

Date: 20-06-2023

The Chief Engineer
Waste Management Cell
West Bengal Pollution Control Board
'Paribesh Bhawan'
Building No. 10A, Block - LA
Sector - III, Bidhannagar
Kolkata - 700 106

Submission of Annual Report in Form IV of Apollo Medical Centre, 48/1F, Leela Roy Sarani, Kolkata - 700019

Dear Sir,

In compliance with the Sl. No. 5 of Additional Conditions stipulated in the Grant of Authorization, Memo No. 18/WBPCB-RO-1/BMW/15/2001 dated 07.02-2022 issued from your office, we are submitting the Annual Report for the period January 2022 to December 2022 in the prescribed format (Form - IV), duly filled in, as per the Bio-medical Waste Management Rules, 2016.

Thanking you,

For Apollo Medical Centre



Rana Dasgupta
Chief Executive Officer -ER

Encl. A/a



/Form – IV
(See rule 13)
ANNUAL REPORT

[To be submitted to the prescribed authority on or before 30th June every year for the period from January to December of the preceding year, by the occupier of health care facility (HCF) or common bio-medical waste treatment facility (CBWTF)]

| Sl. No. | Particulars | | |
|---------|--|---|--|
| 1 | Particulars of the Occupier | : | |
| | (i) Name of the authorized person (occupier or : operator of facility) | : | Mr. Rana Dasgupta Chief Executive Officer |
| | (ii) Name of HCF or CBMWTF | : | APOLLO MEDICAL CENTRE |
| | (iii) Address for Correspondence | : | APOLLO MEDICAL CENTRE |
| | (iv) Address of Facility | : | 48/1 F, LEELA ROY SARANI, KOL – 700 019 |
| | (v) Tel. No, Fax. No | : | (033) 24618028/ 8079; 24618180 |
| | (vi) E-mail ID | : | infokolkata@apollohospitals.com |
| | (vii) URL of Website | : | www.kolkata.apollohospitals.com |
| | (viii) GPS coordinates of HCF or CBMWTF | : | |
| | (ix) Ownership of HCF or CBMWTF | : | (State Government or Private or Semi Govt. or any other) PRIVATE |
| | (x). Status of Authorization under the Bio-Medical Waste (Management and Handling) Rules | : | Authorisation No.: DOO14248 Valid upto: 30/11/26 |
| | (xi). Status of Consents under Water Act and Air Act | : | 25/WBPCB-RO-1/0/1437/2016 Valid upto:30/11/26 |
| 2 | Type of Health Care Facility | : | |
| | (i) Bedded Hospital | : | No. of Beds: <u>10</u> |
| | (ii) Non-bedded hospital | : | NA |
| | Clinical Laboratory or Research Institute or Veterinary Hospital or any other) | : | |
| | (iii) License number and its date of expiry | : | 34235670. Validity – 29/12/2025 |
| 3 | Details of CBMWTF | : | |
| | (i) Number of health care facilities covered by CBMWTF | : | 1893 Nos |
| | (ii) No. of Beds covered by CBMWTF | : | |
| | (iii) Installed treatment and disposal capacity of CBMWTF; | : | Bio Medical waste generated from 30,000 beds. |
| | (iv) Quantity of bio medical waste treated or disposed by CBMWTF | : | <u>7846</u> Kg / day |
| 4 | Quantity of waste generated or disposed in Kg per Annum (on monthly average basis) | : | Yellow Category: 95.1 Kgs Red Category: 215 Kgs White: 2.7 Kgs Blue Category: 16.4 Kgs General Solid Waste: 1650 Kgs |
| 5 | Details of the Storage, Treatment, Transportation, Processing and Disposal Facility | : | |
| | (i) Details of the on-site storage | : | Size:1) 12' x 10' – 02 nos, 2) 8' x 6' – 02 nos |

| | | | | | | |
|---|--|---|--|---------------------------|------------------------|---|
| | facility | | Capacity: 2000 Kgs | | | |
| | | | Provision of on-site storage : (Cold storage or any other provision) | | | |
| | (ii) Disposal facilities | | Type of treatment equipment | No of Units | Capacity Kg/day | Quantity Treated or disposed in kg per annum |
| | | | 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: | - | - | - |
| | (iii) Quantity of recyclable wastes sold to authorized recyclers after treatment in Kg per annum | : | Red Category (like plastic, glass, etc.) NA | | | |
| | (iv) No. of Vehicles used for collection and transportation of biomedical waste | : | 01 No. | | | |
| | (v) Details of incineration ash and ETP sludge generated and disposed during the treatment of wastes in Kg per annum | | | Quantity Generated | Where disposed | |
| | | | Incineration | NA | NA | |
| | | | Ash | NA | NA | |
| | | | ETP Sludge | NA | Na | |
| | (vi) Name of the Common Bio-Medical Waste Treatment Facility Operator through which wastes are disposed of | | Medicare Environmental Management Pvt. Ltd. Howrah Facility | | | |
| | (vii) List of member HCF not handed over bio-medical waste. | | NA | | | |
| 6 | Do you have bio-medical waste management committee? If yes, attach minutes of the meetings held during the reporting period | | YES (Attached) | | | |

