STANDARD OPERATING PROCEDURE
FOR
BIO-MEDICAL WASTE MANAGEMENT PROGRAMME

(Bio-Medical Waste Management Rules, 2016)

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BIO-MEDICAL WASTE MANAGEMENT PROGRAMME

1. Background:

Bio-medical waste management is an integral part of public health service delivery and environment health. The Ministry of Environment and forest (MOE&F),GOI, notified Bio-Medical waste (Management and Handling) Rules,1998 under Environment Protection Act,1986 through gazette Notification S.O.630(E).

The new Rules for Bio-medical waste management came into effect from 28thMarch 2016 called as Bio-medical waste (Management) Rules, 2016. The said rule emphasizes on management of Bio-medical wastes generated at all the health care facilities that includes segregation, collection, transportation, processing, storage, handling, treatment and disposal. Proper management of the generated bio- medical waste will thus further prevent the environmental pollution and public health hazard.

2. Sustainable Development Goal 2030:

Goal 3 :- Ensure Healthy lives and promote well being for all at all ages.

Target by 2030 :- Substantially reduce the number of deaths and illness from hazardous chemicals and air, water & soil pollution and contamination.

3. Objective:

i) To prevent public health hazard and Environmental pollution (soil, air and water) by strengthening the quality of bio- waste management.

ii) To prevent the occupational health hazards by strengthening the accessibility and availability of logistics, consumables, PPE and capacity building.

3.1 Strategy:

1. To ensure for obtaining Authorization for all HCFs from SPCB.
2. To ensure Biomedical waste Management of different HCFs through Out sourcing Agencies at district level.
3. To ensure the availability of adequate HR, logistics & consumables(color coded bins, polythene(non-chlorinated) with biohazard symbol, Needle syringe terminator(NST), Sodium hypochlorite solution(NaOCl), Personal Protective Equipment (PPEs), Wheel barrow, trolleys, weighing machine, log book for documentation, mercury spill kit etc).
4. To ensure display of IEC materials such as posters for hand hygiene, route chart for transportation of waste, segregation practices, NaOCl solution preparation process, mercury spill management, sharp management, and containment area at HCF.
5. To develop different SOPs for segregation, collection, transportation, storage, and treatment & disposal of Bio- Wastes and others related to infection control measures. Further these SOPs to be shared with the districts for ensuring further communication down below.
6. To ensure capacity building of all categories of health care personnel related to bio-medical waste management.
7. To protect the health care personnel by immunizing them against Hepatitis B and Tetanus.

8. To ensure segregation of liquid chemical waste & its treatment at source prior to mixing with other effluent generated from health care facilities.
9. To ensure documentation at each point of generation, treatment and disposal and for accidental injuries.
10. To ensure effective M&S through the BMWM monitoring committee of the state/district and Waste Management Team(WMT) of each hospital.

3.2 Methodology:

3.2.1. Constitution of District level Monitoring committee for BMWM(New BMW Rule 2016)

1. District Level Monitoring Committee- Collector & District Magistrate/Deputy commissioner/Addl. District Magistrate will be the Chairman and the Chief District Medical Officer (CDMO) shall be the Member Secretary of this Committee. Other representative from SPCB/RPCB, representative from (public health engineering department, local bodies or municipal corporation, IMA, CBWTF (if any), registered NGO) working in the field of bio-medical waste management may be the members. The committee may also co-opt any other members and experts, if necessary with due permission of the chairman of the district.

2. The Dist. Level Monitoring committee for BMWM to be convened twice in a year and its proceedings is to be submitted to DPH, Odisha and SPCB as per new Rules 2016.

3. The ADMO (PH), ADMO (Med) and the DPM to be included in the committee with due permission of the Chairman.

3.2.2 Waste Management Team of a Hospital (working group):

All the hospitals to have a separate WM team (working group) at DHH/SDH/CHC level for effective monitoring and supervision of BMWM programme under the chairmanship of CDMO/SDMO/MO I/C. The monthly meetings to be conducted and proceedings submitted to the ADMO (PH) by each HCF. Further the compiled proceeding is to be prepared as a brief summary report for the year and submitted to all the CDMOs respectively by 15th of each month with a copy to the State BMW cell. The ADMO, PH is the Nodal Officer for the implementation of District BMWM programme and all the reports related to BMWM must come through the ADMO (PH) only to this directorate.

1. Members of WMT at DHH: CDMO,ADMO(PH),ADMO(Med.),ADMO(FW),DPM, Hospital Manager, Sr. Specialist, Store Pharmacist, BBO, Pathologist/Microbiologist, Sr. Lab Tech., Sr. Matron/Asst. Matron/ Nursing sister, RWSS/PHED, representative from Group-D staff& outsourcing agency.

2. Members of WMT at SDH/ OH/CHC: SDMO, MO I/C, Sr. Spl., Pharmacist, SN/ Nursing Sister,LT,BPM, Jr. HM, BBO, PHEIO, HQSr.MPHS, HQ ANM, RWSS, representative from Group-D staff, representative from NAC/Municipality, OS agency and Sarpanch from head quarter GP.

