QUALITY CARE

AND

PATIENT SAFETY

PRACTICES FOLLOWED

BY TEACHING HOSPITAL

(2023-2024)

LIST OF BUNDLE PROTOCOLS FOR QUALITY OF CARE AND PATIENT SAFETY.

Sr. no.	Bundle Protocol
1	Hand Hygiene
2	Peripheral IV Cannulation Process
3	Central Line- Insertion Bundle
4	Central Line- Maintenance Bundle
5	Catheter associated urinary tract infection (CAUTI) Bundle
6	Ventilator associated Pneumonia (VAP) Bundle
7	Ventilator associated Pneumonia: Maintenance Bundle
8	Central Line Associated Blood Stream Infection (CLABSI)
9	Peripheral Line Associated Blood Stream Infection (PLABSI)
10	Needle stick infection (NSI)
11	Reverse barrier
12	Barrier Nursing
13	Air-born infection prevention

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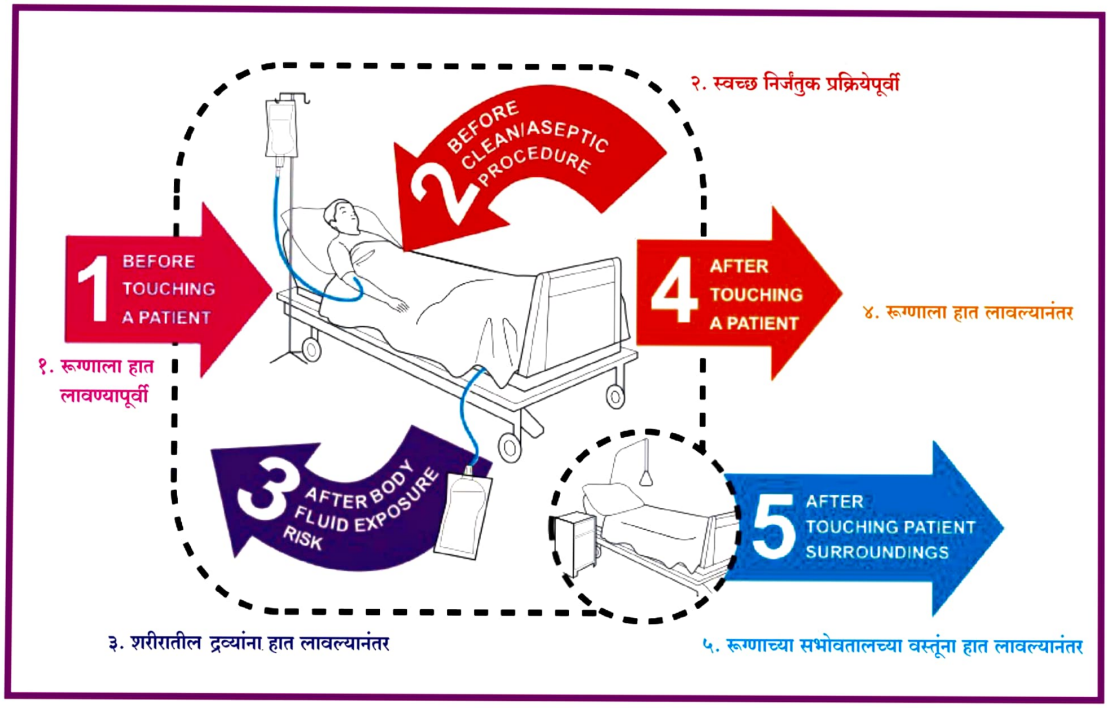
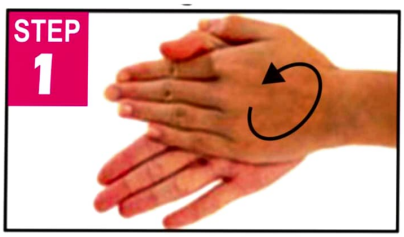
5 Moments for Hand Hygiene

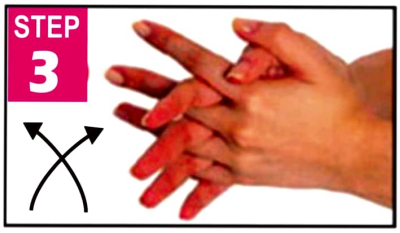


7 STEPS OF HAND HYGIENE

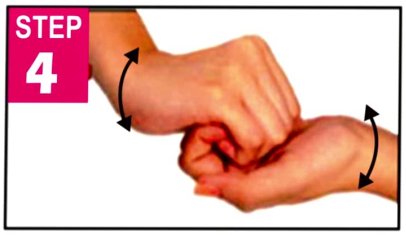


Palm to Palm
तळहात ते तळहात

Palm to back, fingers over faced
तळहाताने दुसऱ्या हाताला मागील बाजूने बोटांच्या साहाय्याने चोळणे

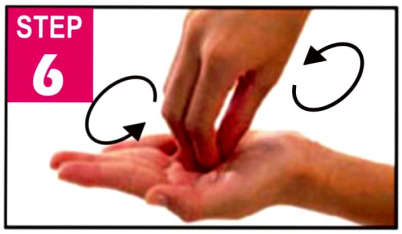


Palm to Palm, finger interlaced
तळहात आणि बोटे एकमेकांमध्ये अडकवणे

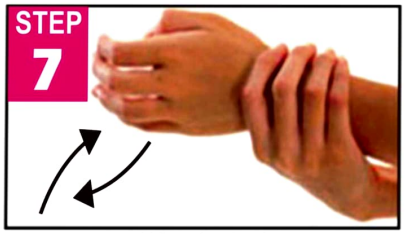


Finger interlocked
बोटे एकमेकांमध्ये अडकवणे

Rotational rubbing of thumb in palm
तळहाताने अंगठा गोलाकार पद्धतीने चोळणे



Rotational rubbing of fingers in palm
हातांची बोटे गोलाकार तळहातावर फिरवणे



Rubbing of each wrist
प्रत्येक मनगट चोळणे

Step 7 : To be washed till elbows (critical areas and invasive procedures)

- Take 2 pumps of Hand rub / Liquid antiseptic soap solution
- Each step 6 times

PERIPHERAL IV CANNULATION PROCESS

Clean IV tray and arrange all required equipment

↓

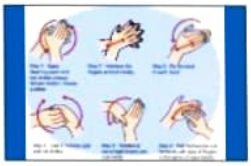
Patient identification and education

↓

Perform hand hygiene

↓

Vein selection and application of tourniquet



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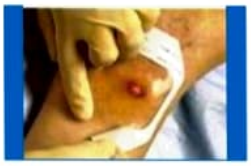
Clean and disinfectcannulation site with antiseptic (Chlorhexidine)