| | | |
|----|---|---|
| 7 | Details trainings conducted on BMW | |
| | (i) Number of trainings conducted on BMW Management | 22 Sessions |
| | (ii) Number of personnel trained | 105 Staffs |
| | (iii) Number of personnel trained at the time of induction | All |
| | (iv) Number of personnel not undergone any training so far | None |
| | (v) Whether standard manual for training is available? | Yes |
| 8 | Details of the accident occurred during the year | |
| | (i) Number of Accidents occurred | Nil |
| | (ii) Number of persons affected | Na |
| | (iii) Remedial Action taken (Please attach details if any) | Attended by House Physician and necessary steps taken as per protocols. |
| | (iv) Any Fatality occurred, details | NA |
| 9 | Are you meeting the standards of air Pollution from the incinerator? How many times in last year could not met the standards? | NA |
| | Details of Continuous online emission monitoring systems installed | NA |
| 10 | Liquid waste generated and treatment methods in place. How many times you have not met the standards in a year? | STP Standards maintained. (Half yearly test reports attached) |
| 11 | Is the disinfection method or sterilization meeting the log 4 standards? How many times you have not met the standards in a year? | NA |
| 12 | Any other relevant information | (Air Pollution Control Devices attached with the Incinerator) |

Certified that the above report is for the period from

.....

: January 2022 – December 2022

RANA DASGUPTA
Rana Dasgupta
Name and Signature of the Head of the Institution

Date: 20/06/2023

Place: KOLKATA



FORM - I
[See rule 4(o), 5(i) and 15(2)]

ACCIDENT REPORTING

1. Date and time of accident : NA
2. Type of Accident : Nil
3. Sequence of events leading to accident : NA
4. Has the Authority of been informed immediately: NA
5. The type of waste involved in accident : NA
6. Assessment of the effects of the accidents on human health and the environment : NA
7. Emergency measures taken : NA
8. Steps taken to alleviate the effects of accidents : NA
9. Steps taken to prevent the recurrence of such an accident : NA
10. Does you facility has Emergency Control policy? If yes, give detail : Yes. Hospital Emergency Code is declared for Spill Management. Team arrives to do the clearance as per the policy.

Date : 20/06/2023

Place : KOLKATA

Signature : *Rama Dargupta*

Designation : CEO ER.



TEST REPORT

Name & Address of Customer :
 Apollo Medical Centre - Gariahat
 48/1F, Leela Roy Sarani, Kolkata- 700019

Report No. : MSKGL/ED/2022-23/000058
 Date : 07/11/2022
 Sample No. : MSKGL/ED/2022-23/11/01324
 Drawn/Submitted on : 02/11/2022
 Reference No. & Date : As per W.O. dt'd on 18.04.2022

We hereby certify that the following sample drawn by us / submitted by the customer has been analyzed with the following results:

| | |
|--|------------------------------------|
| 1. Description of sample (As declared by customer) | Effluent Water |
| 2. Sample Mark (if any given by the customer) | Effluent Water from ETP/STP Outlet |
| 3. Date of sampling | 01/11/2022 |
| 4. Place of sampling | Apollo Medical Centre - Gariahat |
| 5. Environmental conditions during sampling | Maintained |
| 6. Sampling Plan & Procedures used | As per standard guidelines |

Report No. : MSKGL/ED/2022-23/000058


Sample No. : MSKGL/ED/2022-23/11/01324

ANALYSIS RESULT

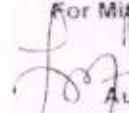
| Chemical | | | | | |
|----------|------------------------------------|------|-------------------------------------|--|------------------|
| Sl No. | Test Parameters | Unit | Test Method | Limit as per CPCB | Result |
| 1 | pH value at 25 | None | ISIRI (23rd Edition) 4500 H-B-2017 | 5.5-9.0 | 7.14 at 25 deg C |
| 2 | Total Dissolved Solids (as TDS) | mg/l | ISIRI (23rd Edition) 2540C-2017 | -- | 840 |
| 3 | Biochemical Oxygen Demand (as BOD) | mg/l | ISIRI (23rd Edition) 5210B-2017 | 30 | 12 |
| 4 | Chemical Oxygen Demand (COD) | mg/l | ISIRI (23rd Edition) 5220B-2017 | 250 | 48 |
| 5 | Oil and Grease | mg/l | ISIRI (23rd Edition) 5520B-2017 | 10 | <5.0 |
| 6 | Bio-assay | None | ISIRI 532 (Part II) - 2001 (RA2013) | 90% survival of fish after 96 hours in 100% effluent | TF=1 |