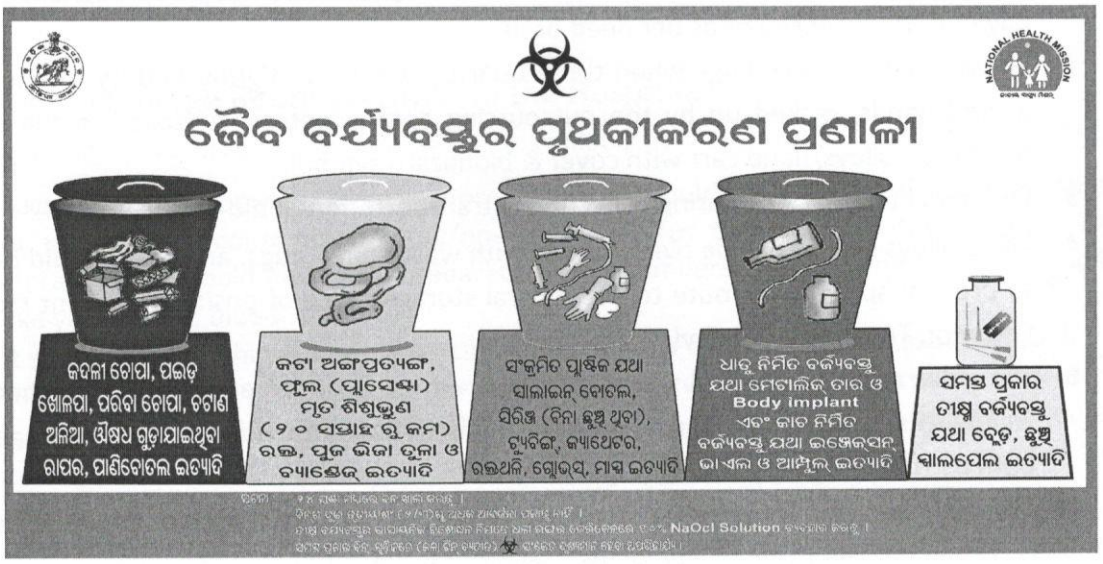
3. Roles & Responsibility of Waste Management Team of a hospital

a) To prepare the bio medical waste management plan for their hospital.
b) To ensure availability & accessibility of bio medical logistics and consumables.
c) To ensure training, Immunization and quality segregation practices.
d) To ensure liquid waste management at each point of generation.
e) To ensure proper treatment and disposal of the generated bio medical waste.

4. Standard OperatingProcedures for Segregation of Bio-medical waste

Bio-medical waste generated during medical procedure/diagnosis/treatment/ immunization /investigation/research activities or health camps may be segregated as given below:

1. It must be segregated into specific color- coded bins with cover having biohazard symbol & lined with bio-degradable poly bags/liners(non-chlorinated). The cover of the bins must always to be kept closed after putting the waste.
2. Posters for segregation practices must be displayed prominently at the location of color-coded bins with biohazard symbol.
3. Needle Syringe Terminator(NST) must be available in a functional condition at each point of generation for needle mutilation.
4. Needles to be cut by NST (both sharp portion and nozzle of the syringe)and or stored in tamper proof/leak proof/ puncture proof container for sharp storage containing 10% hypochlorite solution. Other needles, sharps, blades, syringes with fixed needles which cannot be destroyed by NST may also be put into the PPC.
5. Segregation of BMWs is to be done as per the protocol of new BMWM Rules 2016 as mentioned below:



Note:

i) Expiry drugs/Cytotoxic drugs should be handed over to pharmacist to store in Yellow bin and handed over to the Central Drug house of the district for its disposal following all procedures.

ii) Dead fetus (< 20 weeks) must be put into yellow colored bin &for this purpose requisite certificate to be obtained from ADMO(Med)/ concerned Sr.O&G Spl. of the hospital.

iii) There will be no chemical pretreatment before incineration except for microbiological, lab and highly infectious waste.

iv) Chemical treatment requires using at least 10% Sodium Hypochlorite having 30% residual chlorine for 20 minutes.

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v) Mutilation and shredding must be to an extent to prevent unauthorized reuse.

vi) All the bins may be two thirds filled and tied securely before lifting by the collector.

vii) The poly bags in the color coded bins needs to be replaced on daily basis.The bins needs to be cleaned/replaced by another set by the OS agency on daily basis or as per MOU signed by the third party.

