FEB 2021

28

1682



Pic-5



Pic-6

*[Handwritten signature]*

B. Pan, AEE, WBPCB

*[Handwritten signature]*

T. Aslam, Sc-B, CPCB

*[Handwritten signature]*

S. Roy, Sc-D, CPCB

18 FEB 2021

~~27~~ 1683

Sample Identification  
Code: 200120210814

Analysis Report of Grab Water / Waste Water Samples

Analysis done at:



**WEST BENGAL POLLUTION CONTROL BOARD**  
Central Laboratory, PARIBESH BHAWAN, Salt Lake, Kolkata - 700 106

i. S. Roy & Sri. B.Pan

Sample Collected by (First name only in short) <i>As indicated in the label affixed to the sample container</i>	Sampling Date⇒	19.01.2021	Office Code⇒	HO
Name of Industry / Source:	ID & BG Hospital			
Address:	57, Beliaghata Main Road, P.O. & P.S.- Beliaghata, Kolkata - 700010			
S. No.	Sampling Details (Collection / Discharge)	T#U#	Collection Time	
1.	Hospital Outlet Point	U	12:45 hrs	

Treated/Untreated

Sample Serial Number

Parameters	Sample Serial Number
pH	1
TSS	7.70
COD	98.00
BOD	128.32
D&G	35.80
	1.80

Remarks: 1. Results expressed in mg/l excepting pH

03/02/2021

Date of Reporting

  
Signature of Scientist

  
Signature of Senior Scientist

Copy To-

1. Chief Engineer -- O & E, WBPCB
2. Sr. Environmental Engineer -- Planning/EIM Cell, WBPCB
- ✓ 3. Head Office, WBPCB (2 copies)

18 FEB 2021

1684 30

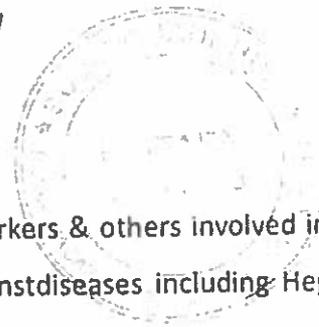
## INSPECTION REPORT

Reference of the inspection: Inspection is conducted for undertaking Environmental Audit by the joint committee of CPCB & SPCB as per the direction of honourable NGT in the matter of O.A. No.120/2015/EZ (M.A. No. 1187/2016/EZ) dated 12/10/2020.

1. Name of the unit: NRS Medical College & Hospital
2. Address: 138, A.J.C. Bose Road, Kolkata-700014
3. Date and time of inspection: 20/01/2021 (12-PM to 2-00 PM)
4. Inspected by: S. Roy, Sc-D, CPCB; T. Aslam, Sc-B, CPCB; B. Pan, AEE, WBPCB.
5. Person met: Rajib Basu, Asst. Super.
6. Bed Capacity: 1890 nos.
7. Observations:
  - **Biomedical waste management:** Biomedical waste management system exists there. BMW are segregated & segregated BMW are stored in designated colour coded bags/containers as per schedule-1 of Biomedical Waste Management Rules, 2016. (Pic-1, Pic-2)
  - **Mutilation & disinfection:** Needle cutters are used for destroying needle. Disposable syringes & sharps are mutilated & stored in Puncture Proof Containers (PPC) containing disinfectant. Saline bottles are punctured before disposal. (Pic-3 & 4)
  - **Storage of biomedical waste:** The bags containing segregated BMW are stored in a properly ventilated intermediate storage room marked with Bio-hazard symbol before handing over to CBMWTF. (Pic-5)
  - **Bar code system:** Bar Code system exists there.
  - **Pre-treatment of laboratory waste/microbiological waste:** Laboratory and microbiological waste/blood samples & blood bags are pretreated through disinfection as per Rule 4(c) of BMW Rules, 2016 before handing over to Common Biomedical Waste Treatment Facility.

18 FEB 2021

1685 X



- **Immunization of health care workers:** Health care workers & others involved in handling of bio-medical waste are immunized for protection against diseases including Hepatitis B and Tetanus that are likely to be transmitted by handling of bio-medical waste as per Rule 49(h) of BMW Rules, 2016.
- **Record maintenance:** Bio-medical waste generation register and manifest for disposal are maintained. (Pic-6)
- **Awareness about BMW management among staffs:** Staffs involved in management & handling of Bio-medical waste are trained & aware about BMW management methodology.
- **Submission of Annual Report:** Annual Report for the year of contention (2019) has been submitted.
- **Effluent and Liquid biomedical waste:** Liquid biomedical waste from laboratory is discharged into Kolkata Municipal Corporation (KMC) sewer after being pretreated with disinfectant. Other effluent from the hospital is discharged into KMC sewer.

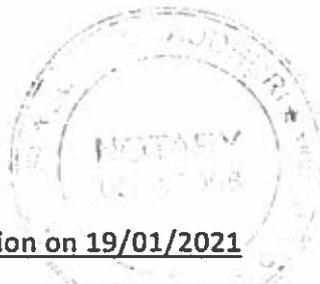
#### 8. Statutory Compliances:

- Both 'Bio-medical Waste Authorization' & 'Consent to Operate' of the unit is valid up to 31/03/2021.

9. **Sampling:** Effluent sample was collected from the hospital outlet point. Analysis Report is enclosed-Annexure-1.

18 FEB 2021

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Photographs taken during inspection on 19/01/2021



Pic-1



Pic-2

18 FEB 2021



## Analysis Report of Grab Water / Waste Water Samples

Analysis done at:



**WEST BENGAL POLLUTION CONTROL BOARD**  
Central Laboratory, PARIBESH BHAWAN, Salt Lake, Kolkata - 700 106

XI  
H88

Sample Identification  
Code: 210120210821

NOTARY  
6884/2008

ri. S. Roy &amp; Sri. B. Pan

Sample Collected by (First name only in short) (As indicated in the label affixed to the sample container)	Sampling Date⇒	20.01.2021	Office Code⇒	HO
Name of Industry / Source:	NRS Medical College & Hospital			
Address:	138, A.J.C. Bose Road, Kolkata - 700014			
Sl. No.	Sampling Details (Collection / Discharge)	T#U#	Collection Time	
1.	Hospital Outlet Point	U	12:30 hrs	

Treated/Untreated

## Sample Serial Number

Parameters	Sample Serial Number
pH	7.29
TSS	50.00
COD	120.00
BOD	55.80
O&G	1.00

Remarks: 1. Results expressed in mg/l excepting pH

03/02/2021

Date of Reporting

Signature of Scientist

Signature of Senior Scientist

Copy To-

1. Chief Engineer - O & E, WBPCB
2. Sr. Environmental Engineer - Planning/EIM Cell, WBPCB
- ✓ 3. Head Office, WBPCB (2 copies)

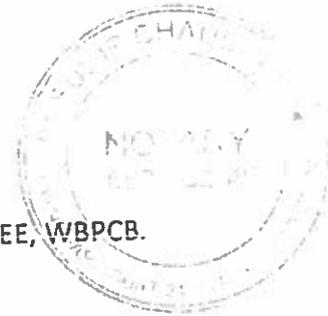
18 FEB 2021

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### INSPECTION REPORT

Reference of the inspection: Inspection is conducted for undertaking Environmental Audit by the joint committee of CPCB & SPCB as per the direction of honourable NGT in the matter of O.A. No.120/2015/EZ (M.A. No. 1187/2016/EZ) dated 12/10/2020.

1. Name of the unit: IPGMER-SSKM Hospital
2. Address: 244, A.J.C. Bose Road, Kol-700020
3. Date and time of inspection: 19/01/2021 (12-PM to 2-00 PM)
4. Inspected by: S. Roy, Sc-D, CPCB; T. Aslam, Sc-B, CPCB; B. Pan, AEE, WBPCB.
5. Persons met: Kumar Mal, Asst. Super.



6. Bed Capacity: 1770 nos.

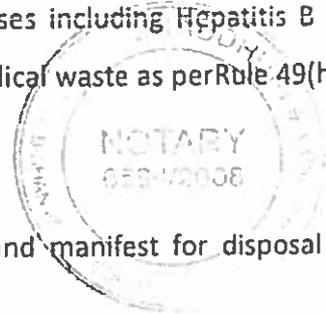
7. Observations:

- **Biomedical waste management:** Biomedical waste management system exists there. BMW are segregated & segregated BMW are stored in designated colour coded bags/containers as per schedule-1 of Biomedical Waste Management Rules, 2016. (Pic-1, Pic-2)
- **Mutilation & disinfection:** Needle cutters are used for destroying needle. Disposable syringes & sharps are mutilated & stored in Puncture Proof Containers (PPC) containing disinfectant. Saline bottles are punctured before disposal. (Pic-3 & 4)
- **Storage of biomedical waste:** The bags containing segregated BMW are stored in a ventilated intermediate storage room marked with Bio-hazard symbol before handing over to CBMWTF. (Pic-5)
- **Bar code system:** Bar Code system exists there.
- **Pre-treatment of laboratory waste/microbiological waste:** Laboratory and microbiological waste/blood samples & blood bags are pretreated through disinfection as per Rule 4(c) of BMW Rules, 2016 before handing over to Common Biomedical Waste Treatment Facility.

18 FEB 2021

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- **Immunization of health care workers:** Health care workers & others involved in handling of bio-medical waste are immunized for protection against diseases including Hepatitis B and Tetanus that are likely to be transmitted by handling of bio-medical waste as per Rule 49(h) of BMW Rules, 2016.
- **Record maintenance:** Bio-medical waste generation register and manifest for disposal are maintained. (Pic-6)
- **Awareness about BMW management among staffs:** Staffs involved in management & handling of Bio-medical waste are trained & aware about BMW management methodology.
- **Submission of Annual Report:** Annual Report for the year of contention (2019) has been submitted (on 02/05/2020).
- **Effluent and Liquid biomedical waste:** Liquid biomedical waste from laboratory is discharged into Kolkata Municipal Corporation (KMC) sewer after being pretreated with disinfectant. Other effluent from the hospital is discharged into KMC sewer.



#### 8. Statutory Compliances:

- Both 'Bio-medical Waste Authorization' & 'Consent to Operate' of the unit is valid up to 31/01/2021. The unit has applied for renewal of the same.
- 

9. **Sampling:** Effluent sample was collected from the hospital outlet point. Analysis Report is enclosed-Annexure-1.

18 FEB 2021

1691 37



Photographs taken during inspection on 19/01/2021



Pic-1

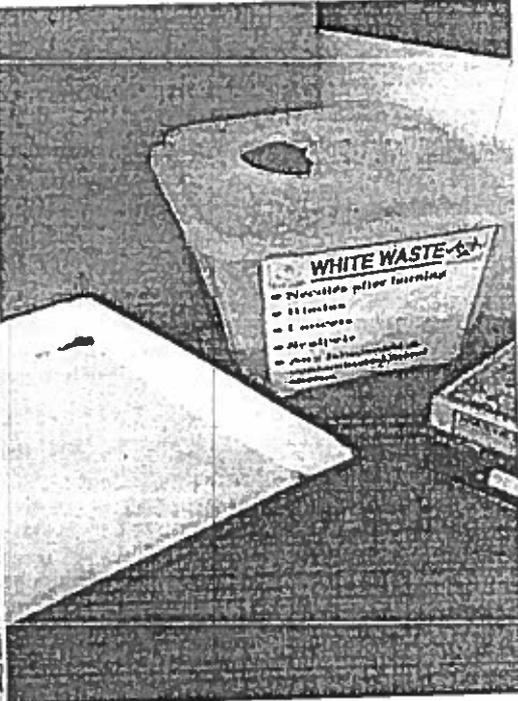


Pic-2



SHOT ON REDMI 9S AT DUAL CAMERA

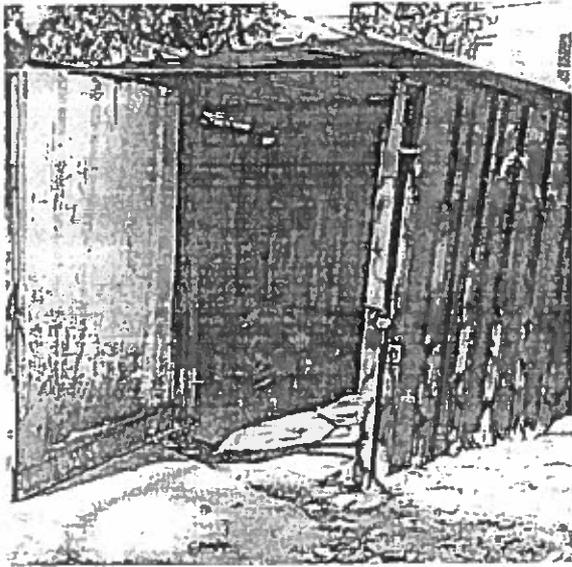
Pic-3



Pic-4

18 FEB 2021

1692 38



Pic-5

RECORD OF RSCC

Sl. No.	Area	Area	Area	Area
01.12.20	01	04	08	01
02.12.20	02	01	04	02
03.12.20	03	01	02	01
04.12.20	04	01	01	01
05.12.20	05	01	01	01
06.12.20	06	01	01	01
07.12.20	07	01	01	01
08.12.20	08	01	01	01
09.12.20	09	01	01	01
10.12.20	10	01	01	01
11.12.20	11	01	01	01
12.12.20	12	01	01	01
13.12.20	13	01	01	01
14.12.20	14	01	01	01
15.12.20	15	01	01	01
16.12.20	16	01	01	01
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18.12.20	18	01	01	01
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27.12.20	27	01	01	01
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29.12.20	29	01	01	01
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31.12.20	31	01	01	01
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33.12.20	33	01	01	01
34.12.20	34	01	01	01
35.12.20	35	01	01	01
36.12.20	36	01	01	01
37.12.20	37	01	01	01
38.12.20	38	01	01	01
39.12.20	39	01	01	01
40.12.20	40	01	01	01
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42.12.20	42	01	01	01
43.12.20	43	01	01	01
44.12.20	44	01	01	01
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47.12.20	47	01	01	01
48.12.20	48	01	01	01
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67.12.20	67	01	01	01
68.12.20	68	01	01	01
69.12.20	69	01	01	01
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93.12.20	93	01	01	01
94.12.20	94	01	01	01
95.12.20	95	01	01	01
96.12.20	96	01	01	01
97.12.20	97	01	01	01
98.12.20	98	01	01	01
99.12.20	99	01	01	01
100.12.20	100	01	01	01

Pic-6

*B. Pan*

*T. Aslam*

*S. Roy*

B. Pan, AEE, WBPCB

T. Aslam, Sc-B, CPCB

S. Roy, Sc-D, CPCB

18 FEB 2021

Analysis Report of Grab Water / Waste Water Samples

Sample Identification  
Code: 200120210816

Analysis done at:



WEST BENGAL POLLUTION CONTROL BOARD  
Central Laboratory, PARIBESH BHAWAN, Salt Lake, Kolkata - 700 106

i. S. Roy & Sri. B. Pan

Sample Collected by (First name only in short) <i>As indicated in the label affixed to the sample container</i>	Sampling Date⇒	19.01.2021	Office Code⇒	HO
Name of Industry / Source:	IGME & R-SSKM Hospital			
Address:	244, A.J.R. Bose Road, Kolkata - 700020			
Sl. No.	Sampling Details (Collection / Discharge)	T#U#	Collection Time	
1.	Hospital Outlet Point	U	14:45 hrs	

Treated/Untreated

Sample Serial Number

Parameters	Sample Serial Number
pH	7.43
TSS	54.00
COD	207.26
BOD	68.30
T&G	1.20

Remarks: 1. Results expressed in mg/l excepting pH

03/02/2021

Date of Reporting

Signature of Scientist

Signature of Senior Scientist

Copy To-

1. Chief Engineer - O & E, WBPCB
2. Sr. Environmental Engineer - Planning/EIM Cell. WBPCB
3. Head Office, WBPCB (2 copies)

18 FEB 2021

1694 4X

INSPECTION REPORT

**Reference of the inspection:** Inspection is conducted for undertaking Environmental Audit by the joint committee of CPCB & SPCB as per the direction of honourable NGT in the matter of O.A. No.120/2015/EZ (M.A. No. 1187/2016/EZ) dated 12/10/2020.

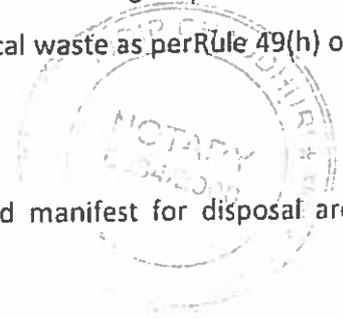
1. Name of the unit: RG Kar Medical College & Hospital
2. Address: 88, College Street, Kolkata-700073
3. Date and time of inspection: 22/01/2021 (12-15PM to 2-00 PM)
4. Inspected by: S. Roy, Sc-D, CPCB, B. Pan, AEE, WBPCB,
5. Person met: Piyali Das, Asst. Super, Qazi, Asst. Super.
6. Bed Capacity: 1385 nos.
7. Observations:
  - **Biomedical waste management:** Biomedical waste management system exists there. BMW are segregated & segregated BMW are stored in designated colour coded bags/containers as per schedule-1 of Biomedical Waste Management Rules, 2016. (Pic-1, Pic-2)
  - This is a dedicated Covid hospital. COVID 19 waste is stored in double layered (using 2 bags) non-chlorinated colour coded bags and handed over to CBWTF operator bags as per guidelines of CPCB.
  - **Mutilation & disinfection:** Needle cutters are used for destroying needle. Disposable syringes & sharps are mutilated & stored in Puncture Proof Containers (PPC) containing disinfectant. Saline bottles are punctured before disposal. (Pic-3 & 4)
  - **Storage of biomedical waste:** The bags containing segregated BMW are stored in a properly ventilated intermediate storage room marked with Bio-hazard symbol before handing over to CBMWTF. (Pic-5)
  - **Bar code system:** Bar Code system exists there.