↓

Wear right size sterile gloves

↓

Cannulate the vein and release the tourniquet

↓

Apply sterile transparent semipermeable membrane dressing (Tegaderm) and label with date and time

↓

Attach Q Syte (Closed luer access devices)

↓

Scrub the hub of Q Syte before access with alcohol

↓

Flush the Cannula with 0.9% Normal Saline syringe

↓

Dispose used equipments appropriately

↓

Document in patient's medical record

↓

Monitor daily for IV related complications and replace if necessary

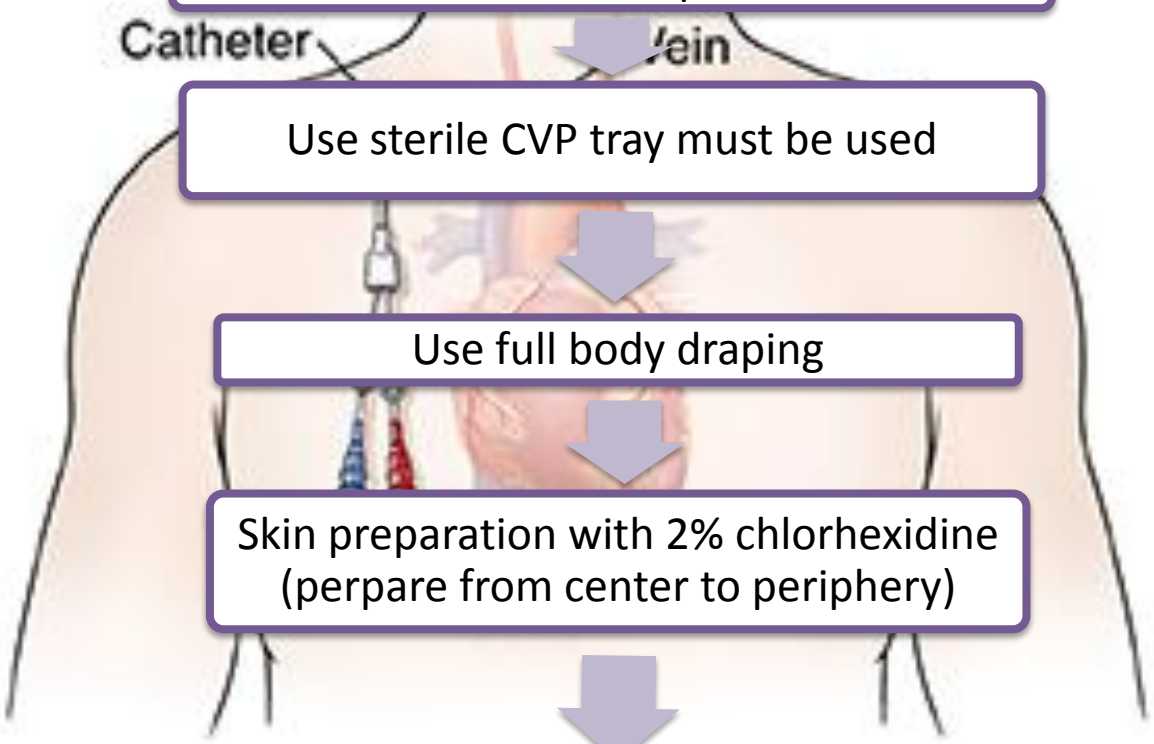
IV CATHETER MAINTENANCE BUNDLE

Hand Hygiene
Scrub the Hub
IV Sets Change According to Hospital Protocol
Flushing According to ACL Protocol

Central Line : Insertion Bundle

Hand Hygiene

Use of PPE (Cap, mask,gown and gloves), assistant must wear cap and and mask



Use sterile CVP tray must be used

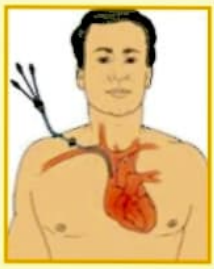
Use full body draping

Skin preparation with 2% chlorhexidine (perpare from center to periphery)

Site selection (pefer subclavian or jugular, avoid femoral)

CENTRAL LINE MAINTENANCE BUNDLE

DMH



Perform Hand Hygiene

↓

Use Aseptic Technique (All Sterile Equipment)

↓

Scrub the Hub of Q Syte with Alcohol before Access

↓

Flush with 0.9% Sodium Chloride solution and always use 10ml diameter syringe and flush5-10 ml 0.9% NaCl in every lumen

↓

Intermittent	Parenteral Nutrition	Blood Product Administration	Blood Draws	Flushing with No Therapy
Min 5 ml	5 ml	Preadmin 5 ml Postadmin 20 ml	Predraw 5 ml Postadmin 10 ml	Nonvalved-at least q 24 hrs Valved - at least weekly

↓

For Blood Sample Collection

- Collect articles required for Blood Sample Collection
- Scrub the hub of Q Syte with alcohol
- Withdraw 10 ml Blood from Q-Syte with Sterile technique and keep aside
- Take another syringe withdraw sample as required
- Flush with minimum 0.9% NaCl using 10 ml diameter syringe at each and every lumen with push-pause technique

↓

Ensure all connections are secure

↓

Clamp the lumens when not in use

↓

Cover the ports of the lumen with sterile drape

↓

Change Tegadermdressing at insertion site every 7days or when oozing, loosened, soiled

↓

Label with date & time on the dressing

↓

Do proper documentation and stabilize the patient

CATHETER ASSOCIATED URINARY TRACT INFECTION (CAUTI) BUNDLE

- Hand hygiene
- Insert the catheter following sterile techniques
- Use single use xylocaine jelly
- Secure the catheter to lower abdomen
- Collection bag should be always placed below the bladder, not resting on floor or bed (during shifting)
- Use closed drain system (Sample collecting port should be present)
- Empty the drainage bag in clean containers
- Ensure the urinary catheter is free of kinking
- Provide perineal care with normal salinetwice a day
- Use Gloves and other PPE's during manipulation of catheter or collection bag
- Assess the need for indwelling urinary catheter

VENTILATOR ASSOCIATED PNEUMONIA (VAP) BUNDLE

- Hand hygiene
- Sedation vacation
- Trial for weaning and decannulation daily
- Provide semirecumbent position (30-45 degree)
- Subglottic suctioning connected with adequate pressure (45-50 mm H_2O)
- Maintain Endotracheal cuff pressure between 20-40 mm H_2O
- Use new catheters every time for Oral suction
- Use Separate oral care brush for every patient and stored clean and dry
- Use inline suction
- Keep fluid in Inline suction apparatus dry and sterile
- All respiratory therapy equipments to be kept dry and sterile
- Use inspiratory filter
- Provide enteral feeding
- Consider declaration of antibiotics or narrow spectrum antibiotics