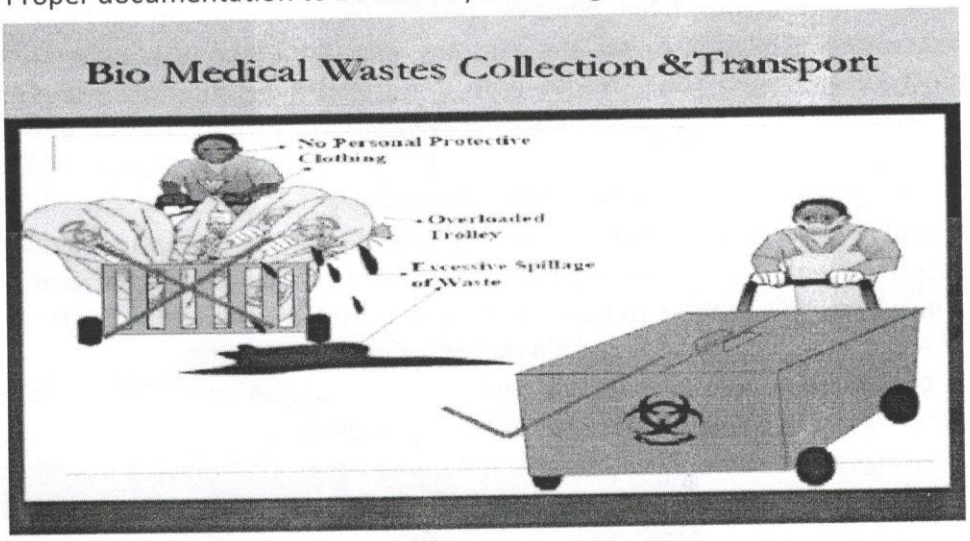
viii) Black bin should be kept in a separate place away from the other color coded bins to prevent mixing of bio-waste with general waste.

ix) All plastic bags shall be as per BIS standards as and when published, till then the prevailing Plastic Waste Management Rules shall be applicable.

5. Standard Operating Procedure for collection and transportation of BMWM

1. The collection & transportation of bio-waste must be done in accordance to predefined route chart displayed at strategic places avoiding peak hours of the hospital twice in a day (7 A.M. & 4 P.M.) or as per need basis
2. Ensure that the poly bags when three-quarters full to be tightly tied by the neck with gloved hands, picked up by the outsourcing agency person & placed in the wheel - barrows/trolleys/hand cart with cover & biohazard symbol.
3. Personnel to wear PPE during collection & transportation of bio-medical waste.
4. The trolleys should not be over- loaded with waste bins/ bags, and care should be taken to prevent spillage en-route to the central storage place of onsite treatment facility or Common Treatment Facility(off-site).
5. The generated bio-medical waste is to be weighed & documented in the log book by a weighing scale/Spring balance prior to transportation to the Common storage room both by the OS agency and ward personnel.
6. The collected and transported bins/poly bags to be kept in the color coded area in the common storage room of the Health facility.
7. Two sets of color coded bins with biohazard symbol are to be made available for each generation point by the OS agency/Hospital. The OS agency collecting BMWs from DHH/SDH/CHC/OH/MCH/CH/RGH/IDH is to be made responsible for cleaning of bins& replacing the alternate set of bins& poly bags each day.The covered trolleys/wheel barrows/hand-carts with cover have to be cleaned daily OS agency. All the bins, trolleys and wheel barrows to be branded with biohazards symbol.
8. The untreated bio-medical waste should not be kept beyond 48 hours as per SPCB mandate. If kept beyond 48 hrs for any reason, it must be informed to the nodal officer of the district with a copy to State BMW cell. (bmwmhodisha@gmail.com, 0674-2395826)

9. The biomedical waste should be transported through a covered vehicle with biohazard symbol for the purpose of treatment & disposal at off-site(CBWTF).
10. Proper documentation to be done by the OS agency as well as the hospital staff.



5.1 Common Storage Room for BMW in the Hospital:

Temporary common storage room is to be made available at MCH/ DHH/ SDH/ CHC/ IDH/ PHC.

1. Location of the common storage room for BMW should be located inside the premises or near to the containment area/on-site facility for treatment of the hospital. The storage area should have three separate small chambers with designated colour coded like yellow, red, blue& white.
2. It should contain three/four big partitions with colour coding with biohazard symbol.
3. All the neck tied poly bags to be collected from various wards in wheel barrows/ trolleys/hand carts with cover and should be kept inside these respective coloured coded areas in the common storage room before final treatment &disposal at on-site or off-site.
4. The storage area should have nonporous cement/ tile floor, wall fencing asbestos roof, protected from rain and sunlight, good ventilation, secured with lock and key with proper signage. The area should be in accessible to animals, insects, rodents and birds.
5. The said room must be well ventilated, lighted having water facility and washable sloping floors with drainage facility for washing and cleaning purposes.
6. The storage area should be easily accessible for waste handlers & waste transporting vehicle with bio hazard logo.
7. The storage area should not be situated in the close proximity of food stores, kitchen, wards or water bodies.
8. Provision for cleaning of the equipment, protective clothing, waste bags or containers and transporting trolleys should be located conveniently close to the storage area.

6. Standard Operating Procedure for Sharp Waste Management

According to the Biomedical Waste Management Rules 2016, Waste sharps category includes needles, syringes with fixed needles, needle from needle tip cutter or needle burner/destroyer, scalpels, blades, metal sharps or any other contaminated sharps object that may cause puncture and cuts. This includes both used, discarded and contaminated metal sharps.