18 FEB 2021

1695 ✕

- **Pre-treatment of laboratory waste/microbiological waste:** Laboratory and microbiological waste/blood samples & blood bags are pretreated through disinfection as per Rule 4(c) of BMW Rules, 2016 before handing over to Common Biomedical Waste Treatment Facility.
- **Immunization of health care workers:** Health care workers & others involved in handling of bio-medical waste are immunized for protection against diseases including Hepatitis B and Tetanus that are likely to be transmitted by handling of bio-medical waste as per Rule 49(h) of BMW Rules, 2016.
- **Record maintenance:** Bio-medical waste generation register and manifest for disposal are maintained. (Pic-6)
- **Awareness about BMW management among staffs:** Staffs involved in management & handling of Bio-medical waste are trained & aware about BMW management methodology.
- **Submission of Annual Report:** Annual Report for the year of contention (2019) has been submitted.
- **Effluent and Liquid biomedical waste:** Liquid biomedical waste from laboratory is discharged into Kolkata Municipal Corporation (KMC) sewer after being pretreated with disinfectant. Other effluent from the hospital is discharged into KMC sewer.



#### 8. Statutory Compliances:

- Both 'Bio-medical Waste Authorization' & 'Consent to Operate' of the unit is valid up to 30/06/2022.
9. **Sampling:** Effluent sample was collected from the hospital outlet point. Analysis Report is enclosed-Annexure-1.

18 FEB 2021

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Photographs taken during inspection on 19/01/2021



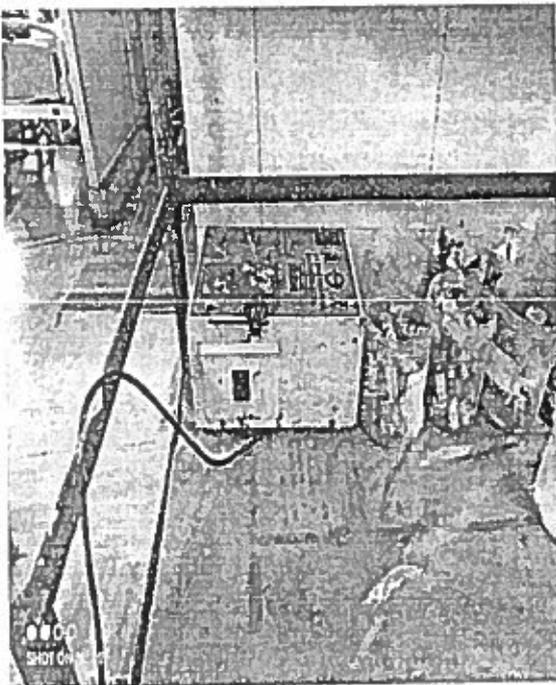
Pic-1



Pic-2



Pic-3



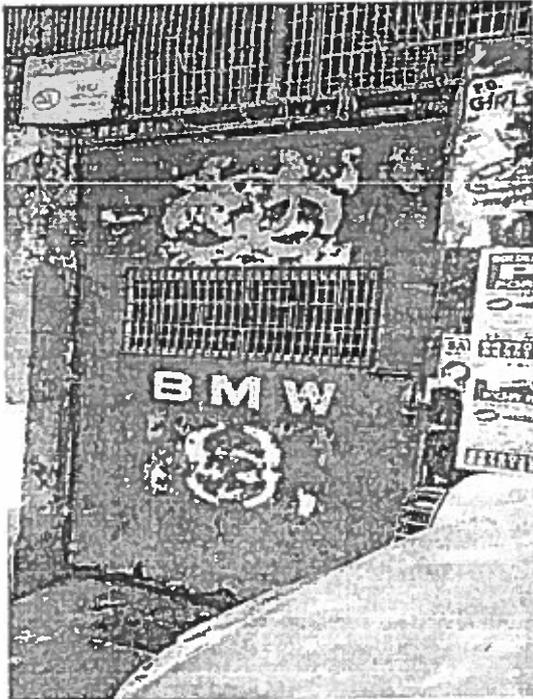
Pic-3



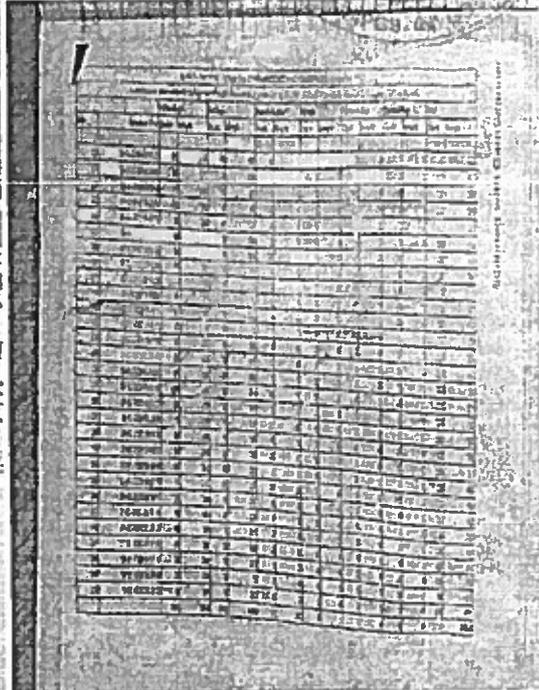
Pic-4

18 FEB 2021

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Pic-5



Pic-6

*B. Pan*

B. Pan, AEE, WBPCB

*S. Roy*

S. Roy, Sc-D, CPCB

18 FEB 2021

Analysis Report of Grab Water / Waste Water Samples

Sample Identification  
Code: 250120210830

Analysis done at:



WEST BENGAL POLLUTION CONTROL BOARD  
Central Laboratory, PARIBESH BHAWAN, Salt Lake, Kolkata - 700 106

i. S. Roy & Sri. B. Pan

Sample Collected by (First name only in short) <i>As indicated in the label affixed to the sample container</i>	Sampling Date⇒	22.01.2021	Office Code⇒	HO
Name of Industry / Source:	R.G.Kar Medical College & Hospital			
Address:	1, Belgachia Road, Kolkata - 700037			
Sl. No.	Sampling Details (Collection / Discharge)	T#U#	Collection Time	
1.	Hospital Outlet Point	U	12:40 hrs	

Treated/Untreated

Sample Serial Number

Parameters	Sample Serial Number
pH	1
TSS	7.49
COD	26.00
BOD	60.68
DO&G	25.95
	BDL

Remarks: 1. Results expressed in mg/l excepting pH

03/02/2021

Date of Reporting

Signature of Scientist

Signature of Senior Scientist

Copy To-

1. Chief Engineer - O & E. WBPCB
2. Sr. Environmental Engineer - Planning/EIM Cell. WBPCB
- ✓ 3. Head Office, WBPCB (2 copies)

18 FEB 2021



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**WEST BENGAL POLLUTION CONTROL BOARD**

(Department of Environment, Govt. of West Bengal)

Parnesh Bnawan

Bldg No. 10 A, Block-LA, Sector-III, Bidhan Nagar

Kolkata - 700 078

Tel : 091 (033) 2335-9088 / 8861 / 8211 / 8073 / 6731

2335-0261 / 8212 / 8213 / 7428 / 5975

Fax 091 (033) 2335 6730 / 2813

Website : [www.wbpcb.gov.in](http://www.wbpcb.gov.in), e-mail : [wbpcbnet@wbpcb.gov.in](mailto:wbpcbnet@wbpcb.gov.in)

No.

Date

Notice for inspection

To

ID & BG Hospital  
 57, Beliaghata Main Road  
 PCPPS Beliaghata  
 Kol-700010



Sir,

Please TAKE NOTICE that for the purpose of enquiry under Rule 7(4) of Bio-medical Waste (Management & Handling) Rules, 1998, the following Officer(s) of the Board, namely: 2016

1. B. Pan, AEE, WBPCB
2. S. Roy, SE-D, WBPCB
3. Toufic Alam, SE-B, WBPCB

and the persons authorized by the Board will inspect the bio-medical waste management and handling of your unit on 19/01/21

Please note that during inspection, management of your unit should extend all necessary assistance to the inspecting officer(s) failing which, necessary action will be taken for obstructing or creating hindrance to the State Board official(s) in discharging their official duties.

By order of the Board

19/1/21  
 (Asstt. Suptt.)

18 FEB 2021



1700 ~~46~~

## WEST BENGAL POLLUTION CONTROL BOARD

(Department of Environment, Govt. of West Bengal)

Paribesh Bhawan

Bldg. No. 10 A, Block-LA, Sector-III, Bidhan Nagar

Kolkata - 700 098

Tel : 091 (033) 2335-9088 / 8861 / 8211 / 8073 / 6731

2335-0261 / 8212 / 8213 / 7428 / 5975

Fax : 091 (033) 2335 6730 / 2813

Website : [www.wbpcb.gov.in](http://www.wbpcb.gov.in), e-mail : [wboebnet@wbpcb.gov.in](mailto:wboebnet@wbpcb.gov.in)

No.

Date : 18/02/2021

### Notice for inspection

To

IGME & R-55KM Hoop. Rd

24A A.T.C. Bone Road,

Kol - 700020



Sir,

Please TAKE NOTICE that for the purpose of enquiry under Rule 7(4) of Bio-medical Waste (Management & Handling) Rules, 1998, the following Officer(s) of the Board, namely, 2016

1. Sandeep Roy, Se-D, C.P.C.B

2. B. Pon. A.E. W.P.C.B

3. T. Ashu. Se-D, C.P.C.B

and the persons authorized by the Board will inspect the bio-medical waste management and handling of your unit on 18/02/2021

Please note that during inspection, management of your unit should extend all necessary assistance to the inspecting officer(s) failing which, necessary action will be taken for obstructing or creating hindrance to the State Board official(s) in discharging their official duties.

*[Signature]*  
By order of the Board

*[Signature]*  
18/02/2021

18 FEB 2021

Act 48



WEST BENGAL POLLUTION CONTROL BOARD

(Department of Environment, Govt. of West Bengal)  
Paribesh Brihata

Bldg. No. 10 A, Block-LA, Sector-III, Bidhan Nagar

Kolkata - 700 098

Tel : 091 (033) 2335-9088 / 8861 / 8211 / 8073 / 6731

2335-0261 / 8212 / 8213 / 7428 / 5975

Fax : 091 (033) 2335 6730 / 2813

Website : [www.wbpcb.gov.in](http://www.wbpcb.gov.in), e-mail : [wbpcbnet@wbpcb.gov.in](mailto:wbpcbnet@wbpcb.gov.in)

No

Date 20.01.2021

Notice for inspection

To

NPS Memorial Hall, Hospital  
128 A.P.E. Estate Road  
D.V. - 700014



Sir,

Please TAKE NOTICE that for the purpose of enquiry under Rule 7(4) of Bio-medical Waste (Management & Handling) Rules, 1998, the following Officer(s) of the Board, namely, 2016

- 1 S. Roy Sr. D.C.P.S
- 2 G. Pan, A.P.E., D.P.S
- 3 T. Alam, Sr. B, A.P.S

and the persons authorized by the Board will inspect the bio-medical waste management and handling of your unit on 20.01.2021

Please note that during inspection, management of your unit should extend all necessary assistance to the inspecting officer(s) failing which, necessary action will be taken for obstructing or creating hindrance to the State Board official(s) in discharging their official duties.

By order of the Board  
20.01.21

Received.  
AB 20.1.2021

18 FEB 2021

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WEST BENGAL POLLUTION CONTROL BOARD

(Department of Environment, Govt. of West Bengal)

Paribesh Bhawan

Bldg. No. 10 A, Block-LA, Sector-III, Bidhan Nagar

Kolkata - 700 098

Tel: 091 (033) 2335-3088 / 8861 / 8211 / 8073 / 6731

2335-0261 / 8212 / 8213 / 7428 / 5976

Fax: 091 (033) 2335 6730 / 2812

Website: [www.wbpcb.gov.in](http://www.wbpcb.gov.in), e-mail: [wbpcbnet@wbpcb.gov.in](mailto:wbpcbnet@wbpcb.gov.in)

No. \_\_\_\_\_

Date: 20/01/2021

Notice for inspection

Medical College of Hospital, Kolkata - 72

88, College Street

Kolkata - 700073



Sir,

Please TAKE NOTICE that for the purpose of enquiry under Rule 7(4) of Bio-medical Waste (Management & Handling) Rules, 1998, the following Officer(s) of the Board, namely.

- 1. S. Roy, SE-D, EPEB
- 2. P. Pan, APEB, WEPB
- 3. T. Anon, SE-D, EPEB

and the persons authorized by the Board will inspect the bio-medical waste management and handling of your unit on 20-01-2021

Please note that during inspection, management of your unit should extend all necessary assistance to the inspecting officer(s) failing which, necessary action will be taken for obstructing or creating hindrance to the State Board official(s) in discharging their official duties.

By order of the Board

Handwritten signature and date 20/1/21

18 FEB 2021

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# WEST BENGAL POLLUTION CONTROL BOARD

(Department of Environment, Govt. of West Bengal)

Paribesh Binawan

Bldg. No. 10 A, Block-LA, Sector-III, Bidhan Nagar

Kolkata - 700 098

Tel : 091 (033) 2335-9088 / 8861 / 8211 / 8073 / 6731

2335-0261 / 8212 / 8213 / 7428 / 5975

Fax : 091 (033) 2335 6730 / 2813

Website : [www.wbpcb.gov.in](http://www.wbpcb.gov.in), e-mail : [wbcnet@wbpcb.gov.in](mailto:wbcnet@wbpcb.gov.in)

No. ....

Date 22.02.2021

## Notice for inspection

To

Lady Duffield Victoria Hospital

1 No. Raja Parimal Das Sarani

PO - Park Road - Sector - 1 - Much - 700009

Kol - 700009



Sir,

Please TAKE NOTICE that for the purpose of enquiry under Rule 7(4) of Bio-medical Waste (Management & Handling) Rules, 1998, the following Officer(s) of the Board, namely. 2016

1. S. Roy, Sr. Director, B. for AET, W.B.P.C.B.

2.

3.

and the persons authorized by the Board will inspect the bio-medical waste management and handling of your unit on \_\_\_\_\_

Please note that during inspection, management of your unit should extend all necessary assistance to the inspecting officer(s) failing which, necessary action will be taken for obstructing or creating hindrance to the State Board official(s) in discharging their official duties.

By order of the Board

Received  
Shatteria  
22/02/21

18 FEB 2021

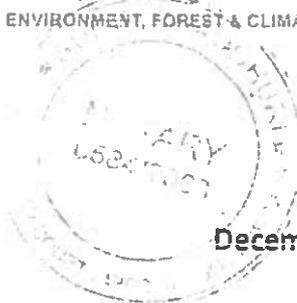


ms/100  
07/11/21

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केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
CENTRAL POLLUTION CONTROL BOARD  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार  
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE GOVT OF INDIA

By Speed Post



PL-100  
8/11

F.No. B-31011/BMW (58.II)/2020/WMD-I/14785

December 29, 2020

To,

The Member Secretary,  
West Bengal Pollution Control Board,  
Paribesh Bhawan, 10A, Block- LA,  
Sector III, Salt Lake City,  
Calcutta- 700106.

West Bengal Pollution Control Board

Date: 3/12/21  
Ref: 7-1-21  
Remarks: SEE (P)

Sub: Authorization of Healthcare Facilities-reg.

Sir,

There is a representation from Indian Medical Association (IMA) that documents such as Bank Statements and other legal/financial documents pertaining to Health Care Facilities (HCFs) are sought by few SPCBs/PCCs for grant of authorization, whereas, the form for grant of authorization does not specify such requirement. IMA has also raised concerns regarding compulsory installation of ETP at HCFs.

In view above, I am directed to inform that SPCBs/PCCs may relook into State specific procedures adopted for grant of authorization including Consent to HCFs. Further, as per the provisions under BMW Rules, 2016, HCFs need not install ETP, in case discharge from HCF is connected with City's/Town's public sewerage network leading to terminal STP.

Yours faithfully

B. Vinod Babu  
AD & DH WMD-I  
8/11

(B. Vinod Babu)  
AD & DH WMD-I

18 FEB 2021

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BEFORE THE NATIONAL  
GREEN TRIBUNAL  
PRINCIPAL BENCH,  
NEW DELHI  
ORIGINAL APPLICATION  
NO. 120/2015/EZ

BETWEEN  
SUBRATO MUKHERJEE  
..... APPLICANT

VERSUS

THE WEST BENGAL  
POLLUTION CONTROL  
BOARD & ORS.

..... RESPONDENT(S)

AFFIDAVIT ON BEHALF OF  
THE RESPONDENT NO. 19  
THE WEST BENGAL  
POLLUTION CONTROL  
BOARD

DIPANJAN GHOSH  
Advocate  
W.B.P.C.B

Annexure - II  
52

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**MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE  
NOTIFICATION**

[Published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i)]

**GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE  
NOTIFICATION**

New Delhi, the 19<sup>th</sup> February, 2019

**G.S.R. 129 (E).**— In exercise of the powers conferred by sub-section 6,8 and 25 of the Environment (Protection) Act, 1986 ( 29 of 1986) read with sub-rule (4) of rules (5) of the Environment (Protection) Rules, 1986 the Central Government, after having dispensed with the requirement of notice under clause (a) of sub-rule (3) of rules 5 of the said rule in public interest, hereby makes the following rules further to amend the Bio-medical Waste Management Rules, 2016 namely

**1. Short title and commencement.-**

- (1) These rules may be called the Bio-Medical Waste Management (Amendment) Rules, 2019.
- (2) They shall come into force on the date of their publication in the Official Gazette.

**2. Application.-**

(1) These rules shall apply to all persons who generate, collect, receive, store, transport, treat, dispose, or handle bio medical waste in any form including hospitals, nursing homes, clinics, dispensaries, veterinary institutions, animal houses, pathological laboratories, blood banks, ayush hospitals, clinical establishments, research or educational institutions, health camps, medical or surgical camps, vaccination camps, blood donation camps, first aid rooms of schools, forensic laboratories and research labs.