Ventilator associated pneumonia: Maintenance bundle

- Hand Hygiene
- Sedation vacation
- Daily trial to be given for weaning and decannulation
- Semirecumbent position to be maintained (30-45 degrees)
- Subglottic suctioning to be maintained with adequate pressure (45-50 mmHg)
- Maintain endotracheal cuff pressure (20-35 cmH_2O)
- New catheters to be used for oral suctioning everytime
- Oral care to be given with cholrhexidine
- Use inline suction apparartus and keep it clean and dry
- All respiratory equipment to be kept clean and dry
- Inspiratory filter to be used
- Provide enteral feeding
- Consider de-escalation of antibiotics

Lata Mangeshkar Medical Foundation's

Deenanath Mangeshkar Hospital & Research Centre

H-2019-0663
Since Sep 24, 2019

DEENANATH MANGESHKAR HOSPITAL AND RESEARCH CENTER				
CAUTI BUNDLE CARE				
Issue No.	Issue Date	Prepared by	Approved by	Issued by
03	01-Jan-2022	Vasudha Shingte, Gayatri Wad Infection Control Associates Ujwala Kadam Infection Control Nurse	Dr. Sampada Patwardhan HOD Microbiology & Infection Control Officer	Quality Manager

C A U T I

Catheter Associated Urinary Tract Infection

- Perform Hand hygiene & wear sterile gloves
- Insert the catheter using an aseptic technique and sterile equipment & single use xylocaine jelly
- Secure the catheter to the lower abdomen & place the collection bag below the bladder but NOT on the floor
- Ensure the catheter is free of kinks at all times
- Use a closed drain system (with a sample collection port) & empty the bag into a clean container from time to time
- Provide perineal and catheter care with normal saline twice a day
- Use gloves and other PPE during manipulation of catheter or collection bag
- Re- assess the need for indwelling urinary catheter from time to time

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C L A B S I — Insertion Bundle

Central Line Associated Blood Stream Infection

- Perform Hand hygiene & wear required PPE
- Put full draping on the patient & use a sterile central line insertion tray
- Prepare skin with 2% chlorhexidine (e.g. AHD 3000) from center to the periphery
- Select insertion site (subclavian and jugular preferred, avoid femoral) & use full length sterile USG probe cover
- Connect 3 way and attach the adequate number of needleless connectors (e.g., Q site) to the central line
- Apply transparent semi permeable membrane dressing (e.g., Tegaderm) in a way that the insertion site is visible
- Label the dressing with the date and time & cover central line ports with a sterile drape

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C L A B S I Maintenance bundle

Central Line Associated Blood Stream Infection

- **Perform Hand hygiene & Scrub the hub of the needleless connector (e.g. Q-site) with an 70% alcohol swab before access**
- **Flush every lumen with prefilled 10 ml syringe containing 0.9% normal saline(e.g. posiflush) intermittently & after blood draws**
- **For parenteral nutrition & blood product administration: flush with 5ml pre and 20ml post administration**
- **For line not in use: Flush every lumen in each shift**
- **Change IV sets every 72 hours and maintain proper documentation of all changes**
- **not in use & cover the ports of the lumen with a sterile drape**
- **Change transparent semi permeable membrane dressing (e.g. tegaderm) at insertion site every 7 days/if oozing, loosened, soiled**

For Blood Sample Collection

1. Collect articles required for blood sample collection
2. Scrub the hub of needless connector (E.g., Q site) with alcohol swab before access
3. Withdraw 10 ml blood from needleless connector (E.g., Q site) with sterile technique and keep aside
4. Take another syringe and withdraw sample as required
5. Push the earlier drawn blood in lumen
6. Flush every lumen with prefilled 10 ml syringe containing 0.9% Normal saline with push-pause technique

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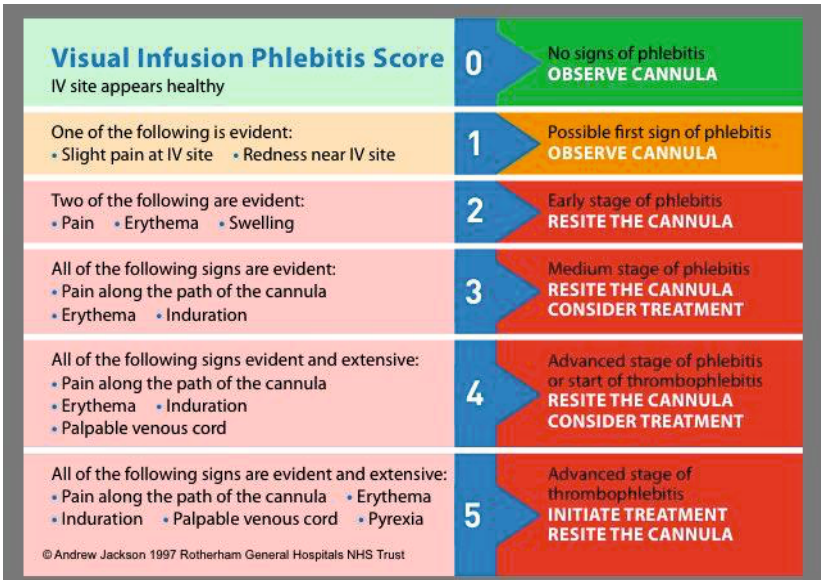
P L A B S I

Peripheral Line Associated Blood Stream Infection

- Perform Hand hygiene, select vein & apply tourniquet
- Clean and disinfect cannulation site with 2% chlorhexidine solution (e.g., AHD 3000) & wear sterile gloves
- Canulate the vein, release tourniquet & apply sterile transparent semi permeable membrane dressing (e.g., Tegaderm)
- Label the dressing with date & time, and attach needleless connectors (e.g.Q-Site) to all ports and label the IV set
- Change the dressing every 7 days or when soiled/ loosened and change the IV set every 72 hours
- Scrub all hubs with 70% alcohol swabs before every access & flush the cannula with prefilled 10 ml syringe containing 0.9% NaCl (e.g. Posiflush)
- Monitor IV related complications daily using the chart below and replace the cannula if necessary



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V A P

Ventilator Associated Pneumonia

- Perform Hand hygiene & wear required PPE
- Sedation vacation & daily trial for weaning and decannulation
- Maintain semi-recumbent position at 30-45 degrees
- Maintain sub-glottic suctioning at 35-45mm Hg and endotracheal cuff pressure at 25-40 cm H2O
- Fresh new catheter to be used for oral suctioning each time
- Oral care to be given with 0.2% Chlorhexidine in each shift
- Use inline suction apparatus & inspiratory filters; ensure all respiratory equipment is kept dry
- Consider de-escalation of antibiotics