Do's:

1. Always were gloves while handling needles and syringes.
2. Always mutilate the needle and cut the nozzle of the syringes with a needle syringe terminator(NST) or needle burner/hub cutter before disinfecting and disposing the sharps in white PPC. Further detach the syringe barrel (without the nozzle) from the plunger and discard it in red colored bin meant for infected plastics.
3. Always cut the ampoule with cutter and discard the used/discarded/contaminated ampoules and injection vials in blue bin(except cyto-toxic).
4. The AD syringes or the needles which are not mutilated by NST may be directly put into the white PPC that contain10% hypochlorite solution.
5. Also discard the metal sharps like blades/lancets and scalpels in PPC with 10 % of hypochlorite solution.
6. The contact period for chemical treatment using at least 10% hypochlorite solution having 30% residual chlorine should be for minimum twenty to thirty minutes and maximum one hour.
7. After 30 minutes to one hour the sharp waste must be sieved out and the remaining disinfectant to be discarded into the drainage system.
8. Finally dispose the sharp wastes in the sharp pit of the containment area orelse hand over to the OS agency of the CBWTF.

Don'ts

1. DO NOT GIVE INJECTIONS WITH BARE HANDS

2. Never mix sharps with other streams of waste.
3. Never throw needles and syringes without mutilation.
4. Never discard the sharps in non-puncture proof and leaking containers
5. Never recap or bend syringes
6. Never burn the syringes
7. Never dispose the syringes in open areas other than red colored bin.
8. Never discard the metal sharps in non-puncture proof container
9. Never cut the ampoules in such a way that they can hurt others.
10. Never break glass sharps manually.



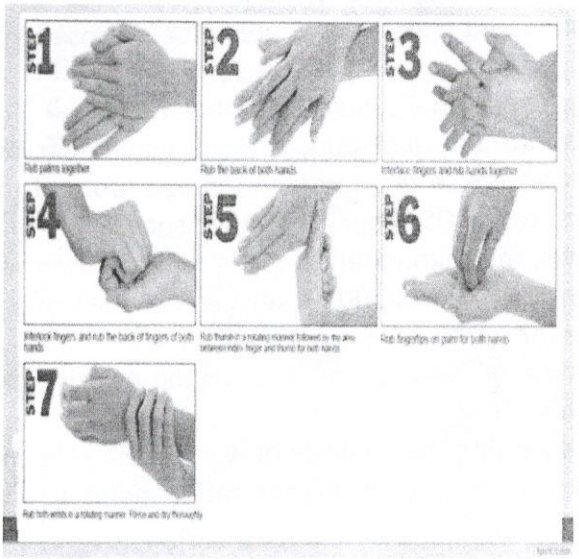


7. Standard Operating Procedure for Hand Hygiene

Five Moments of Hand Hygiene:

1. Before touching a patient.
2. Before clean/aseptic procedure
3. After body fluid exposure risk
4. After touching a patient
5. After touching patient surroundings
6. Use liquid soap or alcohol hand rub
7. Don't dry your hands with the towel but use sterilized tissue paper/cloth or dryer.

Steps of Hand hygiene/Hand Rub:



1. Palm & fingers
2. Back of hands
3. Knuckles
4. Thumbs
5. Finger tips
8. Wrists
9. Interlocking & Wash

8. Standard Operating Procedure for BMW Management at Immunization Point

The Waste generated during the immunization are to be segregated and disposed up as per the Biomedical Waste Management Handling Rules 2016.

i) Before Immunization the Health Care Personnel must wash their hands & wear gloves.
ii) After immunization the syringe & needle must be mutilated through Needle Syringe Terminator (NST)/Hub Cutter.
iii) The needle portion to be mutilated/destroyed by a NST.
iv) The nozzle of the syringe must be cut and barrel separated from plunger.
v) The barrel, plunger & gloves must be put into the red colored plastic bin having biohazard symbol.
vi) The mutilated needles, lancet, syringes with fixed needle that cannot be destroyed by NST are to be put into the white PPC containing 10% hypochlorite solution.
vii) Apart from this used/discarded contaminated metal sharps are to be disposed into the same white PPC.
viii) After segregating the waste, Health Care Personnel should wash their hands.
ix) All the segregated waste must be transported through puncture proof container, red colored poly bags from the immunization site to the common storage room of the nearest DHH/SDH/CHC and handed over to the OS agency for final disposal.
x) In case of ILR point at PHC level/SC level, the segregated waste is to be transported to the nearby CHC by the health worker through MHU/RBSK vehicle/Vaccine van and further action will be done at CHC label for treatment & final disposal.
xi) Further this bio-wastes to be collected by OS agency from CHC to the nearest SDH OR DHH having treatment and disposal facilities.
xii) Proper documentation to be ensured regarding the quantity of wastes and safe and secured transportation during the final journey from immunization point to the point of treatment and disposal.