DL : Detection Limit BDL : Below Detection Limit

Opinion : All fishes are survived in 100% effluent after 96 hrs. (TF=1)


 Report Verified By

For Mitra S. K. Private Limited


 Authorised Signatory

This result relate only to the item(s) tested.

This Test Report shall not be reproduced in any form without the permission of Mitra S. K. Private Limited

Hospital name: Apollo Medical Centre, Kolkata



MEETING MINUTES

| | | | |
|---|------------------------------|---------------|-------|
| Committee Name: | Bio Medical Waste Management | | |
| Date of Meeting: (DD/MM/YYYY) | 03.03.22 | Time: | |
| Location: | GM Operations : Office | Start: | 03 pm |
| Minutes Prepared By: | Ms. Tanusri Pal | End: | 04 pm |
| Presided by: | Mr. Rajeshwar Rao | | |

1. Attendance at Meeting *(add rows as necessary)*

1. GM, Operations, Mr. Rajeshwar Rao
2. Sr Manager – Housekeeping , Ms. Tanusri Pal
3. Security Supervisor - Mr. Subrata Sarkar
4. Nursing Incharge , Ms. Malati Chetri
5. Sr. Supervisor – Housekeeping , Mr. Sovan Sen
6. Supervisor – Housekeeping , Ms. Deboshree Dutta

2. Meeting Agenda

1. Timely Pick up of the waste
2. Training on BMW during Induction.
3. Maintenance of the Storage rooms
4. Availability of BMW consumables.

3. Previous meeting discussions/ follow-ups (if any):

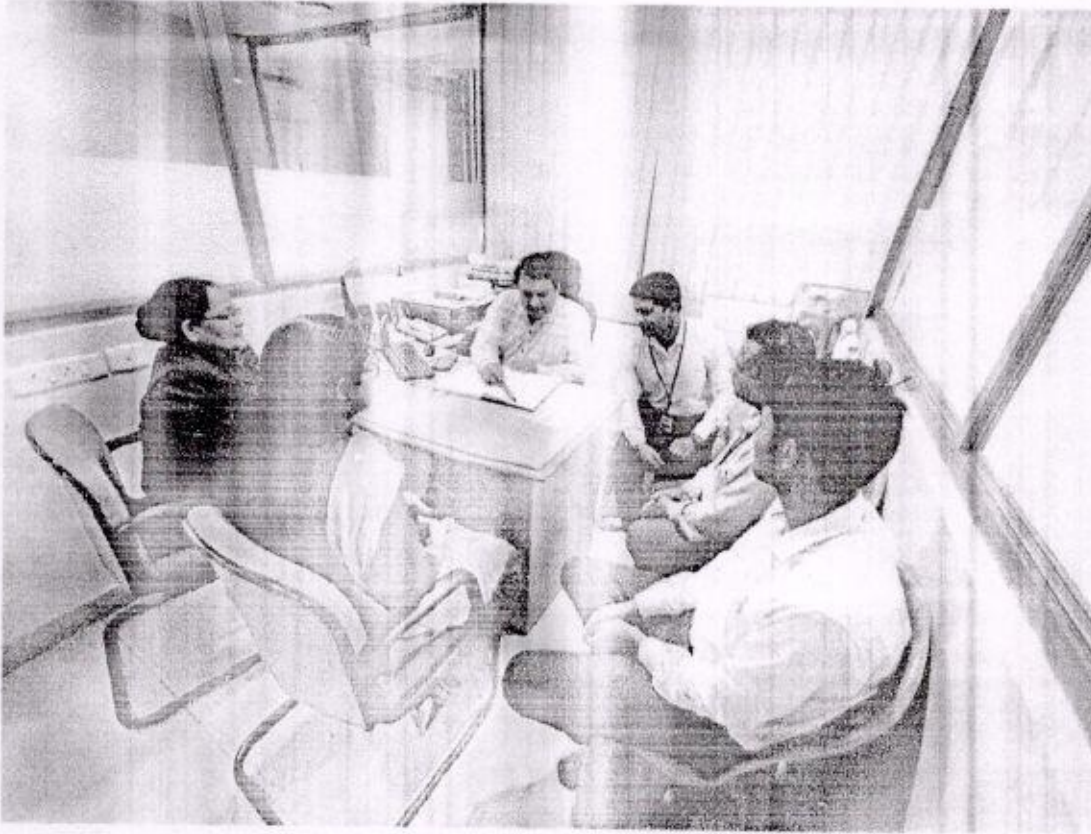
Previous minutes were confirmed, decisions taken as per the requirements and there were no other amendments.