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Needle Stick Injury

If Health Care Workers sustains Needle Stick Injury or mucosal splash:

Do not put injury site in mouth, do not squeeze, allow free bleeding;
Wash hands with soap and water

Go to staff clinic (08:30 AM – 06:30 PM) and in ER at night time (06:30 PM-08:30 AM) & inform the incidence to Nursing supervisor/Head Nurse/ICN

Baseline blood samples of healthcare worker and source patient (if known) to be sent immediately to the lab to test for HIV, HBsAg & HCV & initiate incidence form in Casualty

Follow appropriate treatment regimen immediately after incidence:

Source is HIV Positive

Consult the Infectious Disease Specialist and start Post-Exposure prophylaxis immediately

Source is HIV & HBsAg Negative

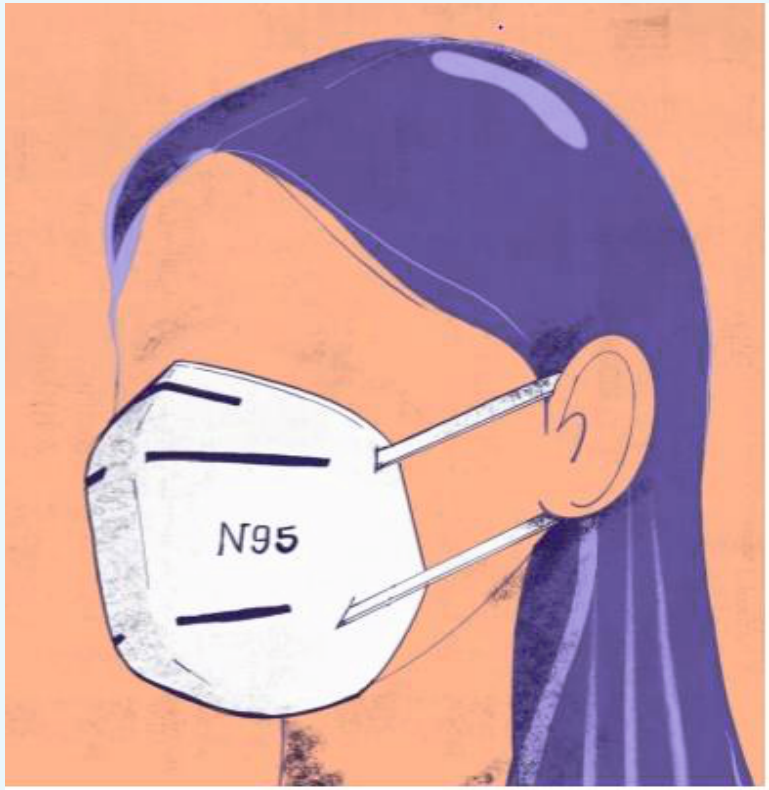
Source is HBsAg positive

Source is Unknown

Check Hepatitis B vaccination status & antibody titer for the HCW and Consult the Infectious Disease Specialist immediately to decide further course of action

Airborne Isolation

FOR YOUR PROTECTION



BEFORE YOU START YOUR TASK, PLEASE WEAR A MASK

Please wear a **N95** mask before entering this patient's room.

Reverse Barrier

Please remember to:

Perform Hand Hygiene

Wear PPE (Cap, Mask, Gown, Gloves)
and perform the required task

Remove PPE within the unit

Perform Hand Hygiene

Barrier Nursing


Please remember to:


Perform Hand Hygiene


Wear PPE (Cap, Mask, Gown, Gloves)
and Perform the required task


Remove PPE within the unit


Perform Hand Hygiene

Maharshi Karve Stree Shikshan Samstha's

Smt. Bakul Tambat Institute of Nursing Education,

Karvenagar, Pune- 411052

NABH CERTIFICATE FOR

PATIENT SAFETY AND QUALITY OF CARE

National Accreditation Board for Hospitals & Healthcare Providers

(Constituent Board of Quality Council of India)

For Patient Safety & Quality of Care

Deenanath Mangeshkar Hospital and Research Center
Near Mhatre Bridge, Erandawane
Pune - 411004, Maharashtra

The award of NABH Accreditation means that the organisation ensures:

1. **Commitment to create a culture of quality, patient safety, efficiency and accountability towards patient care.**
2. **Establishment of protocols and policies as per National/International Standards for patient care, medication management, consent process, patient safety, clinical outcomes, medical records, infection control and staffing.**
3. **Patients are treated with respect, dignity and courtesy at all times.**
4. **Patients are involved in care planning and decision making.**
5. **Patients are treated by qualified and trained staff.**
6. **Feedback from patients is sought and complaints (if any) are addressed.**
7. **Transparency in billing and availability of tariff list.**
8. **Continuous monitoring of its services for improvement.**
9. **Commitment to prevent adverse events that may occur.**

Maharshi Karve Stree Shikshan Samstha's

Smt. Bakul Tambat Institute of Nursing Education,

Karvenagar, Pune- 411052

MAHARASHTRA POLLUTION CONTROL BOARD

CERTIFICATE

MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437
Fax: 24023516
Website: http://mpcb.gov.in
Email: cac-cell@mpcb.gov.in

Kalpataru Point, 2nd and 4th floor, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai-400022

RED/L.S.I
No:- Format1.0/CAC/UAN No.MPCB-CONSENT-0000162873/CO/2402000253

Date: 03/02/2024

To,
LMMF's Deenanath Mangeshkar Hospital & Research Center
8+13/2, Near Mhatre Bridge, Erandawane, Pune.
Email:clean.operations@dmhospital.org
Contact No.:9673701862

Your Service is Our Duty

Grant of Renewal of Combined Consent to Operate and BMW Authorization (CCA) under the provisions of Water (P & CP) Act, 1974, Air (P & CP) Act, 1981 and Bio-Medical Waste Management Rules, 2016 as amended and Hazardous Waste (M & TM) Rules, 2016.

Ref:
1. Environment Clearance accorded by Env. Department, GoM vide dated 04.09.2010.
2. Previous combine consent & BMW authorization granted by Board vide dated 12.05.2022, valid up to 31.03.2023.
3. Your application for Combine Consent and Bio-Medical Authorization vide UAN No. 162873 dated 20.02.2023.
4. Minutes of 15th Consent Appraisal Committee meeting held on 24.11.2023.

After examining the proposal, The Maharashtra Pollution Control Board hereby grant 1st operate Combined Consent and BMW Authorization to HCE under Section 25/26 of the Water (P&CP) Act, 1974, Section 21 of the Air (P&CP) Act, 1981 and Bio-Medical Waste Management Rules, 2016, and Hazardous Wastes (Management & Transboundary Movement) Rules, 2016 respectively, under Environment (Protection) Act, 1986, subject to terms and conditions as specified below and in the **Schedule(I-IV) and Annexure (I-II)** enclosed in this order.