(2). These rules shall not apply to, -

- (a) radioactive wastes as covered under the provisions of the Atomic Energy Act, 1962(33 of 1962) and the rules made there under;
- (b) hazardous chemicals covered under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 made under the Act;
- (c) solid wastes covered under the Solid Waste Management Rules, 2016 made under the Act;
- (d) the lead acid batteries covered under the Batteries (Management and Handling) Rules, 2001 made under the Act;
- (e) hazardous wastes covered under the Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016 made under the Act;
- (f) waste covered under the E-Waste (Management) Rules, 2016 made under the Act; and

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- (g) hazardous micro-organisms, genetically engineered micro-organisms and cells covered under the Manufacture, Use, Import, Export and Storage of Hazardous Microorganisms, Genetically Engineered Micro-organisms or Cells Rules, 1989 made under the Act.

3. **Definitions.-** In these rules, unless the context otherwise requires, -

- (a) "Act" means the Environment (Protection) Act, 1986 (29 of 1986);
- (b) "animal house" means a place where animals are reared or kept for the purpose of experiments or testing;
- (c) "authorisation" means permission granted by the prescribed authority for the generation, collection, reception, storage, transportation, treatment, processing, disposal or any other form of handling of bio-medical waste in accordance with these rules and guidelines issued by the Central Government or Central Pollution Control Board as the case may be;
- (d) "authorised person" means an occupier or operator authorised by the prescribed authority to generate, collect, receive, store, transport, treat, process, dispose or handle bio-medical waste in accordance with these rules and the guidelines issued by the Central Government or the Central Pollution Control Board, as the case may be;
- (e) "biological" means any preparation made from organisms or micro-organisms or product of metabolism and biochemical reactions intended for use in the diagnosis, immunisation or the treatment of human beings or animals or in research activities pertaining thereto;
- (f) "bio-medical waste" means any waste, which is generated during the diagnosis, treatment or immunisation of human beings or animals or research activities pertaining thereto or in the production or testing of biological or in health camps, including the categories mentioned in Schedule I appended to these rules;
- (g) "bio-medical waste treatment and disposal facility" means any facility wherein treatment, disposal of bio-medical waste or processes incidental to such treatment and disposal is carried out, and includes common bio-medical waste treatment facilities;
- (h) "Form" means the Form appended to these rules;
- (i) "handling" in relation to bio-medical waste includes the generation, sorting, segregation, collection, use, storage, packaging, loading, transportation, unloading, processing, treatment, destruction, conversion, or offering for sale, transfer, disposal of such waste;
- (j) "health care facility" means a place where diagnosis, treatment or immunisation of human beings or animals is provided irrespective of type and size of health treatment system, and research activity pertaining thereto;
- (k) "major accident" means accident occurring while handling of bio-medical waste having potential to affect large masses of public and includes toppling of the truck carrying bio-medical waste, accidental

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release of bio-medical waste in any water body but exclude accidents like needle prick injuries, mercury spills;

- (l) "management" includes all steps required to ensure that bio- medical waste is managed in such a manner as to protect health and environment against any adverse effects due to handling of such waste;
- (m) "occupier" means a person having administrative control over the institution and the premises generating bio-medical waste, which includes a hospital, nursing home, clinic, dispensary, veterinary institution, animal house, pathological laboratory, blood bank, health care facility and clinical establishment, irrespective of their system of medicine and by whatever name they are called;
- (n) "operator of a common bio-medical waste treatment facility" means a person who owns or controls a Common Bio-medical Waste Treatment Facility (CBMWTF) for the collection, reception, storage, transport, treatment, disposal or any other form of handling of bio-medical waste;
- (o) "prescribed authority" means the State Pollution Control Board in respect of a State and Pollution Control Committees in respect of a Union territory;
- (p) "Schedule" means the Schedule appended to these rules.

**4. Duties of the Occupier. - It shall be the duty of every occupier to-**

- (a) take all necessary steps to ensure that bio-medical waste is handled without any adverse effect to human health and the environment and in accordance with these rules;
- (b) make a provision within the premises for a safe, ventilated and secured location for storage of segregated biomedical waste in colored bags or containers in the manner as specified in Schedule I, to ensure that there shall be no secondary handling, pilferage of recyclables or inadvertent scattering or spillage by animals and the bio-medical waste from such place or premises shall be directly transported in the manner as prescribed in these rules to the common bio-medical waste treatment facility or for the appropriate treatment and disposal, as the case may be, in the manner as prescribed in Schedule I;
- (c) pre-treat the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilisation on-site in the manner as prescribed by the World Health Organisation (WHO) guidelines on Safe management of wastes from health care activities and WHO Blue Book, 2014 and then sent to the Common biomedical waste treatment and disposal facility for final disposal;
- (d) phase out use of chlorinated plastic bags (excluding blood bags, Urine bags, effluent bags, abdominal bags, and chest drainage bags.) and gloves by the 27<sup>th</sup> March, 2019.
- (e) dispose of solid waste other than bio-medical waste in accordance with the provisions of respective waste management rules made under the relevant laws and amended from time to time;
- (f) not to give treated bio-medical waste with municipal solid waste;

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- (g) provide training to all its health care workers and others, involved in handling of bio medical waste at the time of induction and thereafter at least once every year and the details of training programmes conducted, number of personnel trained and number of personnel not undergone any training shall be provided in the Annual Report;
- (h) immunise all its health care workers and others, involved in handling of bio-medical waste for protection against diseases including Hepatitis B and Tetanus that are likely to be transmitted by handling of bio-medical waste, in the manner as prescribed in the National Immunisation Policy or the guidelines of the Ministry of Health and Family Welfare issued from time to time;
- (i) establish a Bar- Code System for bags or containers containing bio-medical waste to be sent out of the premises or for the further treatment and disposal in accordance with the guidelines issued by the Central Pollution Control Board by 27<sup>th</sup> March, 2019;
- (j) ensure segregation of liquid chemical waste at source and ensure pre-treatment or neutralisation prior to mixing with other effluent generated from health care facilities;
- (k) ensure treatment and disposal of liquid waste in accordance with the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);
- (l) ensure occupational safety of all its health care workers and others involved in handling of biomedical waste by providing appropriate and adequate personal protective equipment;
- (m) conduct health check-up at the time of induction and at least once in a year for all its health care workers and others involved in handling of bio- medical waste and maintain the records for the same;
- (n) in case of all bedded health care units, maintain and update on day to day basis the bio-medical waste management register and display the monthly record on its website according to the bio-medical waste generated in terms of category and colour coding as specified in Schedule I;
- (o) report major accidents including accidents caused by fire hazards, blasts during handling of biomedical waste and the remedial action taken and the records relevant thereto, (including nil report) in Form I to the prescribed authority and also along with the annual report;
- (p) in case of all bedded health care facilities (any number of beds), make available the annual report on its web-site within a period of two years from the date of publication of Bio-Medical Waste Management (Amendment) Rules, 2018;
- (q) inform the prescribed authority immediately in case the operator of a facility does not collect the bio-medical waste within the intended time or as per the agreed time;
- (r) establish a system to review and monitor the activities related to bio-medical waste management, either through an existing committee or by forming a new committee and the Committee shall meet once in every six months and the record of the minutes of the meetings of this committee shall be submitted

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along with the annual report to the prescribed authority and the healthcare establishments having less than thirty beds shall designate a qualified person to review and monitor the activities relating to bio-medical waste management within that establishment and submit the annual report;

- (s) maintain all record for operation of incineration, hydro or autoclaving etc., for a period of five years;
- (t) existing incinerators to achieve the standards for treatment and disposal of bio-medical waste as specified in Schedule II for retention time in secondary chamber and Dioxin and Furans within two years from the date of this notification.

**5. Duties of the operator of a common bio-medical waste treatment and disposal facility. -It shall be the duty of every operator to -**

- (a) take all necessary steps to ensure that the bio-medical waste collected from the occupier is transported, handled, stored, treated and disposed of, without any adverse effect to the human health and the environment, in accordance with these rules and guidelines issued by the Central Government or, as the case may be, the central pollution control board from time to time;
- (b) ensure timely collection of bio-medical waste from the occupier as prescribed under these rules;
- (c) establish bar coding and global positioning system for handling of bio- medical waste in accordance with the guidelines issued by the Central Pollution Control Board 27<sup>th</sup> March, 2019”
- (d) inform the prescribed authority immediately regarding the occupiers which are not handing over the segregated bio-medical waste in accordance with these rules;
- (e) provide training for all its workers involved in handling of bio-medical waste at the time of induction and at least once a year thereafter;
- (f) assist the occupier in training conducted by them for bio-medical waste management;
- (g) undertake appropriate medical examination at the time of induction and at least once in a year and immunise all its workers involved in handling of bio-medical waste for protection against diseases, including Hepatitis B and Tetanus, that are likely to be transmitted while handling bio-medical waste and maintain the records for the same;
- (h) ensure occupational safety of all its workers involved in handling of bio-medical waste by providing appropriate and adequate personal protective equipment;
- (i) report major accidents including accidents caused by fire hazards, blasts during handling of biomedical waste and the remedial action taken and the records relevant thereto, (including nil report) in Form I to the prescribed authority **and also** along with the annual report;
- (i) maintain a log book for each of its treatment equipment according to weight of batch; categories of waste treated; time, date and duration of treatment cycle and total hours of operation;

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- (k) allow occupier, who are giving waste for treatment to the operator, to see whether the treatment is carried out as per the rules;
- (l) shall display details of authorisation, treatment, annual report etc. on its web-site;
- (m) after ensuring treatment by autoclaving or microwaving followed by mutilation or shredding, whichever is applicable, the recyclables from the treated bio-medical wastes such as plastics and glass, shall be given to recyclers having valid consent or authorisation or registration from the respective State Pollution Control Board or Pollution Control Committee;
- (n) supply non-chlorinated plastic coloured bags to the occupier on chargeable basis, if required;
- (o) common bio-medical waste treatment facility shall ensure collection of biomedical waste on holidays also;
- (p) maintain all record for operation of incineration, hydro or autoclaving for a period of five years; and
- (q) upgrade existing incinerators to achieve the standards for retention time in secondary chamber and Dioxin and Furans within two years from the date of this notification.

6. **Duties of authorities.** -The Authority specified in column (2) of Schedule-III shall perform the duties as specified in column (3) thereof in accordance with the provisions of these rules.

7. **Treatment and disposal.** - (1) Bio-medical waste shall be treated and disposed of in accordance with Schedule I, and in compliance with the standards provided in Schedule-II by the health care facilities and common bio-medical waste treatment facility.

- (2) Occupier shall hand over segregated waste as per the Schedule-I to common bio-medical waste treatment facility for treatment, processing and final disposal:

Provided that the lab and highly infectious bio-medical waste generated shall be pre-treated by equipment like autoclave or microwave.

- (3) No occupier shall establish on-site treatment and disposal facility, if a service of common biomedical waste treatment facility is available at a distance of seventy-five kilometre.
- (4) In cases where service of the common bio-medical waste treatment facility is not available, the Occupiers shall set up requisite biomedical waste treatment equipment like incinerator, autoclave or microwave, shredder prior to commencement of its operation, as per the authorisation given by the prescribed authority.
- (5) Any person including an occupier or operator of a common bio medical waste treatment facility, intending to use new technologies for treatment of bio medical waste other than those listed in Schedule I shall request the Central Government for laying down the standards or operating parameters.

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- (6) On receipt of a request referred to in sub-rule (5), the Central Government may determine the standards and operating parameters for new technology which may be published in Gazette by the Central Government.
- (7) Every operator of common bio-medical waste treatment facility shall set up requisite biomedical waste treatment equipment like incinerator, autoclave or microwave, shredder and effluent treatment plant as a part of treatment, prior to commencement of its operation.
- (8) Every occupier shall phase out use of chlorinated plastic bags within two years from the date of publication of these rules and after two years from such publication of these rules, the chlorinated plastic bags shall not be used for storing and transporting of bio-medical waste and the occupier or operator of a common bio-medical waste treatment facility shall not dispose of such plastics by incineration and the bags used for storing and transporting biomedical waste shall be in compliance with the Bureau of Indian Standards. Till the Standards are published, the carry bags shall be as per the Plastic Waste Management Rules, 2016”
- (9) After ensuring treatment by autoclaving or microwaving followed by mutilation or shredding, whichever is applicable, the recyclables from the treated bio-medical wastes such as plastics and glass shall be given to such recyclers having valid authorisation or registration from the respective prescribed authority.
- (10) The Occupier or Operator of a common bio-medical waste treatment facility shall maintain a record of recyclable wastes referred to in sub-rule (9) which are auctioned or sold and the same shall be submitted to the prescribed authority as part of its annual report. The record shall be open for inspection by the prescribed authorities.
- (11) The handling and disposal of all the mercury waste and lead waste shall be in accordance with the respective rules and regulations.

**8. Segregation, packaging, transportation and storage. - (1)** No untreated bio-medical waste shall be mixed with other wastes.

- (2) The bio-medical waste shall be segregated into containers or bags at the point of generation in accordance with Schedule I prior to its storage, transportation, treatment and disposal.
- (3) The containers or bags referred to in sub-rule (2) shall be labelled as specified in Schedule IV.
- (4) Bar code and global positioning system shall be added by the Occupier and common bio-medical waste treatment facility in one-year time.
- (5) The operator of common bio-medical waste treatment facility shall transport the bio-medical waste from the premises of an occupier to any off-site bio-medical waste treatment facility only in the vehicles having label as provided in part 'A' of the Schedule IV along with necessary information as specified in part 'B' of the Schedule IV.

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- (6) The vehicles used for transportation of bio-medical waste shall comply with the conditions if any stipulated by the State Pollution Control Board or Pollution Control Committee in addition to the requirement contained in the Motor Vehicles Act, 1988 (59 of 1988), if any or the rules made there under for transportation of such infectious waste.
- (7) Untreated human anatomical waste, animal anatomical waste, soiled waste and, biotechnology waste shall not be stored beyond a period of forty –eight hours:

Provided that in case for any reason it becomes necessary to store such waste beyond such a period, the occupier shall take appropriate measures to ensure that the waste does not adversely affect human health and the environment and inform the prescribed authority along with the reasons for doing so.

- (8) Microbiology waste and all other clinical laboratory waste shall be pre-treated by sterilisation to Log 6 or disinfection to Log 4, as per the World Health Organisation guidelines before packing and sending to the common bio-medical waste treatment facility.

**9. Prescribed authority** -(1) The prescribed authority for implementation of the provisions of these rules shall be the State Pollution Control Boards in respect of States and Pollution Control Committees in respect of Union territories.

- (2) The prescribed authority for enforcement of the provisions of these rules in respect of all health care establishments including hospitals, nursing homes, clinics, dispensaries, veterinary institutions, animal houses, pathological laboratories and blood banks of the Armed Forces under the Ministry of Defence shall be the Director General, Armed Forces Medical Services, who shall function under the supervision and control of the Ministry of Defence.
- (3) The prescribed authorities shall comply with the responsibilities as stipulated in Schedule III of these rules.

**10. Procedure for authorisation.**-Every occupier or operator handling bio-medical waste, irrespective of the quantity shall make an application in Form II to the prescribed authority i.e. State Pollution Control Board and Pollution Control Committee, as the case may be, for grant of authorisation and the prescribed authority shall grant the provisional authorisation in Form III and the validity of such authorisation for bedded health care facility and operator of a common facility shall be synchronised with the validity of the consents.

- (1) The authorisation shall be one time for non-bedded occupiers and the authorisation in such cases shall be deemed to have been granted, if not objected by the prescribed authority within a period of ninety days from the date of receipt of duly completed application along with such necessary documents.
- (2) In case of refusal of renewal, cancellation or suspension of the authorisation by the prescribed authority, the reasons shall be recorded in writing:

Provided that the prescribed authority shall give an opportunity of being heard to the applicant before such refusal of the authorisation.

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- (3) Every application for authorisation shall be disposed of by the prescribed authority within a period of ninety days from the date of receipt of duly completed application along with such necessary documents, failing which it shall be deemed that the authorisation is granted under these rules.
- (4) In case of any change in the bio-medical waste generation, handling, treatment and disposal for which authorisation was earlier granted, the occupier or operator shall intimate to the prescribed authority about the change or variation in the activity and shall submit a fresh application in Form II for modification of the conditions of authorisation.

**11. Advisory Committee.**-(1) Every State Government or Union territory Administration shall constitute an Advisory Committee for the respective State or Union territory under the chairmanship of the respective health secretary to oversee the implementation of the rules in the respective state and to advise any improvements and the Advisory Committee shall include representatives from the Departments of Health, Environment, Urban Development, Animal Husbandry and Veterinary Sciences of that State Government or Union territory Administration, State Pollution Control Board or Pollution Control Committee, urban local bodies or local bodies or Municipal Corporation, representatives from Indian Medical Association, common bio-medical waste treatment facility and non-governmental organisation.

- (2) Notwithstanding anything contained in sub-rule (1), the Ministry of Defence shall constitute the Advisory Committee (Defence) under the chairmanship of Director General of Health Services of Armed Forces consisting of representatives from the Ministry of Defence, Ministry of Environment, Forest and Climate Change, Central Pollution Control Board, Ministry of Health and Family Welfare, Armed Forces Medical College or Command Hospital.
- (3) The Advisory Committee constituted under sub-rule (1) and (2) shall meet at least once in six months and review all matters related to implementation of the provisions of these rules in the State and Armed Forces Health Care Facilities, as the case may be.
- (4) The Ministry of Health and Defence may co-opt representatives from the other Governmental and non-governmental organisations having expertise in the field of bio-medical waste management.

**12. Monitoring of implementation of the rules in health care facilities -** (1) The Ministry of Environment, Forest and Climate Change shall review the implementation of the rules in the country once in a year through the State Health Secretaries and Chairmen or Member Secretary of State Pollution Control Boards and Central Pollution Control Board and the Ministry may also invite experts in the field of bio-medical waste management, if required.