Note:

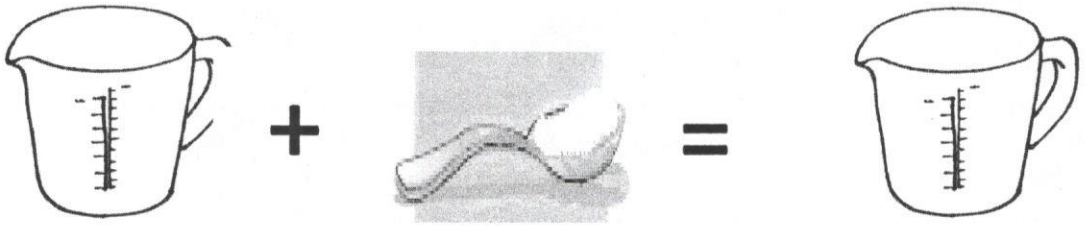
1) Used lancet, mutilated needles, syringes with fixed needles are to be segregated into white PPC.
2) RDKs, gloves, barrel and plunger are to be segregated into Red colored bin.
3) Infected gauze, cotton etc. are to be segregated into yellow colored bin.
4) Discard the body fluids such as urine, blood etc. after disinfecting with 10% NaOCL solution.

9. Standard Operating Procedures for preparation of bleaching powder solution

Disinfection is a very important procedure in bio-medical waste management. Disinfectants are antibacterial agents that are applied to eliminate microorganisms, the process of application of the disinfectant is known as disinfection. The aim of disinfection is to eliminate microorganisms from the used objects, instruments and equipment.

Preparing disinfection solution – Hypochlorite Solution:

1. The disinfection solution becomes unstable rapidly, hence it needs to be freshly prepared daily or changed on becoming dirty / turbid or after 4-6 hrs.
2. To obtain 10% Hypochlorite solution, mix 100 grams(7 table spoons) of bleaching powder (containing active chlorine of 33-35%), in 1 liter of water.
3. Stir the solution well.
4. After the solution is ready, sieve it & pour the solution in the PPC and discard thesediment.
5. Use freshly prepared 10% Hypochlorite stock solution, prepared every day for use.
6. The Bleaching powder container should be kept closed.
7. The methodology to prepare fresh solution of the desired concentration is as follows.



1 liter of water + 100 Gms of Bleaching Powder = 1 liter of 10% Hypochlorite (Disinfectant)Solution

Procedure for preparation of 0.5% , 1% and 10% concentrated NaOCl solution.

(Here solution is made in per liter volume. So as per volume of water taken in bucket,accordingly the amount of NaOCL/bleaching powder should be added to it to make required solution.)

Conc. Of NaOCl (%)	Vol. of water (in lit.)	Amt.of bleaching powder (in gm.)	No.of Table spoon.
0.5%	1	15	1
1%	1	33	2
10%	1	100	7

Note:

1. The NaOCL solution should always be freshly prepared and not to be reused.
2. Discard the used NaOCL solution into the sewerage system.
3. Since different concentrations of NaOCL are being utilized by various hospitals, the user guideline given on the container to be followed accordingly to get the desired impact of disinfection.

10.Standard operating procedure for LWM at the point of generation

Liquid waste Management is an integral part of Biomedical Waste Management of each Health Care Facility. As per the mandate of OSPCB, liquid waste should be treated at the point of generation before being discharged into the sewerage system to reduce water pollution or else can be directly discharged into the drainage system connected to the STP/ETP of the respective hospital.

Steps to be followed for the safe disposal of the liquid Bio-Medical Waste:

Low cost technology& model have been provided to be established across all hospitals (DHH/SDH/CHC)in OT,LR,DR, Lab & IR for managing the liquid waste as per protocol and new Rules BMW (2016). Below given are five steps that needs to be followed for proper management of LWM.

Step 1: Fill the top 5 liter can with 10 % hypochlorite solution

Step 2: Start collection of the liquid Bio-Medical Waste from the wash basins into the (50 L/30 L/20 L) can/drum(as per volume of LW generated) placed below the basin or behind the wall or as per feasibility and keep the outlet valve closed.

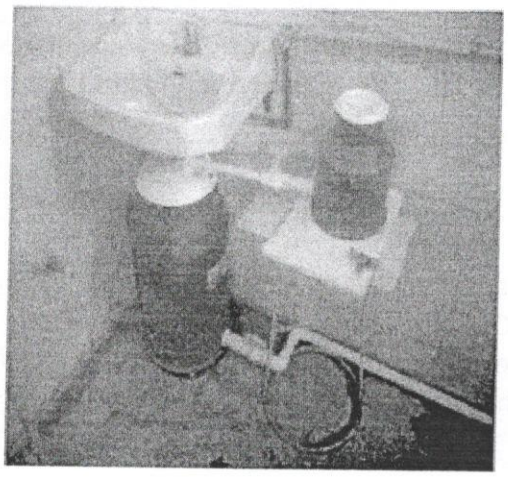
Step 3: Drain the 10 % solution from the 5 L can to the 50 L/30 L/20 L can (as per volume of LW generated) and adjust the quantity of the solution such that it contains more than 2 mg/L of chlorine next day morning on its discharge. The residual chlorine should be measured using a Chloroscope/OT Test Kit and recorded in a register as per mandate of OSPCB.