1. This CCA shall be in force for a period From **31-03-2023** To **31-03-2025**

2. The capital investment of the HCF is **₹55538.18** Lakhs (As per C.A Certificate Submitted by HCF)

3. HCF Area: - Plot Area 24000.00 M^2 with Built-up area 57798.00 M^2.

4. Activities Included

a. Total Number of Beds : **876 Nos.** (As per BNH certificate no. 2760 valid upto 31-03-2024)

I. General Beds : **124 Nos**
II. ICCU/ICU Beds : **138 Nos**
III. Operation Theatre : **18 Nos**
IV. Maternity Beds : **87 Nos**
V. Oncology Beds : **36 Nos**
VI. Other Beds : **473 Nos**

5. Conditions under the Water (P&CP) Act, 1974:-

1. Quantity of total water consumption shall not exceed 437 M^3/day. You shall not use the ground water without obtaining prior permission of Central Ground Water Authority.
2. You shall provide adequate treatment & disposal facility for Sewage & Effluent generated as specified in **Annexure-I**
3. You shall provide water meter at water intake point & at sewage/Effluent disposal point and shall maintain monthly records thereof.

6. Conditions under the Air (P&CP) Act,1981:-

1. You shall use the fuel for DG set as specified in the **Annexure-II**.
2. You shall provide adequate emission control system to DG set as specified in **Annexure-II**.
3. You shall strictly observe noise standards applicable for DG set stack emission and ambient noise level as per **Annexure-II**.

7. Conditions under Hazardous and Other Wastes(Management, Handling & Transboundry Movement) Rules, 2016 for treatment and disposal of hazardous waste:-

You shall have valid membership of CHWTSDF and shall dispose the Hazardous waste generated in strict compliance with said rules and maintain record thereof.

Sr No	Type of Waste	HW Category no.	Quantity	UOM	Disposal
1	5.1 Used or spent oil	5.1	3.33	Lit/Day	By Authorized Recycler
2	35.3 Chemical sludge from waste water treatment	35.3	15	Kg/Day	CHWTSDF

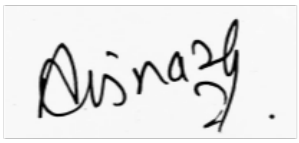
8. Conditions under Solid Waste Management rules 2016

1. You Shall Handover Solid waste (Other Than BMW) to Local bodies as per provisions of SWM Rules, 2016.
2. You shall Not mix general solid waste with Bio Medical Waste.

9. Conditions under BMW Management rules, 2016 (As Amended):-

1. You shall adhere to the BMW Generation quantity and storage conditions as specified in Schedule-I of BMW Management Rules, 2016, as amended.
2. You shall segregate and handover BMW to BMW T&D CTF **PASSCO ENVIRONMENT SOLUTION PVT. LTD, PCMC** Strictly complying with the Provisions of Schedule-I and Maintain record of the same.
3. **Cytotoxic Drugs/ Waste:** You shall have separate storage, marked with the symbol of Bio Hazard & Cytotoxic Hazard for outdated, discarded, unused cytotoxic drugs/waste and submit details of Management and Handling of outdated, discarded, unused Cytotoxic drugs in the format prescribed by CPCB which is available on www.cpcb.nic.in along with Annual Report to MPCB with a copy to CPCB before 30th June of every year.
4. **Mercury Waste:** You shall manage the Mercury Waste in HCE in environmentally sound manner (including storage, spilled collection, transportation and disposal) as per guidelines published by CPCB as detailed in document entitled “Environmentally Sound Management of Mercury Waste in Health Care Facilities” (www.cpcb.nic.in).

10. You shall not undertake Modifications/ Upgrdation in existing facility without obtaining prior Environment Clearance under the Provision of EIA notification, 2006 Or Consent to Establish from the MPC Board as applicable.
11. Any unauthorized change in Location, Name, personnel, equipment or working conditions as mentioned in the application by you shall constitute a breach of this CCA. In case of any change you shall apply fresh for CCA or amendment as applicable.
12. You shall not Rent, Lend, Sell, Transfer or Close Down the facility or otherwise transport / Handover the Bio-Medical waste generated for any other purpose without obtaining prior written permission of the MPC Board.
13. This Board reserves the right to review, amend, suspend, revoke, or change any of the conditions applicable under this CCA and the same shall be binding on the HCE.
14. You shall maintain records of MPC board Officers visit and shall obey all the lawful instructions issued by the Board Officers from time to time.
15. Any violation of provisions of BMW Management Rules, 2016 as amended shall attract the penal provisions of Environment (Protection) Act, 1986 and Violations under the provisions of Water (P&CP) Act 1974, Air (P&CP) act 1981 shall attract provisions of respective act including closure of the facility and prosecution.
16. This CCA shall not be construed as exemption from obtaining necessary NOC/permission from any other Government agencies as applicable.
17. HCE shall provide ETP within next 3 Months.
18. HCE shall properly operate ETP & STP to achieve consented norms.
19. HCE shall submit/extend BGs as per HCE BG regime.
20. You shall submit the bank guarantee of INR 25.00 lakhs towards compliance of conditions as specified in Schedule III to The Regional Officer, MPCB, Pune within 30 days. Non submission of B.G. in specified time shall attract revocation of this CCA without further notice



Signed by: Dr.Avinash Dhakne
Member Secretary
For and on behalf of,
Maharashtra Pollution Control Board
ms@mpcb.gov.in
2024-02-03 15:58:08 IST

Received Consent/Authorization fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	2098123.00	MPCB-DR-17430	20/02/2023	NEFT
2	30000.00	MPCB-DR-17431	20/02/2023	RTGS
3	107560.00	TXN2307001306	11/07/2023	Online Payment
4	154389.00	TXN2401005268	25/01/2024	Online Payment

Copy to:

1. Regional Officer, MPCB, Pune and Sub-Regional Officer, MPCB, Pune I

   They are also directed to ensure the compliance of consent conditions.
2. Cheif Accounts Officer, MPCB,Sion, Mumbai
3. I/C EIC- for record & website updating purpose.
4. CC/CAC Desk for record & website updation purposes.