- (2) The Central Pollution Control Board shall monitor the implementation of these rules in respect of all the Armed Forces health care establishments under the Ministry of Defence.
- (3) The Central Pollution Control Board along with one or more representatives of the Advisory Committee constituted under sub-rule (2) of rule 11, may inspect any Armed Forces health care establishments after prior intimation to the Director General Armed Forces Medical Services.



- (4) Every State Government or Union territory Administration shall constitute District Level Monitoring Committee in the districts under the chairmanship of District Collector or District Magistrate or Deputy Commissioner or Additional District Magistrate to monitor the compliance of the provisions of these rules in the health care facilities generating bio-medical waste and in the common bio-medical waste treatment and disposal facilities, where the bio-medical waste is treated and disposed of.
- (5) The District Level Monitoring Committee constituted under sub-rule (4) shall submit its report once in six months to the State Advisory Committee and a copy thereof shall also be forwarded to State Pollution Control Board or Pollution Control Committee concerned for taking further necessary action.
- (6) The District Level Monitoring Committee shall comprise of District Medical Officer or District Health Officer, representatives from State Pollution Control Board or Pollution Control Committee, Public Health Engineering Department, local bodies or municipal corporation, Indian Medical Association, common bio-medical waste treatment facility and registered nongovernmental organisations working in the field of bio-medical waste management and the Committee may co-opt other members and experts, if necessary and the District Medical Officer shall be the Member Secretary of this Committee.

**13. Annual Report.**-(1) Every occupier or operator of common bio-medical waste treatment facility shall submit an annual report to the prescribed authority in Form-IV, on or before the 30<sup>th</sup> June of every year.

- (2) The prescribed authority shall compile, review and analyse the information received and send this information to the Central Pollution Control Board in Form IVA before the 31<sup>st</sup> July of every year.
- (3) The Central Pollution Control Board shall compile, review and analyse the information received and send this information, along with its comments or suggestions or observations to the Ministry of Environment, Forest and Climate Change on or before 31<sup>st</sup> August every year.
- (4) The Annual Reports shall also be available online on the websites of Occupiers, State Pollution Control Boards and Central Pollution Control Board.

**14. Maintenance of records -** (1) Every authorised person shall maintain records related to the generation, collection, reception, storage, transportation, treatment, disposal or any other form of handling of bio-medical waste, for a period of five years, in accordance with these rules and guidelines issued by the Central Government or the Central Pollution Control Board or the prescribed authority as the case may be.

- (2) All records shall be subject to inspection and verification by the prescribed authority or the Ministry of Environment, Forest and Climate Change at any time.

**15. Accident reporting. -** (1) In case of any major accident at any institution or facility or any other site while handling bio-medical waste, the authorised person shall intimate immediately to the prescribed authority about such accident and forward a report within twenty-four hours in writing regarding the remedial steps taken in Form I.



(2) Information regarding all other accidents and remedial steps taken shall be provided in the annual report in accordance with rule 13 by the occupier.

**16. Appeal.**-(1) Any person aggrieved by an order made by the prescribed authority under these rules may, within a period of thirty days from the date on which the order is communicated to him, prefer an appeal in Form V to the Secretary (Environment) of the State Government or Union territory administration .

(2) Any person aggrieved by an order of the Director General Armed Forces Medical Services under these rules may, within thirty days from the date on which the order is communicated to him, prefer an appeal in Form V to the Secretary, Ministry of Environment, Forest and Climate Change.

(3) The authority referred to in sub-para (1) and (2) as the case may be, may entertain the appeal after the expiry of the said period of thirty days, if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

(4) The appeal shall be disposed of within a period of ninety days from the date of its filing.

**17. Site for common bio-medical waste treatment and disposal facility.**-(1) Without prejudice to rule 5 of these rules, the department in the business allocation of land assignment shall be responsible for providing suitable site for setting up of common biomedical waste treatment and disposal facility in the State Government or Union territory Administration.

(2) The selection of site for setting up of such facility shall be made in consultation with the prescribed authority, other stakeholders and in accordance with guidelines published by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board.

**18. Liability of the occupier, operator of a facility.**- (1) The occupier or an operator of a common bio-medical waste treatment facility shall be liable for all the damages caused to the environment or the public due to improper handling of bio- medical wastes.

(2) The occupier or operator of common bio-medical waste treatment facility shall be liable for action under section 5 and section 15 of the Act, in case of any violation.

**SCHEDULE I [See rules 3 (e), 4(b), 7(1), 7(2), 7(5), 7 (6) and 8(2)] Part-1**

**Biomedical wastes categories and their segregation, collection, treatment, processing and disposal options**

Category	Type of Waste	Type of Bag or Container to be used	Treatment and Disposal options
(1)	(2)	(3)	(4)

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Yellow	<p><b>(a) Human Anatomical Waste:</b> Human tissues, organs, body parts and fetus below the viability period (as per the Medical Termination of Pregnancy Act 1971, amended from time to time).</p>	Yellow coloured non-chlorinated plastic bags	Incineration or Plasma Pyrolysis or deep burial*
	<p><b>(b) Animal Anatomical Waste :</b> Experimental animal carcasses, body parts, organs, tissues, including the waste generated from animals used in experiments or testing in veterinary hospitals or colleges or animal houses.</p>		
	<p><b>(c) Soiled Waste:</b> Items contaminated with blood, body fluids like dressings, plaster casts, cotton swabs and bags containing residual or discarded blood and blood components.</p>		<p>Incineration or Plasma Pyrolysis or deep burial*</p> <p>In absence of above facilities, autoclaving or micro-waving/ hydroclaving followed by shredding or mutilation or combination of sterilization and shredding. Treated waste to be sent for energy recovery.</p>
	<p><b>(d) Expired or Discarded Medicines:</b> Pharmaceutical waste like antibiotics, cytotoxic drugs including all items contaminated with cytotoxic drugs along with glass or plastic ampoules, vials etc.</p>	Yellow coloured non-chlorinated plastic bags or containers	<p>Expired cytotoxic drugs and items contaminated with cytotoxic drugs to be returned back to the manufacturer or supplier for incineration at temperature &gt;1200 °C or to common bio-medical waste treatment facility or hazardous waste treatment, storage and disposal facility for incineration at &gt;1200°C or Encapsulation or Plasma Pyrolysis at &gt;1200°C.</p> <p>All other discarded medicines shall be either sent back to manufacturer or disposed by incineration.</p>

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	<b>(e) Chemical Waste:</b> Chemicals used in production of biological and used or discarded disinfectants.	Yellow coloured containers or non-chlorinated plastic bags	Disposed of by incineration or Plasma Pyrolysis or Encapsulation in hazardous waste treatment, storage and disposal facility.
	<b>(f) Chemical Liquid Waste :</b> Liquid waste generated due to use of chemicals in production of biological and used or discarded disinfectants, Silver X-ray film developing liquid, discarded Formalin, infected secretions, aspirated body fluids, liquid from laboratories and floor washings, cleaning, house-keeping and disinfecting activities etc.	Separate collection system leading to effluent treatment system	After resource recovery, the chemical liquid waste shall be pre-treated before mixing with other wastewater. The combined discharge shall conform to the discharge norms given in Schedule-II.
	<b>(g) Discarded linen, mattresses, beddings contaminated with blood or body fluid routine mask and gown"</b>	Non-chlorinated yellow plastic bags or suitable packing material	Non- chlorinated chemical disinfection followed by incineration or Plasma Pyrolysis or for energy recovery.  In absence of above facilities, shredding or mutilation or combination of sterilization and shredding. Treated waste to be sent for energy recovery or incineration or Plasma Pyrolysis.

	<p><b>(h) Microbiology, Biotechnology and other clinical laboratory waste:</b> Blood bags, Laboratory cultures, stocks or specimens of micro-organisms, live or attenuated vaccines, human and animal cell cultures used in research, industrial laboratories, production of biological, residual toxins, dishes and devices used for cultures.</p>	<p>Autoclave or Microwave or Hydroclave safe plastic bags or containers</p>	<p>Pre-treat to sterilize with non-chlorinated chemicals on-site as per World Health Organisation guidelines on Safe management of wastes from health care activities and WHO Blue book, 2014 and thereafter sent for incineration</p>
Red	<p><b>Contaminated Waste (Recyclable)</b> (a) Wastes generated from disposable items such as tubing, bottles, intravenous tubes and sets, catheters, urine bags, syringes (without needles and <i>fixed needle syringes</i>) and vaccutainers with (their needles cut) and gloves.</p>	<p>Red coloured non-chlorinated plastic bags or containers</p>	<p>Autoclaving or micro-waving/hydroclaving followed by shredding or mutilation or combination of sterilization and shredding. Treated waste to be sent to registered or authorized recyclers or for energy recovery or plastics to diesel or fuel oil or for road making, whichever is possible.</p> <p>Plastic waste should not be sent to landfill sites.</p>
White (Translucent)	<p><b>Waste sharps including Metals:</b> Needles, syringes with fixed needles, needles from needle tip cutter or burner, scalpels, blades, or any other contaminated sharp object that may cause puncture and cuts. This includes both used, discarded and contaminated metal sharps</p>	<p>Puncture proof, Leak proof, tamper proof containers</p>	<p>Autoclaving or Dry Heat Sterilization followed by shredding or mutilation or encapsulation in metal container or cement concrete; combination of shredding cum autoclaving; and sent for final disposal to iron foundries (having consent to operate from the State Pollution Control Boards or Pollution Control Committees) or sanitary landfill or designated concrete waste sharp pit.</p>



Blue	<b>(a) Glassware:</b> Broken or discarded and contaminated glass including medicine vials and ampoules except those contaminated with cytotoxic wastes.	Puncture proof and leak proof boxes or containers with blue colored marking	Disinfection (by soaking the washed glass waste after cleaning with detergent and Sodium Hypochlorite treatment) or through autoclaving or microwaving or hydroclaving and then sent for recycling.
	<b>(b) Metallic Body Implants</b>	Puncture proof and leak proof boxes or containers with blue colored marking	

\*Disposal by deep burial is permitted only in rural or remote areas where there is no access to common bio-medical waste treatment facility. This will be carried out with prior approval from the prescribed authority and as per the Standards specified in Schedule-II. The deep burial facility shall be located as per the provisions and guidelines issued by Central Pollution Control Board from time to time.

#### Part -2

- (1) All plastic bags shall be as per BIS standards as and when published, till then the prevailing Plastic Waste Management Rules shall be applicable.
- (2) Chemical treatment using at least 1% to 2% Sodium Hypochlorite having 30% residual chlorine for twenty minutes or any other equivalent chemical reagent that should demonstrate  $\text{Log}_{10}4$  reduction efficiency for microorganisms as given in Schedule- III.
- (3) Mutilation or shredding must be to an extent to prevent unauthorized reuse.
- (4) There will be no chemical pretreatment before incineration, except for microbiological, lab and highly infectious waste.
- (5) Incineration ash (ash from incineration of any bio-medical waste) shall be disposed through hazardous waste treatment, storage and disposal facility, if toxic or hazardous constituents are present beyond the prescribed limits as given in the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 or as revised from time to time.
- (6) Dead Fetus below the viability period (as per the Medical Termination of Pregnancy Act 1971, amended from time to time) can be considered as human anatomical waste. Such waste should be handed over to the operator of common bio-medical waste treatment and disposal facility in yellow bag with a copy of the official Medical Termination of Pregnancy certificate from the Obstetrician or the Medical Superintendent of hospital or healthcare establishment.

- (7) Cytotoxic drug vials shall not be handed over to unauthorised person under any circumstances. These shall be sent back to the manufactures for necessary disposal at a single point. As a second option, these may be sent for incineration at common bio-medical waste treatment and disposal facility or TSDFs or plasma pyrolysis at temperature  $>1200^{\circ}\text{C}$ .
- (8) Residual or discarded chemical wastes, used or discarded disinfectants and chemical sludge can be disposed at hazardous waste treatment, storage and disposal facility. In such case, the waste should be sent to hazardous waste treatment, storage and disposal facility through operator of common bio-medical waste treatment and disposal facility only.
- (9) On-site pre-treatment of laboratory waste, microbiological waste, blood samples, blood bags should be disinfected or sterilized as per the Guidelines of World Health Organisation or National AIDS Control Organisation and then given to the common bio-medical waste treatment and disposal facility.
- (10) Installation of in-house incinerator is not allowed. However in case there is no common biomedical facility nearby, the same may be installed by the occupier after taking authorisation from the State Pollution Control Board.
- (11) Syringes should be either mutilated or needles should be cut and or stored in tamper proof, leak proof and puncture proof containers for sharps storage. Wherever the occupier is not linked to a disposal facility it shall be the responsibility of the occupier to sterilize and dispose in the manner prescribed.
- (12) Bio-medical waste generated in households during healthcare activities shall be segregated as per these rules and handed over in separate bags or containers to municipal waste collectors. Urban Local Bodies shall have tie up with the common bio-medical waste treatment and disposal facility to pickup this waste from the Material Recovery Facility (MRF) or from the house hold directly, for final disposal in the manner as prescribed in this Schedule.

**SCHEDULE II [See rule 4(t), 7(1) and 7(6)]**

**STANDARDS FOR TREATMENT AND DISPOSAL OF BIO-MEDICALWASTES**

**1. STANDARDS FOR INCINERATION.-**

All incinerators shall meet the following operating and emission standards-

**A. Operating Standards**

1). Combustion efficiency (CE) shall be at least 99.00%.

2). The Combustion efficiency is computed as follows:

$$\text{C.E.} = \frac{\% \text{CO}_2}{\% \text{CO}_2 + \% \text{CO}} \times 100$$

3). The temperature of the primary chamber shall be a minimum of 800 °C and the secondary chamber shall be minimum of 1050°C + or - 50°C.

4). The secondary chamber gas residence time shall be at least two seconds.

**B. Emission Standards**

Sl. No.	Parameter	Standards	
		(3)	(4)
		<b>Limiting concentration in mg/ Nm<sup>3</sup> unless stated</b>	<b>Sampling Duration in minutes, unless stated</b>
1.	Particulate matter	50	30 or 1NM <sup>3</sup> of sample volume, whichever is more
2.	Nitrogen Oxides NO and NO <sub>2</sub> expressed asNO <sub>2</sub>	400	30 for online sampling or grab sample
3.	HCl	50	30 or 1NM <sup>3</sup> of sample volume, whichever is more
4.	Total Dioxins and Furans	0.1ngTEQ/Nm <sup>3</sup> (at 11% O <sub>2</sub> )	8 hours or 5NM <sup>3</sup> of sample volume, whichever is more
5.	Hg and its compounds	0.05	2 hours or 1NM <sup>3</sup> of sample volume, whichever is more



**C. Stack Height:** Minimum stack height shall be 30 meters above the ground and shall be attached with the necessary monitoring facilities as per requirement of monitoring of 'general parameters' as notified under the Environment (Protection) Act, 1986 and in accordance with the Central Pollution Control Board Guidelines of Emission Regulation Part-III.

**Note:**

- (a) The existing incinerators shall comply with the above within a period of two years from the date of the notification.
- (b) The existing incinerators shall comply with the standards for Dioxins and Furans of  $0.1 \text{ ngTEQ/Nm}^3$ , as given below within two years from the date of commencement of these rules.
- (c) All upcoming common bio-medical waste treatment facilities having incineration facility or captive incinerator shall comply with standards for Dioxins and Furans.
- (d) The existing secondary combustion chambers of the incinerator and the pollution control devices shall be suitably retrofitted, if necessary, to achieve the emission limits.
- (e) Wastes to be incinerated shall not be chemically treated with any chlorinated disinfectants.
- (f) Ash from incineration of biomedical waste shall be disposed of at common hazardous waste treatment and disposal facility. However, it may be disposed of in municipal landfill, if the toxic metals in incineration ash are within the regulatory quantities as defined under the Hazardous Waste (Management and Handling and Transboundary Movement) Rules, 2008 as amended from time to time.
- (g) Only low Sulphur fuel like Light Diesel Oil or Low Sulphur Heavy Stock or Diesel, Compressed Natural Gas, Liquefied Natural Gas or Liquefied Petroleum Gas shall be used as fuel in the incinerator.
- (h) The occupier or operator of a common bio-medical waste treatment facility shall monitor the stack gaseous emissions (under optimum capacity of the incinerator) once in three months through a laboratory approved under the Environment (Protection) Act, 1986 and record of such analysis results shall be maintained and submitted to the prescribed authority. In case of dioxins and furans, monitoring should be done once in a year.
- (i) The occupier or operator of the common bio-medical waste treatment facility shall install continuous emission monitoring system for the parameters as stipulated by State Pollution Control Board or Pollution Control Committees in authorisation and transmit the data real time to the servers at State Pollution Control Board or Pollution Control Committees and Central Pollution Control Board.
- (j) All monitored values shall be corrected to 11% Oxygen on dry basis.
- (k) Incinerators (combustion chambers) shall be operated with such temperature, retention time and turbulence, as to achieve Total Organic Carbon content in the slag and bottom ashes less than 3% or their loss on ignition shall be less than 5% of the dry weight.



- (l) The occupier or operator of a common bio-medical waste incinerator shall use combustion gas analyzer to measure CO<sub>2</sub>, CO and O<sub>2</sub>.

**2. Operating and Emission Standards for Disposal by Plasma Pyrolysis or Gasification:**

**A. Operating Standards:**

All the operators of the Plasma Pyrolysis or Gasification shall meet the following operating and emission standards:

- 1) Combustion Efficiency (CE) shall be at least 99.99%.

- 2) The Combustion Efficiency is computed as follows.

$$\frac{\% \text{ CO}_2}{\% \text{ CO}_2 + \% \text{ CO}} \times 100 \quad \text{C.E} =$$

- 3) The temperature of the combustion chamber after plasma gasification shall be 1050 ± 50 °C with gas residence time of at least 2(two) second, with minimum 3 % Oxygen in the stack gas.
- 4) The Stack height should be minimum of 30 m above ground level and shall be attached with the necessary monitoring facilities as per requirement of monitoring of 'general parameters' as notified under the Environment (Protection) Act, 1986 and in accordance with the CPCB Guidelines of Emission Regulation Part-III.