Step 4: Open the outlet valve of the 50 L/30 L/20 L can/drum every day morning so that entire disinfected liquid is drained to the sewer. Conduct the OT test for determination of end point chlorination on daily basis by OS personnel and record the findings.

Step 5: Close the outlet valve of the bigger can/drum and start filling the liquid Bio-Medical Waste again.

Note:

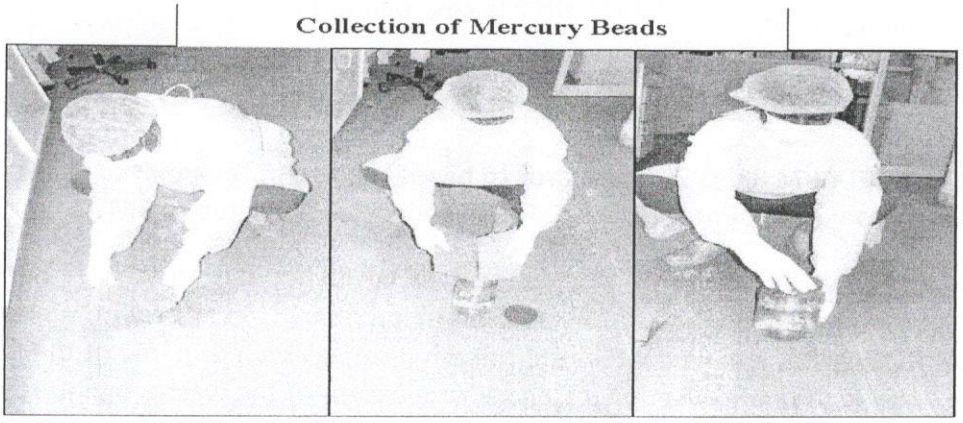
1. Repeat the procedure every day. Keep the records of the consumption of the bleaching powder daily for the verification by OSPCB officers.
2. Maintain the record of residual chlorine measured by Chloroscope/ OT kit and counter sign it by Ward I/C or Matron.

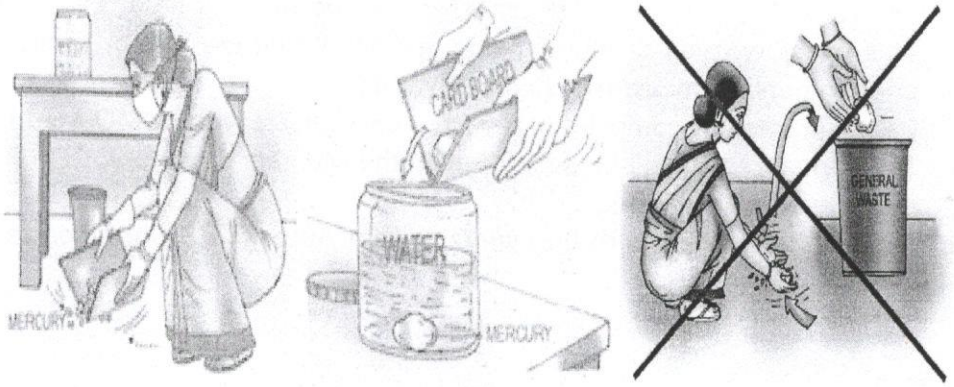


11.Standard Operating Procedure For Mercury Spill Management

Steps for cleaning up Mercury Spills:

1. Remove everyone from the area that has been contaminated with mercury. Keep the heat below 20°C and ventilate the area if possible.
2. Always wear personal protective gears like gloves, masks and aprons while handling mercury spills from broken thermometer or leaking of blood pressure equipment.
3. Remove all jewellery from hands and wrist so that mercury cannot combine with the precious metals.
4. Always collect mercury droplets using together using two card board/discarded x ray-plates pieces. Locate all mercury beads carefully.
5. Drop the collected mercury in a bottle containing some water. Tightly cover the bottle lid and label it.
6. Send the bottle containing mercury back to the Store pharmacist /TSK.
7. Never touch the mercury with bare hands. Never throw the mercury in waste bins or drain. Never use a broom or a vacuum cleaner for cleaning of Mercury.
8. It should not be swept down the drain and wherever possible,it should be disposed off at a hazardous waste facility or given to a mercury based equipment manufacture.





12.Standard Operating Procedure For Management Of Biological Spill

(Blood/Urine/ Fecal/Vomitus)

1. Inspect the area around the spill thoroughly for splatters or splashes.
2. Restrict the activity around the spill until the area has been cleaned, disinfected and dry.
3. Assemble materials required for dealing with the spill prior to putting on PPE.
4. Put on gloves; if there is a possibility of splashing, wear a gown and facial protection (mask and eye protection or face shield).
5. Confine and contain the spill; pour equal or more amounts of disinfectant on the spill & leave it for minimum 20-30 minutes.
6. Then cover with any absorbent material& wipe up the spill and put into yellow colored bin with bio-hazard Symbol.
7. After wiping the spill, disinfect the entire spill area with a disinfectant and allow it to stand for the amount of contact time recommended by the manufacturer or else for 30 minutes.
8. Care must be taken to avoid splashing or generating aerosols during the cleanup.
9. After cleaning procedure is over, remove gloves, put it in red bin and then perform hand hygiene.
10. All the biological spill to be managed as per protocol of Bio- Medical waste Management.