Annexure – I

Conditions under Water (P & CP), 1974 Act: (Refer Condition No. 5)

A. Water Consumption Details:-

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	0.00
2.	Domestic purpose	380.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	32.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Other such as agriculture, gardening, etc.	25.00

B. Conditions for Sewage & Effluent Generation, Treatment and Disposal:-

Sr. No.	Description	Permitted quantity of discharge (CMD)	Standards to be achieved	Disposal
1	Domestic Sewage	306	As per clause 'C'	Recycle maximum and remaining used on land for gardening/disposed in to sewerage system of local body.
2	Trade effluent	26	As per clause 'C'	As above

C. You shall operate the combined waste water treatment plant of adequate design and capacity to treat the domestic sewage and trade effluent so as to achieve the following standards as prescribed below under E (P) Act, 1986 and Rules made there under and recycle treated effluent after achieving standard prescribed below.

Sr. No.	Parameters	Discharge Standards applicable
		Limiting Concentration in mg/except for pH
1	pH	6.5-9.0
2	Oil & Grease	10
3	BOD (3 days 27°C)	30
4	COD	250
5	Total Suspended Solids	100
6	Bio-Assay Test	90 % survival of fish after 96 hours in 100 % effluent

D. You shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

E. You shall provide Primary/ Secondary/ tertiary treatment system and disinfection facility.

F. The Applicant shall obtain prior consent of the Board to take steps for Expansion/Modification of any treatment and disposal system or an extension or addition thereto.

G. You shall provide Specific Water Pollution control system as per above conditions and conditions of Environmental Clearance, if applicable.

Annexure – II

Terms & conditions for Incinerator(s) and D.G. Set(s) under Air (P & CP) Act, 1981 and Bio Medical waste management Rule, 2016: (Refer Condition No.6)

1. You shall observe following fuel pattern and erect following stack (s):

Sr. No.	Stack Attached to	Fuel Type	Quantity	Stack Height (Mtr)
1	Gas Engines (4 x 1200 KVA)	Natural Gas	28.62 m3/day	30.00

2. The Applicant shall obtain prior permission of MPC board for providing additional control equipment with necessary specifications and operation thereof or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
3. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, either in whole or in part as necessary).
4. Conditions for D.G. Set:-
   a. Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically for control of noise.
   b. Acoustic enclosure/acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB(A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
   c. You shall make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.
   d. Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
   e. A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
   f. D.G. Set shall be operated only in case of power failure.
   g. The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
   h. The applicant shall comply with the notification of MoEFCC dated 17.05.2002 regarding noise limit for generator sets run with diesel.
5. You shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.

SCHEDULE-I

Authorization for Management of Bio-Medical Waste (Category and Quantity)

The authorization is granted for Generation and Segregation of BioMedical Waste (BMW) in waste categories and quantities listed here in below:

Sr. No	Category	Type of Waste	Quantity not to exceed (Kg/Month)	Segregation Colour coding	Treatment & Disposal
1	Yellow	a) Human Anatomical waste	11.78	Yellow coloured non- chlorinated plastic bags.	Bio medical Waste shall be sent to MPCB authorized BMW-CTF PASSCO ENVIRONMENT SOLUTION PVT. LTD, PCMC PCMC
		b) Animal Anatomical Waste	0.00		
		c) Soiled Waste	15340.19		
		d) Expired or Discarded Medicines	3.30		
		e) Chemical Waste	0.00		
		f) Chemical Liquid Waste	0.00	Separate collection system leading to effluent treatment system.	
		g) Discarded linen, mattresses, beddings contaminated with blood or body fluid.	7.80	Yellow coloured non - chlorinated plastic bags or suitable packing material.	
		h) Microbiology Biotechnology and other clinical laboratory waste	612.00	Autoclave safe plastic bags or containers.	Pre-treat to sterilize with nonchlorinated chemicals on-site as per National AIDS Control Organisation or World Health Organisation guidelines thereafter sent to BMW-CTF for Incineration.
2	Red	Contaminated waste (Recyclable)	1033.40	Red coloured non chlorinated plastic bags or containers.	Bio medical Waste shall be sent to MPCB authorized BMW-CTF PASSCO ENVIRONMENT SOLUTION PVT. LTD, PCMC PCMC
3	White (Translucent)	Waste sharps including Metals	476.65	Puncture proof, Leak proof, tamper proof container.	Bio medical Waste shall be sent to MPCB authorized BMW-CTF PASSCO ENVIRONMENT SOLUTION PVT. LTD, PCMC PCMC
4	Blue	a) Glassware	2314.00	Puncture proof, Leak proof with Blue coloured marking.	Bio medical Waste shall be sent to MPCB authorized BMW-CTF PASSCO ENVIRONMENT SOLUTION PVT. LTD, PCMC PCMC
		b) Metallic body implants	0.00		

SCHEDULE-II

Responsibilities of CBWTF

1. You shall handover Bio Medical waste only to MPCB Authorized Common Bio medical waste treatment and Disposal facility **PASSCO ENVIRONMENT SOLUTION PVT. LTD, PCMC** and maintain records thereof for 5 years.
2. You shall establish bar code for handling of bio-medical waste.
3. You shall ensure segregation of Bio-Medical Waste in colour coded bags as per BMW Management Rules, 2016
4. You shall not store Bio Medical waste beyond 48 hours from the generation.
5. You shall use only non-chlorinated plastic coloured bags.
6. You shall ensure use of colour coded bins and bags for segregation of BMW as required under BMW Management Rules 2016.
7. You shall not mix General/other Solid waste with Bio Medical Waste.
8. You shall ensure segregation, treatment and disposal of General / Other Municipal solid waste as per Solid Waste Management rules, 2016.
9. You shall pay the charges to authorized Common Bio Medical waste Treatment and Disposal facility for its services as agreed upon during the membership registration or as amended.
10. You shall comply and strictly abide with the conditions stipulated in BMW Management Rules, 2016 as amended time to time.
11. You shall handover Plastic / Metal waste (BMW) to Common Bio medical waste treatment and Disposal facility allocated to you for treatment & disposal or plastic/ metal recycler authorized by MPCB for BMW Handling and maintain records thereof & submit to MPCB in Annual report.
12. You shall provide training to all workers involved in handling of bio-medical waste at the time of induction and at least once a year thereafter and maintain record thereof.
13. You shall undertake appropriate medical examination of all BMW Waste handlers & staff at the time of induction and at least once in a year and immunize all involved in management 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.
14. You shall ensure use of personal protective Equipment such as Heavy Duty Gloves (Workman's Gloves), Gum Boots or safety shoes for waste collectors, Face mask, Head Cap, Splash Proof Gowns or aprons etc., Disposal gloves by waste handlers.
15. You shall develop and operate own website. The website should be uploaded on monthly basis with all the information relating to Bio-Medical waste management including this CCA and other permission and report.
16. You shall maintain all record for Generation, for a period of five years and produce whenever asked by MPCB authorities.
17. The occupier and operator of a Health Care Establishment shall be liable for all the damages caused to the environment or the public due to improper handling of bio-medical wastes.
18. You shall ensure submission of Annual Report of BMW for the period Jan to Dec, including category and quantity of BMW Generated and Disposed in Form IV for preceding year before 30th June of every year to the Regional Office, MPCB, Pune and uploading the same to MPCB Portal (https://www.ecmpcb.in/).