**B. Air Emission Standards and Air Pollution Control Measures**

- (i) Emission standards for incinerator, notified at SI No.1 above in this Schedule, and revised from time to time, shall be applicable for the Plasma Pyrolysis or Gasification also.
- (ii) Suitably designed air pollution control devices shall be installed or retrofitted with the 'Plasma Pyrolysis or Gasification to achieve the above emission limits, if necessary.
- (iii) Wastes to be treated using Plasma Pyrolysis or Gasification shall not be chemically treated with any chlorinated disinfectants and chlorinated plastics shall not be treated in the system.

**C. Disposal of Ash Vitrified Material:** The ash or vitrified material generated from the 'Plasma Pyrolysis or Gasification shall be disposed off in accordance with the Hazardous Waste (Management, Handling and Transboundary Movement) Rules 2008 and revisions made thereafter in case the constituents exceed the limits prescribed under Schedule II of the said Rules or else in accordance with the provisions of the Environment (Protection) Act, 1986, whichever is applicable.

### 3. STANDARDS FOR AUTOCLAVING OF BIO-MEDICAL WASTE.-

The autoclave should be dedicated for the purposes of disinfecting and treating bio-medical waste.

- (1) When operating a gravity flow autoclave, medical waste shall be subjected to:
  - (i) a temperature of not less than 121° C and pressure of 15 pounds per square inch (psi) for an autoclave residence time of not less than 60 minutes; or
  - (ii) a temperature of not less than 135° C and a pressure of 31 psi for an autoclave residence time of not less than 45 minutes; or
  - (iii) a temperature of not less than 149° C and a pressure of 52 psi for an autoclave residence time of not less than 30 minutes.
- (2) When operating a vacuum autoclave, medical waste shall be subjected to a minimum of three pre-vacuum pulse to purge the autoclave of all air. The air removed during the pre-vacuum, cycle should be decontaminated by means of HEPA and activated carbon filtration, steam treatment, or any other method to prevent release of pathogen. The waste shall be subjected to the following:
  - (i) a temperature of not less than 121°C and pressure of 15 psi per an autoclave residence time of not less than 45 minutes; or
  - (ii) a temperature of not less than 135°C and a pressure of 31 psi for an autoclave residence time of not less than 30 minutes;
- (3) Medical waste shall not be considered as properly treated unless the time, temperature and pressure indicators indicate that the required time, temperature and pressure were reached during the autoclave process. If for any reasons, time temperature or pressure indicator indicates that the required temperature, pressure or residence time was not reached, the entire load of medical waste must be autoclaved again until the proper temperature, pressure and residence time were achieved.
- (4) **Recording of operational parameters:** Each autoclave shall have graphic or computer recording devices which will automatically and continuously monitor and record dates, time of day, load identification number and operating parameters throughout the entire length of the autoclave cycle.
- (5) **Validation test for autoclave:** The validation test shall use four biological indicator strips, one shall be used as a control and left at room temperature, and three shall be placed in the approximate center of three containers with the waste. Personal protective equipment (gloves, face mask and coveralls) shall be used when opening containers for the purpose of placing the biological indicators. At least one of the containers with a biological indicator should be placed in the most difficult location for steam to penetrate, generally the bottom center of the waste pile. The occupier or operator shall conduct this test three consecutive times to define the minimum operating conditions. The temperature, pressure and residence time at which all biological indicator vials or strips for three consecutive tests show complete inactivation of the spores shall define the minimum operating conditions for the autoclave. After determining the minimum temperature, pressure and residence

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time, the occupier or operator of a common biomedical waste treatment facility shall conduct this test once in three months and records in this regard shall be maintained.

- (6) **Routine Test:** A chemical indicator strips or tape that changes colour when a certain temperature is reached can be used to verify that a specific temperature has been achieved. It may be necessary to use more than one strip over the waste package at different locations to ensure that the inner content of the package has been adequately autoclaved. The occupier or operator of a common bio medical waste treatment facility shall conduct this test during autoclaving of each batch and records in this regard shall be maintained.
- (7) **Spore testing:** The autoclave should completely and consistently kill the approved biological indicator at the maximum design capacity of each autoclave unit. Biological indicator for autoclave shall be *Geobacillusstearothermophilus* spores using vials or spore Strips; with at least  $1 \times 10^6$  spores. Under no circumstances will an autoclave have minimum operating parameters less than a residence time of 30 minutes, a temperature less than  $121^\circ \text{C}$  or a pressure less than 15 psi. The occupier or operator of a common bio medical waste treatment and disposal facility shall conduct this test at least once in every week and records in this regard shall be maintained.

#### 4. STANDARDS OF MICROWAVING-

- (1) Microwave treatment shall not be used for cytotoxic, hazardous or radioactive wastes, contaminated animal carcasses, body parts and large metal items.
- (2) The microwave system shall comply with the efficacy test or routine tests and a performance guarantee may be provided by the supplier before operation of the limit.
- (3) The microwave should completely and consistently kill the bacteria and other pathogenic organisms that are ensured by approved biological indicator at the maximum design capacity of each microwave unit. Biological indicators for microwave shall be *Bacillus atrophaeus* spores using vials or spore strips with at least  $1 \times 10^4$  spores per detachable strip. The biological indicator shall be placed with waste and exposed to same conditions as the waste during a normal treatment cycle.

5. **STANDARDS FOR DEEP BURIAL-** (1) A pit or trench should be dug about two meters deep. It should be half filled with waste, then covered with lime within 50 cm of the surface, before filling the rest of the pit with soil.

- (2) It must be ensured that animals do not have any access to burial sites. Covers of galvanised iron or wire meshes may be used.
- (3) On each occasion, when wastes are added to the pit, a layer of 10 cm of soil shall be added to cover the wastes.
- (4) Burial must be performed under close and dedicated supervision.
- (5) The deep burial site should be relatively impermeable and no shallow well should be close to the site.

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- (6) The pits should be distant from habitation, and located so as to ensure that no contamination occurs to surface water or ground water. The area should not be prone to flooding or erosion.
- (7) The location of the deep burial site shall be authorised by the prescribed authority.
- (8) The institution shall maintain a record of all pits used for deep burial.
- (9) The ground water table level should be a minimum of six meters below the lower level of deep burial pit.

#### 6. STANDARDS FOR EFFICACY OF CHEMICAL DISINFECTION

Microbial inactivation efficacy is equated to "Log<sub>10</sub> kill" which is defined as the difference between the logarithms of number of test microorganisms before and after chemical treatment. Chemical disinfection methods shall demonstrate a 4 Log<sub>10</sub> reduction or greater for *Bacillus Subtilis* (ATCC 19659) in chemical treatment systems.

#### 7. STANDARDS FOR DRY HEAT STERILIZATION

Waste sharps can be treated by dry heat sterilization at a temperature not less than 185°C, at least for a residence period of 150 minutes in each cycle, which sterilization period of 90 minutes. There should be automatic recording system to monitor operating parameters.

##### (i) Validation test for Sharps sterilization unit

Waste sharps sterilization unit should completely and consistently kill the biological indicator *Geobacillus Stearothermophilus* or *Bacillus Atropheauspoers* using vials with at least log<sub>10</sub> 6 spores per ml. The test shall be carried out once in three months

##### (ii) Routine test

A chemical indicator strip or tape that changes colour when a certain temperature is reached can be used to verify that a specific temperature has been achieved. It may be necessary to use more than one strip over the waste to ensure that the inner content of the sharps has been adequately disinfected. This test shall be performed once in week and records in this regard shall be maintained.

#### 8. STANDARDS FOR LIQUID WASTE.-

- (1) The effluent generated or treated from the premises of occupier or operator of a common bio medical waste treatment and disposal facility, before discharge into the sewer should conform to the following limits-

PARAMETERS	PERMISSIBLE LIMITS
pH	6.5-9.0
Suspended solids	100 mg/l
Oil and grease	10 mg/l
BOD	30 mg/l
COD	250 mg/l
Bio-assay test	90% survival of fish after 96 hours in 100% effluent.

\*Note-

1. Above limits are applicable to the occupiers of Health Care Facilities (bedded) which are either connected with sewerage network without terminal sewage treatment plant or not connected to public sewers.
2. For discharge into public sewers with terminal facilities, the general standards as notified under the Environment (Protection) Act, 1986 (29 of 1986) shall be applicable.
3. Health Care Facilities having less than ten beds shall have to comply with the output discharge standard for liquid waste by 31<sup>st</sup> December, 2019.
4. Non-bedded occupiers shall dispose infectious liquid wastes only after treatment by disinfection as per Schedule – II (6) of the principal rules.”.

- (2) Sludge from Effluent Treatment Plant shall be given to common bio-medical waste treatment facility for incineration or to hazardous waste treatment, storage and disposal facility for disposal.

### Schedule III [See rule 6 and 9(3)]

#### List of Prescribed Authorities and the Corresponding Duties

Sl. No (1)	Authority (2)		Corresponding Duties (3)
1	Ministry of Environment, Forest and Climate Change, Government of India	(i)	Making Policies concerning bio-medical waste Management in the Country including notification of Rules and amendments to the Rules as and when required.
		(ii)	Providing financial assistance for training and awareness programmes on bio-medical waste management related activities to for the State Pollution Control Boards or Pollution Control Committees.
		(iii)	Facilitating financial assistance for setting up or up-gradation of common bio-medical waste treatment facilities.
		(iv)	Undertake or support operational research and assessment with reference to risks to environment and health due to bio-medical waste and previously unknown disposables and wastes from new types of equipment.
		(v)	Constitution of Monitoring Committee for implementation of the rules.
		(vi)	Hearing Appeals and give decision made in Form-V against order passed by the prescribed authorities.



		(vii)	Develop Standard manual for Trainers and Training.
		(viii)	Notify the standards or operating parameters for new technologies for treatment of bio medical waste other than those listed in Schedule- I.
2	Central or State Ministry of Health and Family Welfare, Central Ministry for Animal Husbandry and Veterinary or State Department of Animal Husbandry and Veterinary.		<p>(i) Grant of license to health care facilities or nursing homes or veterinary establishments with a condition to obtain authorisation from the prescribed authority for bio-medical waste management.</p> <p>(ii) Monitoring, Refusal or Cancellation of license for health care facilities or nursing homes or veterinary establishments for violations of conditions of authorisation or provisions under these Rules.</p> <p>(iii) Publication of list of registered health care facilities with regard to bio-medical waste generation, treatment and disposal.</p> <p>(iv) Undertake or support operational research and assessment with reference to risks to environment and health due to bio-medical waste and previously unknown disposables and wastes from new types of equipment.</p> <p>(v) Coordinate with State Pollution Control Boards for organizing training programmes to staff of health care facilities and municipal workers on bio-medical waste.</p> <p>(vi) Constitution of Expert Committees at National or State level for overall review and promotion of clean or new technologies for bio-medical waste management.</p> <p>(vii) Organizing or Sponsoring of trainings for the regulatory authorities and health care facilities on bio-medical waste management related activities.</p> <p>(viii) Sponsoring of mass awareness campaigns in electronic media and print media.</p>

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3	Ministry of Defence	(i)	Grant and renewal of authorisation to Armed Forces health care facilities or common bio-medical waste treatment facilities (Rule 10).
		(ii)	Conduct training courses for authorities dealing with management of bio-medical wastes in Armed Forces health care facilities or treatment facilities in association with State Pollution Control Boards or Pollution Control Committees or Central Pollution Control Board or Ministry of Environment, Forest and Climate Change.
		(iii)	Publication of inventory of occupiers and biomedical waste generation from Armed Forces health care facilities or occupiers
		(iv)	Constitution of Advisory Committee for implementation of the rules.
		(v)	Review of management of bio-medical waste generation in the Armed Forces health care facilities through its Advisory Committee (Rule 11).
		(vi)	Submission of annual report to Central Pollution Control Board within the stipulated time period (Rule 13).
		(vii)	Inspection and monitoring of Medical Inspection (MI) rooms, sick bays onboard ships or submarines, stations medical centres and field hospitals in forward locations operated by Director General, Armed Forces Medical Services.
4.	Central Pollution Control Board	(i)	Prepare Guidelines on bio-medical waste Management and submit to the Ministry of Environment, Forest and Climate Change.
		(ii)	Co-ordination of activities of State Pollution Control Boards or Pollution Control Committees on biomedical waste.
		(iii)	Conduct training courses for authorities dealing with management of bio-medical waste.
		(iv)	Lay down standards for new technologies for treatment and disposal of bio-medical waste (Rule 7) and prescribe specifications for treatment and disposal of bio-medical wastes (Rule 7).

		<ul style="list-style-type: none"> <li>(v) Lay down Criteria for establishing common biomedical waste treatment facilities in the Country.</li> <li>(vi) Random inspection or monitoring of health care facilities and common bio-medical waste treatment facilities.</li> <li>(vii) Review and analysis of data submitted by the State Pollution Control Boards on bio-medical waste and submission of compiled information in the form of annual report along with its observations to Ministry of Environment, Forest and Climate Change.</li> <li>(viii) Inspection and monitoring of health care facilities other than Medical Inspection (MI) rooms, sick bays on board ships or submarines, stations medical centres and field hospitals in forward locations operated by Director General, Armed Forces Medical Services (Rule-9).</li> <li>(ix) Undertake or support research or operational research regarding bio-medical waste.</li> </ul>
5	State Government of Health or Union Territory Government or Administration	<ul style="list-style-type: none"> <li>(i) To ensure implementation of the rule in all health care facilities or occupiers.</li> <li>(ii) Allocation of adequate funds to Government health care facilities for bio-medical waste management.</li> <li>(iii) Procurement and allocation of treatment equipments and make provision for consumables for bio-medical waste management in Government health care facilities.</li> <li>(iv) Constitute State or District Level Advisory Committees under the District Magistrate or Additional District Magistrate to oversee the biomedical waste management in the Districts.</li> </ul>

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		<p>(v) Advise State Pollution Control Boards or Pollution Control Committees on implementation of these Rules.</p> <p>(vi) Implementation of recommendations of the Advisory Committee in all the health care facilities.</p>
6	State Pollution Control Boards or Pollution Control Committees	<p>(i) Inventorisation of Occupiers and data on bio-medical waste generation, treatment &amp; disposal.</p> <p>(ii) Compilation of data and submission of the same in annual report to Central Pollution Control Board within the stipulated time period.</p> <p>(iii) Grant and renewal, suspension or refusal cancellation or of authorisation under these rules (Rule 7, 8 and 10).</p> <p>(iv) Monitoring of compliance of various provisions and conditions of authorisation.</p> <p>(v) Action against health care facilities or common biomedical waste treatment facilities for violation of these rules (Rule 18).</p> <p>(vi) Organizing training programmes to staff of health care facilities and common bio-medical waste treatment facilities and State Pollution Control Boards or Pollution Control Committees Staff on segregation, collection, storage, transportation, treatment and disposal of bio-medical wastes.</p> <p>(vii) Undertake or support research or operational research regarding bio-medical waste management.</p> <p>(viii) Any other function under these rules assigned by Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.</p>



			<ul style="list-style-type: none"> <li>(ix) Implementation of recommendations of the Advisory Committee.</li> <li>(x) Publish the list of Registered or Authorised (or give consent) Recyclers.</li> <li>(xi) Undertake and support third party audits of the common bio-medical waste treatment facilities in their State.</li> </ul>
7	Municipalities or Corporations, Urban Local Bodies and Gram Panchayats		<ul style="list-style-type: none"> <li>(i) Provide or allocate suitable land for development of common bio-medical waste treatment facilities in their respective jurisdictions as per the guidelines of Central Pollution Control Board.</li> <li>(ii) Collect other solid waste (other than the biomedical waste) from the health care facilities as per the Municipal Solid Waste ( Management and handling) Rules, 2000 or as amended time to time.</li> <li>(iii) Any other function stipulated under these Rules.</li> </ul>

**SCHEDULE IV [See rule 8(3) and (5)] Part A**

**LABEL FOR BIO-MEDICAL WASTE CONTAINERS or BAGS**



HANDLE WITH CARE

**CYTOTOXIC HAZARD SYMBOL**



HANDLE WITH CARE



**Part B**

**LABEL FOR TRANSPORTING BIO-MEDICAL WASTE BAGS OR CONTAINERS**

Day .....Month .....  
Year .....  
Date of generation .....

Waste category Number .....

Waste quantity.....

Sender's Name and Address

Phone Number .....

Fax Number.....

Contact Person .....

In case of emergency please contact :

Name and Address :

Phone No.

Note :Label shall be non-washable and prominently visible.

Receiver's Name and Address:

Phone Number .....

Fax Number .....

Contact Person .....

**FORM – I [ (See rule 4(o), 5(i) and 15 (2))**

**ACCIDENT REPORTING**

1. Date and time of accident :
2. Type of Accident :
3. Sequence of events leading to accident :
4. Has the Authority been informed immediately :
5. The type of waste involved in accident :
6. Assessment of the effects of the accidents on human health and the environment:
7. Emergency measures taken :
8. Steps taken to alleviate the effects of accidents :
9. Steps taken to prevent the recurrence of such an accident :
10. Does you facility has an Emergency Control policy? If yes give details:

Date : .....

Signature .....

Place: .....

Designation .....

**FORM - II**

(See rule10)

**APPLICATION FOR AUTHORISATION OR RENEWAL OF AUTHORISATION**  
(To be submitted by occupier of health care facility or common bio-medical waste treatment facility)

To

The Prescribed Authority  
(Name of the State or UT Administration) Address.