13.Standard Operating Procedure for Record Maintenance

As per new BMWM Rules 2016, records to be maintained at the point of generation, collection, transportation, treatment & disposal. The various records related to BMWM are as follows-

1. Daily Bio-waste collection register is to be mentioned at each generation points like Labour room, OT, Laboratory, Immunization room, Dressing room, Wards, SNCU etc.
2. The register should contain the column headings such as name of the generation point, date & time of collection, category wise weight of the waste, signature of OS agency as well as health staff of the concerned unit.
3. An accidental injury reporting register is to be maintained at each ward/unit. Date & time of injury, type of injury, name, gender & address, no. of doses of PEP received, prior immunization history against HBV & TT
4. Daily and monthly compilation report to be available with ADMO(Med.).
5. The Annual report will be submitted to the Member Secretary, OSPCB by 30th June of every year.
6. Separate log book are to be maintained for Autoclave & Shredder as per mandate of SPCB.

Standard Operating Procedure For Containment Area at DHH/SDH/CHC

A dedicated containment area must be present in the premises of each hospital. The containment area should have deep burial pits, sharp pits, common waste storage room, area for cleaning, drainage system, electricity& water facilities. Near to the containment area there is a separate room for BMW equipment functionality with three phase electric supply and water supply at DHH/SDH/IDHs/RGH RKL/ CH, BBSR.

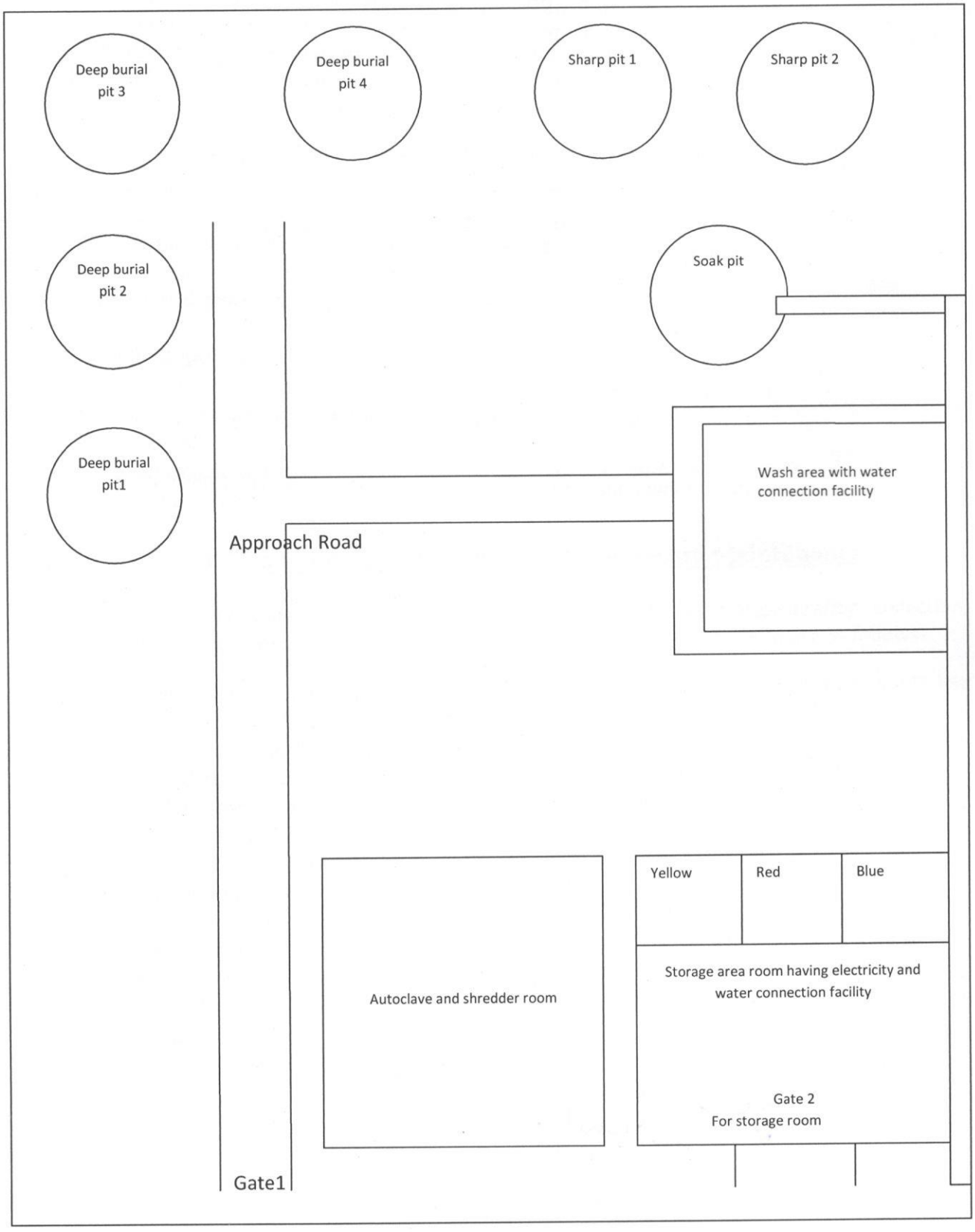
Few points to be addressed during development of containment area at HCFs.