SCHEDULE-III

Bank Guarantees

1. Bank Guarantee imposed to ensure timely compliance, to be observed by operator.

Sr.No	Activity / Condition to be Complied	Compliance Timeline (Months)	Bank Guarantee Amount
1A	**Performance**		
1	To Segregate and Handle BMW as per Rule	Continuous	500,000.00
2	To provide BMW separate storage facility as per guidelines of CPCB	Continuous	500,000.00
1B	**Operation and Maintenance**		
1	Towards Operation and Maintenance of STP/ETP to achieve prescribed discharge standards	Continuous	500,000.00
2	**Records**		
1	To Maintain records of BMW and submission of Annual Report in Form –II before 31st January	Continuous	500,000.00
2	To maintain records of BMW material delivered to CBMWTSDF	Continuous	500,000.00
Total			25,00,000.00

Note: You shall extend the existing submitted Bank Guarantee for the Activity / Condition to be Complied mentioned in the above table valid upto the validity of this CCA + 4 months additional. Submit a fresh Bank Guarantee for the newly added Activity / Condition to be Complied mentioned in the above table valid upto the validity of this CCA + 4 months additional.

SCHEDULE-IV

General Conditions

The following general conditions shall apply:-

1. You shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
2. Whenever due to any accident or other unforeseen act or event, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith reported to Board, concerned Police Station, Executive Engineer MIDC and Local Body. In case of failure of pollution control equipment's, the process connected to it shall be stopped.
3. You shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control operation to abide by terms and conditions of this consent.
4. You shall submit to this office, the 30th day of September every year, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as per the provisions of rule 15 of the Environment (Protection) (Second Amendment) Rules, 1992.
5. You shall comply with the Hazardous Waste (M, H & TM) Rules, 2016 and submit the Annual Returns as per Rule 20(2) of Hazardous Waste (M, H & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year to Regional Office, Pune.
6. You shall engage qualified staff/personnel/agency to see the day to day compliance of consent & authorization condition towards Environment Protection.
7. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the Terminal manholes. No effluent shall find its way other than in designed and provided collection system.
8. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the HCE.
9. You shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
10. You should not cause any nuisance in surrounding area. You shall maintain good housekeeping.
11. You shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted.
12. The non-hazardous solid waste arising in the HCE premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
13. You shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification Dated. 16/11/2009 as amended.

14. You shall submit an official e-mail address and any change will be duly informed to the MPCB.
15. You shall observe provisions of E-waste (Management) Rules 2016 & as amended time to time and Batteries (Management and Handling) Amendment Rules, 2010.
16. An inspection book shall be opened and made available to the Board’s officers during their visit to the HCE.
17. In case you use/ handle/ generate the cytotoxic waste you shall strictly adhave to the standards/ SOPs applicable and waste shall be labelled specifically as "Cytotoxic Waste" with symbol on waste containers/ bags and shall handover to BMW CTFs.
18. You shall obtain required permissions from competent authority for radio active material user/ handling/ disposal of waste before commencement of such activity.
19. The Energy source for lighting purpose shall preferably be LED based.
20. You shall harvest rainwater from roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial applications within the plant
21. You shall provide personal protection equipment as per norms of Factory Act 1948
22. You are responsible to submit application for renewal of Combined Consent & Biomedical Waste authorization before 60 days of expiry.

This certificate is digitally & electronically signed.

MAHARASHTRA POLLUTION CONTROL BOARD
REGIONAL OFFICE – PUNE

Phone : 020-25811627
Fax : 020-25811701

Email : ropune@mpcb.gov.in
Visit At : http://mpcb.gov.in

Jog Center, 3rd floor, Mumbai Pune Road, S.No. 21/5, F.P.No.28, Wakdewadi, Shivajinagar, Pune - 411003

LETTER OF BIO-MEDICAL WASTE AUTHORISATION

[Authorisation for Generation, Storage, Disposal of Bio-Medical Wastes under Rule 7(4)]

I. File number of authorisation and date of issue

MPCB/ROP/BMW-AUTH/ 20080001174 **/2020 Date** 14/08/2020

II. **M/s MAI MANGESHKAR Hospital** is hereby granted an authorization for generation of biomedical waste on the premises situated, **117/1, NEAR BAIF, MUMBAI BANGALORE HIGHWAY, WARJE, PUNE 411058**

III. This authorisation shall be in force for a period up to **31.03.2025**

An application shall be made by the occupier/operator for renewal 3 Months before expiry of earlier authorisation.

IV. This authorisation is issued subject to compliance of 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.

V. No of Beds: 45

Terms and Conditions of authorisation

1. The authorized Person shall comply with the provisions of the Environment (Protection) Act, 1986, and the Rules made there under.
2. The authorisation shall be produced for inspection at the request of an officer authorized by the prescribed authority.
3. i) The authorized person shall not rent, lend or sell the biomedical waste or facility.

   ii) The authorized person can transfer the BMW generated at above premises to the "Transporter" or "Operator of Facility" authorized by MPCB under Bio-Medical Waste (Management and Handling) Rules, 1998 for collection, transportation, treatment and/or disposal of BMW generated.
4. Any unauthorized change in equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of this authorisation.
5. It is the duty of the authorized person to take prior permission of the prescribed authority to close down the facility.

REGIONAL OFFICER PUNE M.P.C.BOARD

6. The authorisation is granted for generation of Bio-Medical Waste (BMW) in waste categories and quantities listed here in below:

Sr. No.	Category	Description	Quantity not to exceed (Kg/M)	Segregation Colour coding	Treatment & Disposal
1	Yellow	Human Anatomical Waste	133	Yellow	Incineration
		Solied Waste: Items contaminated with blood	158.16	Yellow	
		Expired or Discarded Medicine		Yellow	Incineration
		Clinical Laboratory Waste		Yellow	Incineration
		Chemical Liquid Waste	As per Actual	Separate collection system leading to ETP	After resource recovery, the chemicals liquid waste shall be pre-treated before mixing with other wastewater. The combine discharge shall confirm to discharge norms given in Schedule III of BMW Rules
		X-ray hypo solution (fixture)			
2	Red	Contaminated Waste(Recyclable)	87.613	Red	Autoclaving followed by shredding
3	Blue	Waste Sharps	3.528	Blue / white translucent	Disinfection (chemical treatment)and mutilation / shredding

No onsite treatment of BMW is permitted. The above mentioned Bio medical Waste shall be sent to Common BMW Treatment & Disposal facility i.e. **M/s.PASSCO ENVIRONMENT SOLUTION, ERANDWANE, BEHIND ELSON PHRMACEUTICALS, PUNE 411004 authorized by MPCB**

7. The hospital authority shall proper collection of mercury spillage arising due to breakage of thermometer, pressure gauges & other equipments used in health care facilities as well as the storage shall be in accordance with Hazardous Waste (Management, Handling & Transboundry Movement) Rules, 2008 and returning it to instrument manufacturing apart from taking necessary steps to ensure that the spilled mercury does not become a part of Bio-Medical Waste or other solid waste generated from Health Care Facilities.