## 1. Particulars of Applicant:

(i) Name of the Applicant:  
(In block letters & in full)

(ii) Name of the health care facility (HCF) or common bio-medical waste treatment facility (CBWTF)  
:

(iii) Address for correspondence:

(iv) Tele No., Fax No.:

(v) Email:

(vi) Website Address:

## 2. Activity for which authorisation is sought:

Activity	Please tick
Generation, segregation	
Collection,	
Storage      packaging      Reception	
Transportation	
Treatment or processing or conversion	
Recycling	
Disposal or destruction use	
offering      for      sale,	
transfer	
Any other form of handling	

3. Application for  fresh or  renewal of authorisation (please tick whatever is applicable):

(i) Applied for CTO/CTE Yes/No



(ii) In case of renewal previous authorisation number and date: -----  
----- (iii) Status of Consents:

(a) under the Water (Prevention and Control of Pollution) Act, 1974  
-----

(b) under the Air (Prevention and Control of Pollution) Act, 1981:  
-----

4. (i) Address of the health care facility (HCF) or common bio-medical waste treatment facility (CBWTF):

(ii) GPS coordinates of health care facility (HCF) or common bio-medical waste treatment facility (CBWTF):

5. Details of health care facility (HCF) or common bio-medical waste treatment facility (CBWTF):

(i) Number of beds of HCF:

(ii) Number of patients treated per month by HCF:

(iii) Number healthcare facilities covered by CBMWTF: \_\_\_\_\_

(iv) No of beds covered by CBMWTF: \_\_\_\_\_

(v) Installed treatment and disposal capacity of CBMWTF: \_\_\_\_\_ Kg per day

(vi) Quantity of biomedical waste treated or disposed by CBMWTF: \_\_\_\_\_ Kg/ day

(vii) Area or distance covered by CBMWTF: \_\_\_\_\_

(pl. attach map a map with GPS locations of CBMWTF and area of coverage) (viii)

Quantity of Biomedical waste handled, treated or disposed:

Category	Type of Waste	Quantity Generated or Collected, kg/day	Method of Treatment and Disposal (Refer Schedule-I)
(1)	(2)	(3)	(4)
Yellow	(a) Human Anatomical Waste:		
	(b) Animal Anatomical Waste :		
	(c) Soiled Waste:		
	(d) Expired or Discarded Medicines:		
	(e) Chemical Solid Waste:		
	(f) Chemical Liquid Waste :		
	(g) Discarded linen, mattresses, beddings contaminated with blood or body fluid.		
	(h) Microbiology, Biotechnology and other clinical laboratory waste:		
Red	Contaminated Waste (Recyclable)		

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White (Translucent)	Waste sharps including Metals:		
Blue	Glassware:		
	Metallic Body Implants		

6. Brief description of arrangements for handling of biomedical waste (attach details): (i) Mode of transportation (if any) of bio-medical waste:

(ii) Details of treatment equipment (please give details such as the number, type & capacity of each unit)

	No of units	Capacity of each unit
Incinerators :	Plasma Pyrolysis:	
Autoclaves:	Microwave:	
Hydroclave:	Shredder:	
Needle tip cutter or	destroyer	
Sharps encapsulation or	concrete pit:	
Deep burial pits:		
Chemical disinfection:	Any other treatment	
equipment:		

7. Contingency plan of common bio-medical waste treatment facility (CBWTF)(attach documents):

8. Details of directions or notices or legal actions if any during the period of earlier authorisation 9.

**Declaration**

I do hereby declare that the statements made and information given above are true to the best of my knowledge and belief and that I have not concealed any information.

I do also hereby undertake to provide any further information sought by the prescribed authority in relation to these rules and to fulfill any conditions stipulated by the prescribed authority.

Date :

Signature of the Applicant

Place :

Designation of the Applicant



**FORM –III (See rule 10)**

**AUTHORISATION**

(Authorisation for operating a facility for generation, collection, reception, treatment, storage, transport and disposal of biomedical wastes)

1. File number of authorisation and date of issue.....
2. M/s \_\_\_\_\_ an occupier or operator of the facility located at \_\_\_\_\_ is hereby granted an authorisation for;

Activity	Please tick
Generation, segregation	
Collection,	
Storage      packaging      Reception	
Transportation	
Treatment or processing or conversion	
Recycling	
Disposal or destruction use	
offering for sale,	
transfer	
Any other form of handling	

3. M/s \_\_\_\_\_ is hereby authorized for handling of biomedical waste as per the capacity given below;
- (i) Number of beds of HCF: \_\_\_\_\_
- (ii) Number healthcare facilities covered by CBMWTF: \_\_\_\_\_
- (iii) Installed treatment and disposal capacity: \_\_\_\_\_ Kg per day
- (iv) Area      or      distance      covered      by      CBMWTF: \_\_\_\_\_
- (v) Quantity of Biomedical waste handled, treated or disposed:

Type of Waste Category	Quantity permitted for Handling
Yellow	
Red	
White (Translucent)	
Blue	

3. This authorisation shall be in force for a period of ..... Years from the date of issue.
4. This authorisation is subject to the conditions stated below and to such other conditions as may be specified in the rules for the time being in force under the Environment (Protection) Act, 1986.



Date .....

Signature.....

Place: .....

Designation .....

**Terms and conditions of authorisation \***

1. The authorisation shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made there under.
2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the prescribed authority.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the biomedical wastes without obtaining prior permission of the prescribed authority.
4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.
5. It is the duty of the authorised person to take prior permission of the prescribed authority to close down the facility and such other terms and conditions may be stipulated by the prescribed authority.



**FORM IV A**  
**Central Pollution Control Board**  
**(Ministry of Environment Forest & Climate Change)**  
**Waste Management Division**  
**Delhi-11032**  
 \*\*\*\*\*

Format for Submission of the Annual Report Information on Bio-medical Waste Management (to be submitted by the State Pollution Control Boards or Pollution Control Committees and Director General Armed Forces Medical Services to Central Pollution Control Board on or before 31st July of every year for the period from January to December of the preceding calendar year)

- |        |   |   |
|--------|---|---|
| (1)    | Name of the Organization  | : |
| (2)    | Name of the Nodal Officer with contact telephone number and e-mail        | : |
| (3)    | Total no. of Health Care Facilities / Occupiers                           | : |
| (i)    | Bedded Hospitals and Nursing Homes (bedded)                               | : |
| (ii)   | Clinics, dispensaries   | : |
| (iii)  | Veterinary institutions   | : |
| (iv)   | Animal houses   | : |
| (v)    | Pathological laboratories   | : |
| (vi)   | Blood banks   | : |
| (vii)  | Clinical establishment  | : |
| (viii) | Research Institutions   | : |
| (ix)   | AYUSH   | : |
| (4)    | Total no. of beds   | : |
| (5)    | Status of authorisation   | : |
| (i)    | Total number of Occupiers applied for authorisation                       | : |
| (ii)   | Total number of Occupiers granted authorisation                           | : |
| (iii)  | Total number of application under consideration                           | : |
| (iv)   | Total number of applications rejected                                     | : |
| (v)    | Total number of Occupiers in operation without applying for authorisation | : |
| (6)    | Quantity of Bio-medical Waste Generation (in kg/day)                      | : |
|        | (please enclose District Wise Bio-medical Waste Generation as per Part-2) |   |
| (i)    | Bio-medical waste generation by bedded hospitals(in kg/day)               | : |
| (ii)   | Bio-medical waste generation by non-bedded hospitals (in kg/day)          | : |
| (iii)  | Any other   | : |



Total : \_\_\_\_\_ Kg/day

- (7) Bio-medical waste treatment and disposal
- (a) By Captive bio-medical waste treatment and disposal by Health Care Facilities (please enclose details as per (Part-3))
- (i) Number of Health Care Facilities having captive treatment and Disposal facilities :
- (ii) Total bio-medical waste treated and disposed by captive treatment facilities in kg/day :
- (b) Bio-medical waste treatment and disposal by Common Bio Medical Waste Treatment Facilities (please enclose details as per Part 4)
- (i) Number of Common Bio Medical Waste Treatment Facilities in Operation :
- (ii) Number of Common Bio Medical Waste Treatment Facilities under construction :
- (iii) Total bio-medical waste treated in kg/day :
- (iv) Total treated bio-medical waste disposed through authorised recyclers ( in Kg/day) :
- (8) Total no. of violation by :
- (i) Health Care Facilities (bedded and non-bedded) :
- (ii) Common Bio Medical Waste Treatment Facilities :
- (iii) Others (please specify) :
- (9) Show cause notice/ direction issued to defaulter :
- (i) Common Bio Medical Waste Treatment Facilities :
- (iii) Others :
- (10) Any other relevant information :
- (i) Number of workshops / trainings conducted during the year :
- (ii) Number of occupiers installed liquid waste treatment facility :
- (iii) Number of captive incinerators complying to the norms :
- (iv) Number of occupiers organised trainings :
- (v) Number of occupiers constituted Bio-medical Waste Management Committees :
- (vi) Number of occupiers submitted Annual Report for the previous calendar year :
- (vii) Number of occupiers practising pre-treatment of lab microbiology and Bio-technology waste :
- (viii) Number of Common Bio Medical Waste Treatment Facilities that have installed Continuous Online Emission Monitoring Systems

**Part 2: District-wise Bio-medical Waste Generation (for the previous calendar year .....**

S. No	Name of the State / Union Territory	Name of the District	Bio-medical Waste Generation (in Kg/day)	Existing Total bio-medical waste treatment capacity (both captive and CBMWTF)in kg/day	
				Equipment	Total



				Incinerator:	
				Autoclave:	
				Deep	
				Burial:	
				Any other:	

**Part 3 : Information on Health Care Facilities having captive treatment facilities (for the previous calendar Year .....**)

S. No.	Name and address of the Health Care Facility	Quantity of Bio-medical Waste Generation (in kg/day)					Total Installed Treatment Capacity in kg/day				Total bio-medical treated and disposed by Health Care Facilities in Kg/day	
		Yellow	Red	Blue	White	Total Bio-medical waste generated (in Kg/day)	Incinerator	Autoclave	Deep burial	Any other		
												Incinerator :
												Autoclave :
												Deep :
												Burial :
												Any other :
												Total :

**Part 4: Information on Common Bio-Medical Waste Treatment and Disposal Facilities (for the previous calendar Year .....**)

S. No	Name and Address of The Common Bio Medical Waste Treatment Facilities With contact person name and telephone number	GPS Coordinates	Coverage Area in KMS	Name of the cities/ areas covered by Common Bio-Medical Waste Treatment Facilities	Total number of Health Care Facilities being covered	Total number of beds covered	Total Quantity of Bio Medical Waste collected From member Health Care Facilities (in Kg/day)	Capacity of Treatment equipments installed by Common Bio Medical Waste Treatment Facilities			Total Bio-Medical Waste treated in kg/day	Method of Disposal of treated wastes (Incineration Ash/Sharps /Plastic
								Equipment	Numbers	Total installed capacity (kg/day)		
								Incinerator				Incineration Ash:
								Plasma Paralysis				Quantity: Disposed By
								Autoclave				Sharps :
								Hydroclav e				Quantity :



**FORM -V****(See rule 16)****Application for filing appeal against order passed by the prescribed authority**

1. Name and address of the person applying for appeal :
2. Number, date of order and address of the authority which passed the order, against which appeal is being made (certified copy of order to be attached):
3. Ground on which the appeal is being made:
4. List of enclosures other than the order referred in para 2 against which appeal is being filed:

Date: 16.03.2018

Signature .....

Name and Address.....

[F. No. 3-1/2000-HSMD]

RITESH KUMAR SINGH, Jt. Secy.

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<sup>1</sup>[SCHEDULE - VI]  
(See rule 3A)

GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENTAL  
POLLUTANTS PART-A : EFFLUENTS

S. No.	Parameter	Standards			
		Inland surface water	Public Sewers	Land for irrigation	Marine coastal areas
1	2	3			
		(a)	(b)	(c)	(d)
1.	Colour and odour	See 6 of Annexure-I	--	See 6 of Annexure -I	See 6 of Annexure-I
2.	Suspended solids mg/l, Max.	100	600	200	(a) For process waste water- 100  (b) For cooling water effluent 10 percent above total suspended matter of influent.
3.	Particulate size of suspended solids	Shall pass 850 micron IS Sieve	--	--	(a) Floatable solids, max. 3 mm.  (b) Settleable solids, max. 850 microns.
<sup>2</sup> 4.	***	*	--	***	--
5.	pH Value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
6.	Temperature	shall not exceed 5°C above the receiving water temperature	--	--	shall not exceed 5°C above the receiving water temperature

<sup>1</sup> Schedule VI inserted by Rule 2(d) of the Environment (Protection) Second Amendment Rules, 1993 notified vide G.S.R. 422(E) dated 19.05.1993, published in the Gazette No. 174 dated 19.05.1993.

<sup>2</sup> Omitted by Rule 2(d)(i) of the Environment (Protection) Third Amendment Rules, 1993 vide Notification No.G.S.R.801(E), dated 31.12.1993.



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S. No.	Parameter	Standards			
		Inland surface water	Public Sewers	Land for irrigation	Marine coastal areas
1	2	3			
		(a)	(b)	(c)	(d)
7.	Oil and grease mg/l Max.	10	20	10	20
8.	Total residual chlorin mg/l Max.	1.0	--	--	1.0
9.	Ammonical nitrogen (as N), mg/l Max.	50	50	--	50
10.	Total Kjeldahl Nitrogen (as NH <sub>3</sub> ) mg/l, Max.	100	--	--	100
11.	Free ammonia (as NH <sub>3</sub> ) mg/l, Max.	5.0	--	--	5.0
12.	Biochemical Oxygen demand <sup>1</sup> [3 days at 27°C] mg/l max.	30	350	100	100
13.	Chemical Oxygen Demand, mg/l, max.	250	--	--	250
14.	Arsenic (as As), mg/l, max.	0.2	0.2	0.2	0.2
15.	Mercury (as Hg), mg/l, Max.	0.01	0.01	--	0.01
16.	Lead (as Pb) mg/l, Max.	0.1	1.0	--	2.0
17.	Cadmium (as Cd) mg/l, Max.	2.0	1.0	--	2.0
18.	Hexavalent Chromium (as Cr+6), mg/l max.	0.1	2.0	--	1.0

<sup>1</sup> Substituted by Rule 2 of the Environment (Protection) Amendment Rules, 1996 notified by G.S.R. 176, dated 2.4.1996 may be read as BOD (3 days at 27°C) wherever BOD 5 days 20°C occurred.

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S. No.	Parameter	Standards			
		Inland surface water	Public Sewers	Land for irrigation	Marine coastal areas
1	2	3			
		(a)	(b)	(c)	(d)
19.	Total chromium (as Cr.) mg/l, Max.	2.0	2.0	--	2.0
20.	Copper (as Cu) mg/l, Max.	3.0	3.0	--	3.0
21.	Zinc (As Zn.) mg/l, Max.	5.0	15	--	15
22.	Selenium (as Se.) mg/l, Max.	0.05	0.05	--	0.05
23.	Nickel (as Ni) mg/l, Max.	3.0	3.0	--	5.0
<sup>1</sup> 24.	***	*	*	*	*
<sup>1</sup> 25.	***	*	*	*	*
<sup>1</sup> 26.	***	*	*	*	*
27.	Cyanide (as CN) mg/l Max.	0.2	2.0	0.2	0.2
<sup>1</sup> 28.	***	*	*	*	*
29.	Fluoride (as F) mg/l Max.	2.0	15	--	15
30.	Dissolved Phosphates (as P), mg/l Max.	5.0	--	--	--
<sup>2</sup> 31.	***	*	*	*	*
32.	Sulphide (as S) mg/l Max.	2.0	--	--	5.0
33.	Phenoile compounds (as C <sub>6</sub> H <sub>5</sub> OH) mg/l, Max.	1.0	5.0	--	5.0

<sup>1</sup> Omitted by Rule 2(d)(i) of the Environment (Protection) Third Amendment Rules, 1993 vide Notification No.G.S.R.801(E), dated 31.12.1993.