Hospital name: Apollo Medical Centre, Kolkata

General comments (if any):

| S/No | Points Discussed | Responsible for Action | EDC |
|------|--|------------------------|------------|
| 1. | It has been observed that there are occasions where the waste is not picked within 48 hours. It has to be discussed with the Howrah unit for prompt action. | Mr. Tanusri Pal | Immediate |
| 2. | All the new joiners should undergo a training on Bio Medical Waste Management during their induction program. | Mr. Rajeshwar Rao | Immediate |
| 3. | The locking system of Yellow storage room is not appropriate. Needs immediate repair work. | Mr. Sovan Sen | 15/03/2023 |
| 4. | There is irregular supply of the bio medical waste bags by Medicare. Urgent discussion is needed with Purchase department and the materials department of the Medicare unit. | Ms. Deboshree Dutta | 20.03.2023 |

Hospital name: Apollo Medical Centre, Kolkata



Signed by:

A handwritten signature in dark ink, appearing to be "R. Rao", written over a horizontal line.

(Chairperson)

APOLO MEDICAL CENTRE

BIO MEDICAL WASTE MANAGEMENT- COMMITTEE MEETING

DATE: 3.3.2023 TIME: 3 pm- 4 pm
 SPEAKER: V. Rajesh Rao VENUE: 4th floor (Admin Block)

| SLNO | EMPLOYEE NAME | DESIGNATION | DEPARTMENT | SIGNATURE |
|------|------------------|---------------------------|--------------|--------------------|
| 1 | V. Rajesh Rao | GM-Ops | Operations | <i>[Signature]</i> |
| 2 | Malati Chaitra | Asst. Nsg. Superintendent | Nursing | <i>[Signature]</i> |
| 3 | SUBRATHA SANKAR | SL SECURITY SUPERVISOR | | <i>[Signature]</i> |
| 4 | DEBOSHREE DUTTA | SUPERVISOR | HOUSEKEEPING | <i>[Signature]</i> |
| 5 | Niladri Sengupta | Executive | Housekeeping | <i>[Signature]</i> |
| 6 | Abhinav Das | Supervisor | Housekeeping | <i>[Signature]</i> |
| 7 | Sovor Kumar Sen | in supervision | Housekeeping | <i>[Signature]</i> |
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SIGNATURE OF THE SPEAKER: *[Signature]*

Hospital name: Apollo Medical Centre, Kolkata

MEETING MINUTES

| | | | |
|---|--|---------------|-------|
| Committee Name: | Bio Medical Waste Management Committee | | |
| Date of Meeting: (DD/MM/YYYY) | 01.09.2022 | Time: | |
| Location: | GM Operations : Office | Start: | 02 pm |
| Minutes Prepared By: | Ms. Tanusri Pal | End: | 03 pm |
| Presided by: | Mr. Rajeshwar Rao | | |

1. Attendance at Meeting (fill rows as necessary)

1. GM, Operations, Mr. Rajeshwar Rao
2. Sr Manager – Housekeeping , Ms. Tanusri Pal
3. Security Supervisor - Mr. Subrata Sarkar
4. Nursing Incharge , Ms. Malati Chetri
5. Sr. Supervisor – Housekeeping , Mr. Sovan Sen
6. Supervisor – Housekeeping , Ms. Deboshree Dutta

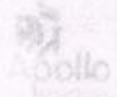
2. Agenda/Agenda

1. Revision of Hazmat Response Team
2. Availability of MSDS as per hazmat list.
3. MSDS file need to have index with page marking
4. Decision on mercury spill kit
5. Training on BMW during Induction.
6. Availability of BMW consumables.

3. Any Outstanding discussions/ follow ups (if any)

Previous minutes were confirmed, decisions taken as per the requirements and there were no other amendments.