8. The liquid/solid waste generated from the treatment activity (from laboratory and washing, cleaning, housekeeping and disinfecting activities) shall be treated suitably by providing effluent treatment facility to conform the standards prescribed in Schedule V of said Rules and the Environment (Protection) Act, 1986.

(i) The daily quantity of trade effluent shall not exceed 1.0 M^3

(ii) The daily quantity of sewage effluent shall not exceed 10.0 M^3

9. BMW shall be treated and disposed of in accordance with Schedule I; and in compliance with the standards prescribed in Schedule V of said Rules.

10. (i) BMW shall not be mixed with other wastes or reused, recycled or sold in any form.

(ii) BMW shall be segregated into containers / bags at the point of generation in accordance with Schedule-II prior to storage, treatment and disposal. The containers shall be labeled according to Schedule III.

(iii) If a container containing BMW is to be transported from the premises where BMW is generated to any waste treatment facility outside the premises, the container shall, apart from the Label prescribed in Schedule III, also carry information prescribed in Schedule IV and shall be transported by authorized Transporter only.

(iv) Notwithstanding anything contained in the Motor Vehicles Act, 1988 or Rules there under, BMW shall be transported only in such vehicle as may be authorized for the purpose by the competent authority as specified by the Government.

(v) No untreated BMW shall be kept stored beyond a period of 48 hours.

11. Standards for waste autoclaving:
The autoclave should be dedicated for the purposes of disinfecting and treating Bio- Medical Waste,

(I) 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.

(II) When operating a vacuum autoclave, medical waste shall be subjected to a minimum of one pre-vacuum pulse to purge the autoclave of all air. The waste shall be subjected to the following.

(i) a temperature of not less than 121 C° and a pressure of 15 psi for 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; or

(III) Medical waste shall not be considered 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 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.

(IV) *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.

(V) *Validation test: 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 Bacillus stearothermophilus spores using vials or spore strips, with at least 1x 10^4 spores per milliliter. Under no circumstances will an autoclave have minimum operating parameters less than a residence time of 30 minutes, regardless of temperature and pressure, a temperature less than 121 C° or a pressure, less than 15 psi.

(VI) Routine Test.—A chemical indicator strip/tape that changes color 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 that one strip over the waste package at different location to ensure that the inner content of the package has been adequately autoclaved.

12. Every 'Authorized Person' shall submit an Annual Report to the prescribed authority in Form-II by 31st January every year including information about the categories and quantities of BMW handled during the preceding year.

13. (i) Every 'Authorized Person' shall maintain records related to the generation, collection, reception, storage, transportation, treatment, disposal and/or any form of handling of BMW in accordance with these Rules and any guidelines issued.

(ii) All records shall be subject to inspection and verification by the prescribed authority at any time.

14. When any accident occurs at any institution or facility or any other site where BMW is handled or during transportation of such waste, the authorized person shall report the accident in Form III to the prescribed authority forthwith.

15. **You Shall Obatin Separate Consent under water (Prevention &Control of Pollution) Act,1974&Air (Prevention &Control of Pollution)Act,1981**

16. The applicant shall submit Bank Guarantees at the Regional Office, M.P.C. Board, Pune within 15 days of the date of issue of Authorization. The Bank Guarantee(s) shall be valid up to validity **30.06.2025**of this authorization. The details of Bank Guarantees to be submitted are as below.

Sr. No.	Activity / Condition to be Complied	Compliance Timeline (Months)	Bank Guarantee Amount
I (A)	**Operation and Maintenance**		
1	To Segregate and Handle BMW as per Rule	Continuous	25,000/-
I (B)	**Records**		
1	To Maintain records of BMW, generation, transportation, treatment & disposal and submission of Annual Report in Form –II before 31st January every year.	Continuous	15,000/-
II	**Performance**		
1	To provide Separate BMW storage facility As per guidelines of CPCB.	Six	25,000/-
2	Towards Operation & Maintenance of pollution control systems.	Continuous	25,000/-
3	Effluent Treatment Plant Not provided	Six	50000/-

17 The Occupier will obey all the lawful instructions issued by the Board Officers from time to time

For and on behalf of the
Maharashtra Pollution Control Board

REGIONAL OFFICER PUNE M.P.C.BOARD

(Dr.J.B.Sangewar)
Regional Officer, Pune

To,
M/s MAI MANGESHKAR Hospital.
117/1, NEAR BAIF, MUMBAI BANGALORE HIGHWAY,
WARJE, PUNE 411058

Authorization Fees Received:-

Sr. No.	Amount (Rs.)	Transaction No.	Date
1.	12500/-	TXN2002001880	19-02-2020

Copy to:
Chief Accounts Officer, MPCB, Mumbai

CERTIFICATE OF PERMANENT REGISTRATION

(CHAITNYA INSTITUTE OF MENTAL HEALTH)

MAHARASHTRA STATE MENTAL HEALTH AUTHORIY

(MSMHA)

Form-F

[*See* rule 66)

CERTIFICATE OF PERMANENT REGISTRATION OF MENTAL HEALTH ESTABLISHMENT

The Maharashtra State Mental Health Authority, after considering the application under section 65 (2) or section 66 (3) or section 66(10) or section 66 (17) of the Mental Healthcare Act, 2017, hereby accords renewal of Permanent Registration to the applicant mental health establishment in terms of section 66 (4) or section 66 (11), or section (17) as per the details given hereunder:

Name:- **Chaitanya Institute For Mental Health**

Address – **Bhagatpuram S.R. No 31/A Khadi Machine Chauk Kondhawa Pune**

No of beds:- **200**

Permanent Registration Certificate No. **8/2023**

The Permanent registration certificate No. **8/2023** issued, is subject to the conditions laid down in the Mental Healthcare Act, 2017 and the rules and regulations made there under .

Place:-Mumbai

Date :.-20/04/2023

Registration Authority

(MSMHA)

Seal of the Registration Authority

Dr. Swapnil Lale
Chief Executive Officer
State Mental Health
Authority, Mumbai