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S. No.	Parameter	Standards			
		Inland surface water	Public Sewers	Land for irrigation	Marine coastal areas
1	2	3			
		(a)	(b)	(c)	(d)
34.	Radioactive materials :				
	(a) Alpha emitter micro curie/ml.	$10^{-7}$	$10^{-7}$	$10^{-8}$	$10^{-7}$
	(b) Beta emitter micro curie/ml.	$10^{-6}$	$10^{-6}$	$10^{-7}$	$10^{-6}$
35.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
36.	Manganese (as Mn)	2 mg/l	2 mg/l	--	2 mg/l
37.	Iron (as Fe)	3 mg/l	3 mg/l	--	3 mg/l
38.	Vanadium (as V)	0.2 mg/l	0.2 mg/l	--	0.2 mg/l
39.	Nitrate Nitrogen	10 mg/l	--	--	20 mg/l
<sup>1</sup> 40.	***	*	*	*	*

<sup>1</sup> Omitted by Rule 2(d)(i) of the Environment (Protection) Third Amendment Rules, 1993 vide Notification No. G.S.R. 801(E) dated 31.12.1993

**WASTE WATER GENERATION STANDARDS - PART-B**

<b>S.No.</b>	<b>Industry</b>	<b>Quantum</b>
1.	Integrated Iron & Steel	16 m <sup>3</sup> /tonne of finished steel
2.	Sugar	0.4 m <sup>3</sup> /tonne of cane crushed
3.	Pulp & Paper Industries	
	(a) Larger pulp & paper	
	(i) Pulp & Paper	175 m <sup>3</sup> /tonne of paper produced
	(ii)Viscose Staple Fibre	150 m <sup>3</sup> /tonne of product
	(iii)Viscose Filament Yarn	500 m <sup>3</sup> /tonne of product
	(b) Small Pulp & Paper :	
	(i) Agro residue based	150 m <sup>3</sup> /tonne of paper produced
	(ii) Waste paper based	50 m <sup>3</sup> /tonne of paper produced
4.	Fermentation Industries :	
	(a) Maltry	3.5 m <sup>3</sup> /tonne of grain produced
	(b) Brewery	0.25 m <sup>3</sup> /KL of beer produced
	(c) Distillery	12 m <sup>3</sup> /KL of alcohol produced
5.	Caustic Soda	
	(a) Membrane cell process	1 m <sup>3</sup> /tonne of caustic soda produced excluding cooling tower blowdown
	(b) Mercury cell process	4 m <sup>3</sup> /tonne of caustic soda produced (mercury bearing) 10% blowdown permitted for cooling tower
6.	Textile Industries : Man-made Fibre	
	(i) Nylon & Polyster	120 m <sup>3</sup> /tonne of fibre produced
	(ii) Vixcose rayon	150 m <sup>3</sup> /tonne of product
7.	Tanneries	28 m <sup>3</sup> /tonne of raw hide
8.	Starch. Glucose and related products	8 m <sup>3</sup> /tonne of maize crushed
9.	Dairy	3 m <sup>3</sup> /KL of Milk

10.	Natural rubber processing industry	4 m <sup>3</sup> /tonne of rubber
11.	Fertilizer	
	(a) Straight nitrogenous fertilizer	5 m <sup>3</sup> /tonne of urea or equivalent produced
	(b) Straight phosphatic fertilizer (SSP & TSP) excluding manufacture of any acid	0.5 m <sup>3</sup> /tonne of SSP/TSP
	(c) Complex fertilizer	Standards of nitrogenous and phosphatic fertilizers are applicable depending on the primary product

### LOAD BASED STANDARDS - PART-C

[1. Petroleum Oil Refinery:

Parameter 1	Standard 2
	Quantum limit in Kg/l 1,000 tonne of crude processed
1. Oil & Grease	2.0
2. BOD <sub>3 days, 27° C</sub>	6.0
3. COD	50
4. Suspended Solids	8.0
5. Phenols	0.14
6. Sulphides	0.2
7. CN	0.08
8. Ammonia as N	6.0
9. TKN	16
10. P	1.2
11. Cr (Hexavalent )	0.04
12. Cr(Total)	0.8
13. Pb	0.04
14. Hg	0.004
15. Zn	2.0
16. Ni	0.4
17. Cu	0.4
18. V	0.8
19. Benzene	0.04
20. Benzo (a) – Pyrene	0.08

<sup>1</sup> Substituted by Rule 2(ii)(a) of the Environment (Protection) Amendment Rules, 2008 notified by G.S.R.186(E), dated 18.3.2008

**Notes:**

- (i) Quantum limit shall be applicable for discharge of total effluent (process effluent, cooling water blow down including sea cooling water blow down, washings, etc.) to receiving environment (excluding direct application on land for irrigation/horticulture purposes within the premises of refinery).
- (ii) In order to measure the quantity of effluent (separately for discharge to receiving environment, application for irrigation/horticulture purposes within the premises of refinery & blow-down of cooling systems), appropriate flow measuring devices (e.g. V-notch, flow meters) shall be provided with.
- (iii) Quantum of pollutants shall be calculated on the basis of daily average of concentration values (one 24-hourly composite sample or average of three grab samples, as the case may be), average flow of effluent during the day and crude throughput capacity of the refinery.
- (iv) Limit for quantity of effluent discharged (excluding blow-down from seawater cooling) shall be 400 m<sup>3</sup>/1000 tonne of crude processed. However, for refineries located in high rain fall area, limit of quantity of effluent only during rainy days shall be 700 m<sup>3</sup>/1000 tonne of crude processed].

2. Large Pulp & Paper, News Print/ Rayon grade Plants of capacity above 24000 tonne/ Annum

Parameter	Quantum
Total Organic Chloride (TOCI)	2 kg/tonne of product.

**GENERAL EMISSION STANDARDS - PART-D****I. Concentration Based Standards**

Sl. No.	Parameter	Standard Concentration not to exceed (in mg/Nm <sup>3</sup> )
1.	Particulate Matter (PM)	150
2.	Total Fluoride	25
3.	Asbestos	4 Fibres/cc and dust should not be more than 2 mg/Nm <sup>3</sup>

4.	Mercury	0.2
5.	Chlorine	15
6.	Hydrochloric acid vapour and mist	35
<sup>1</sup> 7.	***	*
8.	Sulphuric acid mist	50
9.	Carbon monoxide	1% max. (v/v)
<sup>1</sup> 10.	***	*
11.	Lead	10 mg/Nm <sup>3</sup>
<sup>1</sup> 12.	***	*

## II. Equipment based Standards

<sup>2</sup>[For dispersal of sulphur dioxide, in minimum stack height limit is accordingly prescribed as below]

Sl. No.	Parameter	Standard
1.	Sulphur dioxide	Stack-height limit in metre
	(i) Power generation capacity :	
	- 500 MW and more	275
	- 200/210 MW and above to less than 500 MW	220
	- less than 200/210 MW	$H=14(Q)^{0.3}$
	(ii) Steam generation capacity	
	- Less than 2 tonne/h	Less than 8.5 MT      9
	- 2 to 5 tonne/h	8.5 to 21 MT      12
	- 5 to 10 tonne/h	21 to 42 MT      15
	- 10 to 15 tonne/h	42 to 64 MT      18
	- 15 to 20 tonne/h	64 to 104 MT      21
	- 20 to 25 tonne/h	104 to 105 MT      24
	- 25 to 30 tonne/h	105 to 126 MT      27
	- More than 30 tonne/h	More than 126 MT      30
		or using the formula $H=14(Q)^{0.3}$

<sup>1</sup> Omitted by Rule 2 (g) (iv) of the Environment (Protection) Third Amendment Rules, 1993 vide G.S.R. 801(E) dated 31.12.1993.

<sup>2</sup> Substituted by Rule 2(h)(i), *ibid.*



Note : H – Physical height of the stack in metre  
Q – Emission rate of SO<sub>2</sub> in kg/hr.

### III. Load/Mass based Standards

Sl. No.	Industry	Parameter	Standard
1.	Fertiliser (Urea) Commissioned Prior to 1.1.82	Particulate Matter (PM)	2 kg/tonne of product
	Commissioned after 1.1.82	Particulate Matter (PM)	0.5 kg/tonne of product
2.	Copper, Lead and Zinc Smelter/converter	Sulphur dioxide	4 kg/tonne of concentrated (100% acid produced)
3.	Nitric Acid	Oxides of Nitrogen	3 kg/tonne of weak acid (before concentration) produced
4.	Sulphuric Acid Plant		Quantum Limit in kg/tonne Plant capacity for 100% Existing Unit    New Unit concentration of
		Sulphuric Acid (tonne/day)	
		Sulphur dioxide (SO <sub>2</sub> )	Upto 300                      2.5                      2.0 Above 100                      2.0                      1.5]
5.	Coke Oven	Carbon Monoxide	3 kg/tonne of coke produced.
6.	Petroleum Oil Refinery (Sulphur Recovery)	Installed Capacity of SRU* (tonne/day)	Kg/tonne of sulphur in the feed to SRIJ Existing SRU                      New SRU
		Sulphur Dioxide	Above 20                      26                      10
			5 to 20                      80                      40
			Upto 5                      120                      80

\* SRU – Sulphur Recovery Unit]

<sup>1</sup> Substituted by Rule 2(ii) of the Environment (Protection) Third Amendment Rules, 2008 notified by G.S.R.344(I), dated 7.5.2008.

<sup>2</sup> Substituted by Rule 2 of the Environment (Protection) Fifth Amendment Rules, 2009 notified by G.S.R.595(E), dated 21.8.2009.

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## 7. Aluminium Plants :

(i)	Anode Bake Oven Total Fluoride		0.3 Kg/MT of Aluminium
(ii)	Pot room		
(a)	VSS	-do-	4.7 Kg/MT of Aluminium
(b)	HSS	-do-	6 Kg/MT of Aluminium
(c)	PBSW	-do-	2.5 Kg/MT of Aluminium
(d)	PBCW	-do-	1.0 Kg/MT of Aluminium

Note :           VSS =       Vertical Stud Soderberg  
                       HSS =       Horizontal Stud Soderberg  
                       PBSW =      Pre Backed Side Work  
                       PBCW =      Pre Backed Centre Work

## 8. Glass Industry :

## (a) Furnace Capacity

- |      |  |      |                            |
|------|--|------|----------------------------|
| (i)  | Up in the product draw Particulate matter capacity of 60 MTD/Day |      | 2 Kg/hr ca                 |
| (ii) | Product draw capacity more than 60 MT/Day                        | -do- | 0.8 Kg/MT of Product drawn |

**\*NOISE STANDARDS - PART-E**

## A. Noise Limits for Automobiles (Free Field Distance at 7.5 Metre in dB(A) at the manufacturing Stage

(a)	Motorcycle, Scooters & Three Wheelers	80
(b)	Passenger Cars	82
(c)	Passenger or Commercial vehicles upto 4 MT	85
(d)	Passenger or Commercial vehicles above 4 MT and upto 12 MT	89
(e)	Passenger or Commercial vehicles exceeding 12MT	91

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\* Standards notified at S. No. 46 may also be referred.

~~100~~**[AA. Noise limits for vehicles at manufacturing stage**

The test method to be followed shall be IS:3028-1998.

**(1) Noise limits for vehicles applicable at manufacturing stage from the year 2003**

Serial Number	Type of vehicle	Noise limits dB(A)	Date of implementation
(1)	(2)	(3)	(4)
1.	<b>Two wheeler</b>		1 <sup>st</sup> January, 2003
	Displacement upto 80 cm <sup>3</sup>	75	
	Displacement more than 80 cm <sup>3</sup> but upto 175 cm <sup>3</sup>	77	
	Displacement more than 175 cm <sup>3</sup>	80	
2.	<b>Three wheeler</b>		1 <sup>st</sup> January, 2003
	Displacement upto 175 cm <sup>3</sup>	77	
	Displacement more than 175 cm <sup>3</sup>	80	
3.	<b>Passenger Car</b>	75	1 <sup>st</sup> January, 2003
4.	<b>Passenger or Commercial Vehicles</b>		1 <sup>st</sup> July, 2003
	Gross vehicle weight upto 4 tonnes	80	
	Gross vehicle weight more than 4 tonnes but upto 12 tonnes.	83	
	Gross vehicle weight more than 12 tonnes.	85	

**(2) Noise limits for vehicles at manufacturing stage applicable on and from 1<sup>st</sup> April, 2005**

Serial Number	Type of vehicles	Noise limits dB(A)
1.0	<b>Two wheelers</b>	
1.1	Displacement upto 80 cc	75
1.2	Displacement more than 80 cc but upto 175 cc	77
1.3	Displacement more than 175 cc	80
2.0	<b>Three wheelers</b>	
2.1	Displacement upto 175 cc	77
2.2	Displacement more than 175 cc	80
3.0	<b>Vehicles used for the carriage of passengers and capable of having not more than nine seats, including the driver's seat</b>	74

<sup>1</sup> Substituted by Rule 2 of the Environment (Protection) Fourth Amendment Rules, 2002 notified vide Notification G.S.R. 849(E), dated 30.12.2002 (Earlier 'AA - Noise limits for vehicles w.e.f. 1<sup>st</sup> January 2003' inserted by Rule 2 (2) of the Environment (Protection) Amendment Rules, 2000 notified vide Notification G.S.R. 742(E), dated 25.9.2000.)



4.0	<b>Vehicles used for the carriage of passengers having more than nine seats, including the driver's seat, and a maximum Gross Vehicle Weight (GVW) of more than 3.5 tonnes</b>	
4.1	With an engine power less than 150 KW	78
4.2	With an engine power of 150 KW or above.	80
5.0	<b>Vehicles used for the carriage of passengers having more than nine seats, including the driver's seat : vehicles used for the carriage of goods.</b>	
5.1	With a maximum GVW not exceeding 2 tonnes	76
5.2	With a maximum GVW greater than 3 tonnes but not exceeding 3.5 tonnes	77
6.0	<b>Vehicles used for the transport of goods with a maximum GVW exceeding 3.5 tonnes.</b>	
6.1	With an engine power less than 75 KW	77
6.2	With an engine power of 75 KW or above but less than 150 KW.	78
6.3	With an engine power of 150 KW or above.	80]

<sup>1</sup>[Provided that for vehicles mentioned at serial numbers 3.0 to 6.3, the noise limits for the following States shall be applicable on and from the date specified against that State,-

- (i) Himachal Pradesh with effect from 1<sup>st</sup> October, 2005
- (ii) Jammu and Kashmir with effect from 1<sup>st</sup> October, 2005
- (iii) Madhya Pradesh with effect from 1<sup>st</sup> September, 2005
- (iv) Punjab with effect from 1<sup>st</sup> October, 2005
- (v) Rajasthan with effect from 1<sup>st</sup> June, 2005
- (vi) Uttar Pradesh (Mathura, Kannauj, Muzaffarnagar, Aligarh, Farukkabad, Saharanpur, Badaun, Barreily, Moradabad, Hathras, Rampur, Bijnor, Agra, Pilibhit, J.P. Nagar, Mainpuri, Lalitpur, Hardio, Ferozabad, Jhansi, Shahjahanpur, Etawah, Jalon, Lakhimpur, Kheri, Etah, Mahoba, and Sitapur) with effect from 1<sup>st</sup> June, 2005.
- (vii) Uttranchal with effect from 1<sup>st</sup> July, 2005.]

B. Domestic appliances and construction equipments at the manufacturing stage to be achieved by 31<sup>st</sup> December, 1993.

(a) Window Air Conditioners of 1 ton to 1.5 ton	68
(b) Air Coolers	60
(c) Refrigerators	46
<sup>2</sup> [(d) * * * .....]	...]
(e) Compactors (rollers), Front Loaders, Concrete mixers, Cranes (moveable), Vibrators and Saws	75

<sup>1</sup> Inserted by the Environment (Protection) Amendment Rules, 2005 notified vide Notification G.S.R.272 (E), dated 5.5.2005.

<sup>2</sup> Entry (d) relating to 'Diesel Generator of Domestic Purposes.....85 - 90' omitted by Rule 3 of the Environment (Protection) Second Amendment, Rules, 2002 notified vide Notification G.S.R. 371(E), dated 17.5.2002.

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**ANNEXURE-I**

(For the purposes of Parts – A, B and C)

The State Boards shall following guide-lines in enforcing the standards specified under the schedule VI :

- (1) the waste waters and gases are to be treated with the best available technology (BAT) in order to achieve the prescribed standards.
- (2) the industries need to be encouraged for recycling and reuse, of waste materials as far as practicable in order to minimize the discharge of wastes into the environments.
- (3) the industries are to be encouraged for recovery of biogas, energy and reusable materials.
- (4) while permitting the discharge of effluent and emission into the environment, State Boards have to take into account the assimilative capacities of the receiving bodies, especially water bodies so that quality of the intended use of the receiving waters is not affected. Where such quality is likely to be effected discharges should not be allowed into water bodies.
- (5) the Central and State Boards shall put emphasis on the implementation of clean technologies by the industries in order to increase fuel efficiency and reduce the generation of environmental pollutants.
- (6) All efforts should be made to remove colour and unpleasant odour as far as practicable.
- (7) The standards mentioned in the Schedule shall also apply to all other effluents discharged such as industrial mining, and mineral processing activities and sewage.
- (8) the limit given for the total concentration of mercury in the final effluent of caustic soda industry, is for the combined effluent from (a) Cell house, (b) Brine Plant, (c) Chlorine handling, (d) hydrogen handling and (e) hydro choleric acid plant.
- (9) <sup>1</sup>[(a)....(f)]
- (10) All effluents discharge including from the industries such as cotton textile, composite woolen mills, synthetic rubber, small pulp & paper, natural rubber, petro-chemicals, tanneries, point dyes,

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<sup>1</sup> Omitted by Rule 4 of the Environment (Protection) Rules, 1996 notified by notification G.S.R. 176(E), dated 2.4.1996.

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slaughter houses, food & fruit processing and diary industries into surface waters shall conform to be BOD limit specified above, namely 30 mg/l. For discharge an effluent having a BOD more than 30 mg./l, the standards shall conform to those given, above for other receiving bodies, namely, sewers, coastal waters, and land for irrigation.

- (11) <sup>1</sup>[\*\*\*.....]
- (12) In case of fertilizer industry the limits in respect of chromium and fluoride shall be complied with at the outlet of chromium and fluoride removal units respectively.
- (13) In case of pesticides :
- (a) The limits should be complied with at the end of the treatment plant before dilution.
  - (b) Bio-assay test should be carried out with the available species of fish in the receiving water, the COD limits to be specified in the consent conditions should be correlated with the BOD limits.
  - (c) In case metabolites and isomers of the Pesticides in the given list are found in significant concentration, standards should be prescribed for these also in the same concentration as the individual pesticides.
  - (d) Industries are required to analyze pesticides in waste water by advanced analytical methods such as GLC/HPLC.
- (<sup>2</sup>14) The chemical oxygen demands (COD) concentration in a treated effluent, if observed to be persistently greater than 250 mg/l before disposal to any receiving body (public sewer, land for irrigation, inland surface water and marine coastal areas), such industrial units are required to identify chemicals causing the same. In case these are found to be toxic as defined in the Schedule I of the Hazardous Rules 1989 the State Board in such cases shall direct the industries to install tertiary treatment stipulating time limit.
- (15) Standards specified in Part A of Schedule – VI for discharge of effluent into the public sewer shall be applicable only if such sewer leads to a secondary treatment including biological treatment system, otherwise the discharge into sewers shall be treated as discharge into inland surface waters].

<sup>1</sup> Omitted by Rule, 2(k) (vii) of the Environment (Protection) Third amendment Rules, 1993 vide G.S.R. 801 (E), dated 31.12.1993.