Hospital name: Apollo Medical Centre, Kolkata



General comments (if any):

| S/No | Points Discussed | Responsible for Action | EDC |
|------|---|---------------------------------|-----------|
| 1. | It was briefed by Senior Manager, Housekeeping that area wise modification done in Hazmat Response Team and it will be effective from 10 th September, 2022. | For Information | 10.09.22 |
| 2. | It was suggested by the committee members that hazmat item lists need to undergone through proper revision based on current conditions and consumption pattern. | Respective HOD | 14.09.22 |
| 3. | Preparation of area specific bilingual MSDS is under process. | Respective Department & Quality | 14.10.22 |
| 4. | It has been advised that there should be a training session on HAZMAT during Induction. | GM - Operations | 01.11.22 |
| 5. | It was briefed by GM Operations to Materials department to ensure supply of BMW consumables at regular intervals. | GM Operations | Immediate |
| 6. | Bio-Medical Waste Handlers should wear appropriate PPE | Sr. Manager - Housekeeping | Immediate |

Hospital name: Apollo Medical Centre, Kolkata



Signature

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HOUSEKEEPING TRAINING ATTENDANCE SHEET

TOPIC: Biomedical Waste Management

DATE: 27/9/22

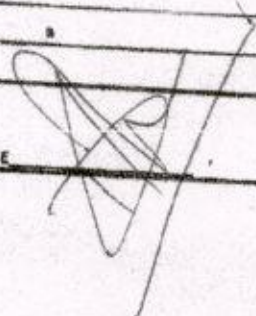
TIME: 1pm - 2pm

TRAINER: Debasree Dutta

VENUE: 4th floor (Admin Block)

| SLNO | EMPLOYEE NAME | EMPLOYEE ID | SIGNATURE |
|------|----------------|-------------|----------------|
| 1 | Ranjan Sardar | 55000160 | R. SARDAR |
| 2 | Shyamal Nandi | 55000166 | Shyamal Nandi |
| 3 | Arun Chandra | 55000165 | Arun Chandra |
| 4 | Alok Sen | 55000184 | Alok Sen |
| 5 | Sirrajit Dutta | 55000241 | Sirrajit Dutta |
| 6 | Anil Patra | 55000161 | A. PATRA |
| 7 | Rakesh Hani | 55000168 | Rakesh Hani |
| 8 | Amul Jana | 55000089 | Amul |
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TRAINER'S SIGNATURE: 

HOUSEKEEPING H.O.D. SIGNATURE: 



APOLLO MEDICAL CENTRE - KOLKATA
HOUSEKEEPING TRAINING ATTENDANCE SHEET

TOPIC: Biomedical Waste Management
DATE: 2.8.2022
TIME: 1pm - 2pm
TRAINER: Sovan Kumar L
VENUE: 4th Floor - Apollo Medical Centre

| SLNO | EMPLOYEE NAME | EMPLOYEE ID | SIGNATURE |
|------|--------------------|-------------|-------------|
| 1 | Aloke Das | 55000184 | A Das |
| 2 | Rajen Sarda | 55000160 | R. SARDAR |
| 3 | Karm Raut | 55000159 | Karm Raut |
| 4 | Lok Nath Choudhury | 55000278 | Lok Nath |
| 5 | Paprajit Das | 55000341 | P. Das |
| 6 | Mukul Jha | 55000289 | M. Jha |
| 7 | Jalal Datta | 55000209 | J. D. K |
| 8 | AMAR DHANUK | 55000060 | Amar Dhanuk |
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TRAINER'S SIGNATURE

HOUSEKEEPING H.O.D. SIGNATURE

APOLLO MEDICAL CENTRE - KOLKATA

HOUSEKEEPING TRAINING ATTENDANCE SHEET

TOPIC: Biomedical Waste Management

DATE: 2.10.22

TRAINER: Sovan Kumar Das

TIME: 1pm - 2pm

VENUE: 1st Floor - Garbha Clinic

| SLNO | EMPLOYEE NAME | EMPLOYEE ID | SIGNATURE |
|------|------------------|-------------|---------------|
| 1 | Kan Roy | 5500159 | [Signature] |
| 2 | Lokesh Choudhary | 5500278 | [Signature] |
| 3 | Jaki Dinku | 5500209 | [Signature] |
| 4 | Anukul Jha | 5500208 | [Signature] |
| 5 | Somya Nanda | 5500165 | [Signature] |
| 6 | Bismit Datta | 5500341 | Shyamal Nandi |
| 7 | AMAR DHANUK | 5500166 | B Datta |
| 8 | Rakesh Han | 5500158 | Amar Dhanuk |
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TRAINER'S SIGNATURE

HOUSEKEEPING H.O.D. SIGNATURE