<sup>2</sup> Inserted by rule 2(k) (ix), *ibid.*

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## ANNEXURE-II

(For the purpose of Part-D)

The State Boards shall follow the following guidelines in enforcing the standards specified under Schedule VI:

- (a) In case of cement plants, the total dust (from all sections) shall be within 400 mg/Nm<sup>3</sup> and 250 mg/Nm<sup>3</sup> for the plants upto 200 t/d and more than 200 t/d capacities respectively.
- (b) In respect of calcinations process (e.g. Aluminum Plants) Kilns. and step Grate Bagasse fired-Boilers. Particulate Matter (PM) emissions shall be within 250 mg/Nm<sup>3</sup>.
- (c) In case of thermal power plants commissioned prior to 01.01.1982 and having generation capacity less than 62.5 MW, the PM emission shall be within 350 mg/Nm<sup>3</sup>.
- (d) In case of Lime Kilns of capacity more than 5 t/day and upto 40 t/day, the PM emission shall be within 500 mg/Nm<sup>3</sup>.
- (e) In case of horse shoe/pulsating Grate and Spreader Stroker Bagasse-fired-Boilers, the PM emission shall be within 500 (12% CO<sub>2</sub>) and 800 (12% CO<sub>2</sub>) mg/Nm<sup>3</sup> respectively. In respect of these boilers, if more than attached to a single stack, the emission standards shall be fixed, based on added capacity of all the boilers connected with the stack.
- (f) In case of asbestos dust, the same shall not exceed 2mg/Nm<sup>3</sup>.
- (g) In case of the urea plants commissioned after 01.01.92, coke ovens and lead glass units, the PM emission shall be within 50 mg/Nm<sup>3</sup>.
- (h) In case of small boilers of capacity less than 2 tons/hour and between 2 to 5 tons/ hour, the PM emissions shall be within 1000 and 1200 mg/Nm<sup>3</sup>.
- (i) In case of integrated Iron and Steel Plants, PM emission upto 400 mg/Nm<sup>3</sup> shall be allowed during oxygen lancing.

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- (j) In case of stone crushing units, the suspended PM contribution value at a distance of 40 meters from a controlled, isolated as well as from a unit located in cluster should be less than 600 micrograms/Nm<sup>3</sup>.<sup>1</sup>[\* \* \*] These units must also adopt the following pollution control measures :
- (i) Dust containment cum suppression system for the equipment;
  - (ii) Construction of wind breaking walls;
  - (iii) Construction of the metalled roads within the premises;
  - (iv) Regular cleaning and wetting of the ground within the premises;
  - (v) Growing of a green belt along with periphery.
- (k) In case of Ceramic industry, from the other sources of pollution, such as basic raw materials and processing operations, heat recovery dryers, mechanical finishing operation, all possible preventive measures should be taken to control PM emission as far as practicable.
2. The total fluoride emission in respect of Glass and Phosphatic Fertilizers shall not exceed 5 mg/Nm<sup>3</sup> and 25 mg/Nm<sup>3</sup> respectively.
- <sup>2</sup>3. [In case of copper, lead and zinc smelting, the off-gases may, as far as possible, be utilized for manufacturing sulphuric acid]
- <sup>3</sup>4. [In case of cupolas (Foundries) having capacity (melting rate) less than 3 tonne/hour, the particulate matter emission shall be within 450 mg/Nm<sup>3</sup>. In these cases it is essential that stack is constructed over the cupolas beyond the charging door and the emissions are directed through the stack, which should be at least six times the diameter of cupola. In respect of Arc Furnaces and Induction Furnaces, provision has to be made for collecting the fumes before discharging the emissions through the stack].

[No. Q-15017/24/89-CPW]  
MUKUL SANWAL, Jt. Secy.

<sup>1</sup> Omitted by Rule 2(i)(iii) of the Environment (Protection) Third Amendment Rules, 1993, vide G.S.R. 801(E) dated 31.12.1993.

<sup>2</sup> Substituted by Rule 2(1)(i); Ibid.

<sup>3</sup> Added by Rule 2(1)(ii), Ibid.

Annex - IV

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Annexure IV

By Speed Post

December 29, 2020

F.No. B-31011/BMW (58.II)/2020/WMD-I/ 14757-14791

To,

The Member Secretary,  
(All SPCBs/PCCs)

Sub: Authorization of Healthcare Facilities-reg.

Sir,

There is a representation from Indian Medical Association (IMA) that documents such as Bank Statements and other legal/financial documents pertaining to Health Care Facilities (HCFs) are sought by few SPCBs/PCCs for grant of authorization, whereas, the form for grant of authorization does not specify such requirement. IMA has also raised concerns regarding compulsory installation of ETP at HCFs.

In view above, I am directed to inform that SPCBs/PCCs may relook into State specific procedures adopted for grant of authorization including Consent to HCFs. Further, as per the provisions under BMW Rules, 2016, HCFs need not install ETP, in case discharge from HCF is connected with City's/Town's public sewerage network leading to terminal STP.

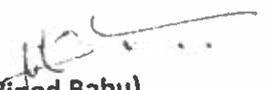
Yours faithfully

  
 (B. Vinod Babu)  
 AD & DH WMD-I

Copy to:

(i) PS to 'MS'

: For kind information of 'MS' please

  
 (B. Vinod Babu)

केन्द्रीय प्रदूषण नियंत्रण बोर्ड

निर्गत... NSM... D/

दिनांक 31/12/2020

Annexure - IV

~~10/10~~

केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
CENTRAL POLLUTION CONTROL BOARD  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार  
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE GOVT OF INDIA

By Speed Post

F. No. B-31011/BMW (58.II)/2022/WMD-I

April 12, 2022

To,

Member Secretary  
SPCBs/PCCs. (as per the list)

**Sub.:** Compliance to wastewater discharge standards by Healthcare Facilities as per Biomedical Waste Management Rules, 2016 – reg.

**Ref.:** CPCB letter no. B-31011/BMW (58.II)/2020/WMD-I/14757-14791 dated 29.12.2020

Sir,

This has reference to above referred CPCB letter dated 29.12.2020 regarding compliance to wastewater discharge norms under BMW Rules, 2016 by the Healthcare Facilities.

In this regard, in order to avoid any ambiguity, it is to clarify that non-bedded Healthcare Facilities (HCFs) may not necessarily need to install Effluent Treatment Plant and as per BMW Rules, 2016 they are required to dispose infectious liquid wastes only after treatment by disinfection as stipulated under Schedule II (6) of said Rules. Further, bedded HCFs are required to comply with the standards prescribed for liquid waste under Schedule-II of Biomedical Waste Management Rules, 2016. In case, wastewater is discharged into a public sewer connected to a terminal Sewage Treatment Plant, the bedded HCFs are required to meet general standards as notified under the Environment (Protection) Act, 1986 (29 of 1986). Copy of the relevant portion of Schedule II of BMW Rules, 2016 is enclosed for ready reference.

Yours faithfully,

(B. Vinod Babu)

Scientist-F & Nodal Officer,  
Waste Management

Encl.: As above

~~108~~**8. STANDARDS FOR LIQUID WASTE. -**

(1) The effluent generated or treated from the premises of occupier or operator of a common bio medical waste treatment and disposal facility, before discharge into the sewer should conform to the following limits;

<b>PARAMETERS</b>	<b>PERMISSIBLE LIMITS</b>
pH	6.5-9.0
Suspended solids	100 mg/l
Oil and grease	10 mg/l
BOD	30 mg/l
COD	250 mg/l
Bio-assay test	90% survival of fish after 96 hours in 100% effluent.

(2) Sludge from Effluent Treatment Plant shall be given to common bio-medical waste treatment facility for incineration or to hazardous waste treatment, storage and disposal facility for disposal.

Annexure-VI

109

By Speed Post

F.No. CM-13014/10/2025-LAW-RD-KOLKATA-RD (Kolkata) 9979

March 10, 2025

To,

The Principal Secretary,  
Health and Family Welfare Department,  
Government of West Bengal  
Swasthya Bhawan, GN-29, Sector-V,  
Salt Lake, Kolkata - 700 091

Sub: Regarding matter M.A. No.44 of 2024 in O.A. No.120 of 2015 titled Subrato Mookherjee Vs West Bengal Pollution Control Board & Ors. listed before Hon'ble NGT (EZ).

Sir,

This has reference to the matter of M.A. No.44 of 2024 in O.A. No.120 of 2015 titled Subrato Mookherjee Vs West Bengal Pollution Control Board & Ors. listed before Hon'ble NGT (EZ). The said matter is regarding compliance to standards for liquid waste as prescribed under Biomedical Waste Management Rules, 2016 by the Healthcare Facilities operating in the city of Kolkata.

In this regard, Hon'ble NGT (EZ) in the said matter vide order dated 05.02.2025 mentioned about affidavit filed by West Bengal SPCB wherein it is mentioned that process of installation of Effluent Treatment Plant has been initiated in following six Government hospitals operating in city of Kolkata:

- i. R.G. Kar Medical College & Hospitals, Kolkata
- ii. SSKM Medical College & Hospital, Kolkata
- iii. Nil Ratan Sarkar Medical College and Hospital, Kolkata
- iv. ID & BG Hospitals, Belegkata, Kolkata
- v. Medical College & Hospital, Kolkata
- vi. Lady Dufferin Victoria Hospital, Kolkata

In view of the above, it is requested to kindly provide the status of installation of Effluent Treatment Plant in aforementioned Government hospitals by 12.03.2025.

Yours faithfully,



(V. P. Yadav)

Director &amp; Head

Waste Management Division -I

Copy to:

- (i) The Member Secretary,  
West Bengal Pollution Control Board,  
Paribesh Bhawan, 10A, Block- LA, Sector III,  
Salt Lake City, Calcutta- 700106,  
West Bengal.

: For follow-up, please



(V. P. Yadav)

केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
निर्गत.....  
दिनांक.....11/03/25.....

9c

**Re: Regarding matter M.A. No.44 of 2024 in O.A. No.120 of 2015 titled Subrato Mookherjee Vs West Bengal Pollution Control Board & Ors. listed before Hon'ble NGT (EZ).**

**GG** GOUR GOPAL CHAKRABORTY <ae29.wbpcb-wb@bangla.gov.in>  
 Thu, 13 Mar 2025 11:12:27 AM +0530 •  
 To "BMW, CPCB" <bmw.cpcb@gov.in>  
 Cc "SWARUP KR MANDAL" <see4.wbpcb-wb@bangla.gov.in>, "Niralee Verma" <niralee.cpcb@gov.in>, "Vijay yadav" <vpyadav.cpcb@nic.in>, "Youthika Puri" <youthika.cpcb@nic.in>

Madam/Sir,

Pl. find attached herewith the letter with subject " Present status report in connection with establishment of ETPs in compliance with the Order dated 08.04.2024 in OA No. 606/2018" vide No. 478/PHE-15015/3/2024-LAW CELL dated 03/03/2025 which speaks for itself.

With Regards  
 AEE(WMC), WBPCB

---

**From:** "Niralee Verma" <niralee.cpcb@gov.in>  
**To:** "GOUR GOPAL CHAKRABORTY" <ae29.wbpcb-wb@bangla.gov.in>, "SWARUP KR MANDAL" <see4.wbpcb-wb@bangla.gov.in>  
**Sent:** Thursday, March 13, 2025 10:59:17 AM  
**Subject:** Fwd: Regarding matter M.A. No.44 of 2024 in O.A. No.120 of 2015 titled Subrato Mookherjee Vs West Bengal Pollution Control Board & Ors. listed before Hon'ble NGT (EZ).

==== Forwarded message =====  
**From:** BMW, CPCB <bmw.cpcb@gov.in>  
**To:** "ROSHNI SEN" <ms.wbpcb-wb@bangla.gov.in>  
**Cc:** "Vijay yadav" <vpyadav.cpcb@nic.in>, "Youthika Puri" <youthika.cpcb@nic.in>, "CPCB Kolkata" <rdkolkata.cpcb@gov.in>, "Niralee Verma" <niralee.cpcb@gov.in>  
**Date:** Tue, 11 Mar 2025 12:38:10 +0530  
**Subject:** Regarding matter M.A. No.44 of 2024 in O.A. No.120 of 2015 titled Subrato Mookherjee Vs West Bengal Pollution Control Board & Ors. listed before Hon'ble NGT (EZ).  
 ===== Forwarded message =====

Sir/Madam,

This has reference to the matter of M.A. No.44 of 2024 in O.A. No.120 of 2015 titled Subrato Mookherjee Vs West Bengal Pollution Control Board & Ors. listed before Hon'ble NGT (EZ). The said matter is regarding compliance to standards for liquid waste as prescribed under Biomedical Waste Management Rules, 2016 by the Healthcare Facilities operating in the city of Kolkata.

In this regard, I am directed to forward CPCB letter dated 10.03.2025 for necessary action, please.

Regards,

WM-I Division,



Regarding matter M.A. No.44 of 2024 in O.A. No.120 of 2015 title...

<https://mail.mgovcloud.in/zm/?fromService=wp&wpVersion=6470a>

Central Pollution Control Board,  
Delhi

☺ 1 Attachment(s) • Download as Zip



6 hospital ETP status (1).pdf  
1.5 MB • 🔗

BMW-100  
05/03/25  
5802045/ms  
05/03/25 (56)

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**Government of West Bengal**  
**PUBLIC HEALTH ENGINEERING DEPARTMENT**  
Janaswasthya Karigari Bhawan "Nijalaya" Floor-7<sup>th</sup> & 8<sup>th</sup>  
CN-8, Street No-18, Sector-V, Bidhannagar, Kolkata-700091

No. 478/ PHE-15015/3/2024-LAW CELL

Dated: 03.03.2025

From: Law Officer  
PHE Department

West Bengal Pollution Control Board

To: The Member Secretary,  
West Bengal State Pollution Control Board  
Paribesh Bhavan Canteen,  
10A, Broadway Rd,  
LA Block, Sector 3,  
Bidhannagar,  
Kolkata-700106

Dist. No. 22920  
Date 05/03/25  
Referred to: CE (NMC)  
Remarks:

Member Secretary

Sub: Present status report in connection with Establishment of ETPs in compliance with the Order dated 08.04.2024 in OA No. 606/2018.

Sir,  
In compliance with the aforesaid order, I am directed to submit a status report in connection with Establishment of ETPs prepared by the Executive Engineer, Survey Division, PHE Dte. and Assistant Engineer, Survey Sub-Division-I, PHE Dte. (Copy of the report is enclosed herewith) for your kind perusal.

Thanking you.

Yours faithfully

LAW OFFICER, WBLS  
LAW OFFICER  
PHE Department  
Govt. of West Bengal  
Dated: 03.03.2025

No. 478/ PHE-15015/3/2024-LAW CELL

Copy forwarded for information and necessary action to:

- 1. The Principal Secretary, Environment Department, Govt. of WB  
(Copy of the report enclosed)
- 2. The Secretary, Department of UD&MA, Govt. of WB  
(Copy of the report enclosed)

Law Officer  
PHE Department.

No. 478/ PHE-15015/3/2024-LAW CELL

Dated: 03.03.2025

Copy forwarded for information to:  
The Chief Engineer (HQs) PHE Dte.

Law Officer  
PHE Department.

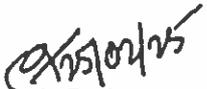
06/03/25

KKS  
Pl. Keep in  
6 Hospitals  
06/3/25

11X

1	2	3	4	5
Sl. No.	ETP Location and Capacity	Order No.	Working Progress Status (as on 25.02.2025)	Remarks
1	N.R.S Medical College & Hospital, Capacity-1.5MLD Trial- 3month O & M- 1 Year	Acceptance order no. 438/PC-I dt. 28.07.2023 Work Order No.162/SD dt.- 04.08.2023	1).Soil test und design-drawing (civil part) approved. 2). Construction work is processing in full swing and 20% work has already been achieved.	After issuance of work order, we get clear site from Hospital Authority vide Memo No - NH/5900 of dated 05.09.2024 after getting necessary permission of Forest Dept.
2	R.G. Kar Medical College & Hospital, Capacity- 1.0MLD Trial- 1month O & M- 3month	Acceptance order no. 164/PC-I dt 05.02.2024 399/SD dt- 15.02.2024	1. Soil test done. 2. Process Design submitted but structural design yet to be finalized by the agency.	After issuance of the work order physical progress delayed for site clearance by cutting of existing trees at the site for which necessary permission intimated by the hospital authority on 10/01/2025. Expecting for early commencement of field progress.
3	IPGMER-SSKM Capacity- 0.5 MLD Trial- 3month O & M- 12month	Acceptance order no. 164/PC-I dt 05.02.2024 398/SD dt.- 15.02.2024	No field work done yet.	Repeated correspondences were made for necessary permission along with issuance of gate pass by the hospital authority for commencement of field work by the agency, but yet to be accorded. Moreover it is to be mentioned that as the Effluent network will be done by PWD (Civil) an e-file for revised AAFS sent by the Hospital authority for necessary approval from H&FW Dept.
4	Beleghata ID & BG Capacity- 1.0 MLD Trial- 3month O & M- 12month	Acceptance order no. 445/PC-I dt. 01.08.2023 Work Order no. 122/SD dt.- 26.06.2024	1. Soil test done. 2. Hydraulic Process design and unit size design submitted and structural design ready to submit by the agency.	Work order issued after getting Revised AAFS on 13.06.2024 and work will start expected by 1 <sup>st</sup> week of March '25.
5	Medical College Capacity-1.5 MLD	NA	Till date no scope of field work	As the ETP site divided in two parts due to unavailability of requisite land area, revised DPR prepared considering present scenario and submitted to H&FH dept. through e-File No. PHE-28012/4/2024-SCHM CELL-Dep.t of PHE (Computer No. 908582) and subsequently hard copy of DPR also submitted to hospital authority for accordance of revised AAFS which is still pending.
6	Lady Dufferin Victoria Capacity-0.3 MLD As per DPR submitted on February, 2020	NA	Till date no scope of field work	Several field visit and correspondence for availability of ETP land area were made earlier by PHED. However, on enquiry this office requested further vide memo 331/SD dated 18.12.24 for handover of clear demarcated requisite for construction of ETP.

Note: After construction and commissioning of said ETPs of mentioned hospitals bio-medical liquid waste can expected to be disposed safely to the environment.

  
Assistant Engineer  
Survey Sub Division-I, P.H.E.Dte.  
Government of West Bengal

  
Executive Engineer  
Survey Division, P.H.E.Dte.  
Government of West Bengal