1. The containment area must be located at the back site of the hospital inside the campus where access of the public & community is very less.
2. But a separate route may be earmarked for transportation of biowaste from the all the generation points of the hospital and to the CBWTF.
3. The containment area must be surrounded by a boundary wall having 5 ft height in order to avoid access of animals, rag pickers & public etc.
4. The boundary wall must be constructed with concrete of 2 ft height from ground and rest 3 ft. must be iron wire fencing.
5. The entrance of the containment area must be fixed with iron grill having lock and key system.

The detail plan for developing containment area at DHH, SDH, CHC& PHC is given below;

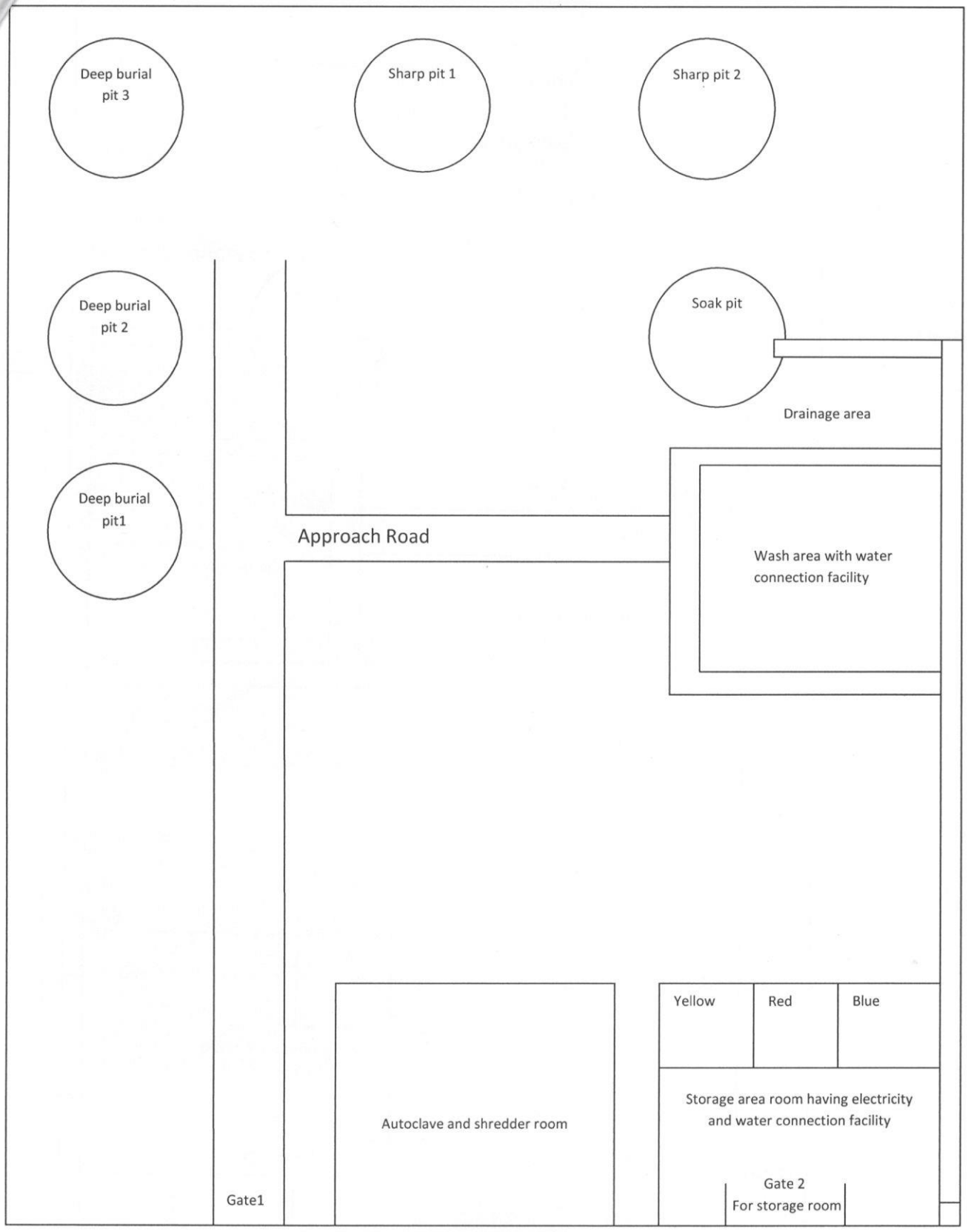
Draft Plan for Containment area at DHH(1500 Sqft. approx)

(Source: NHM)



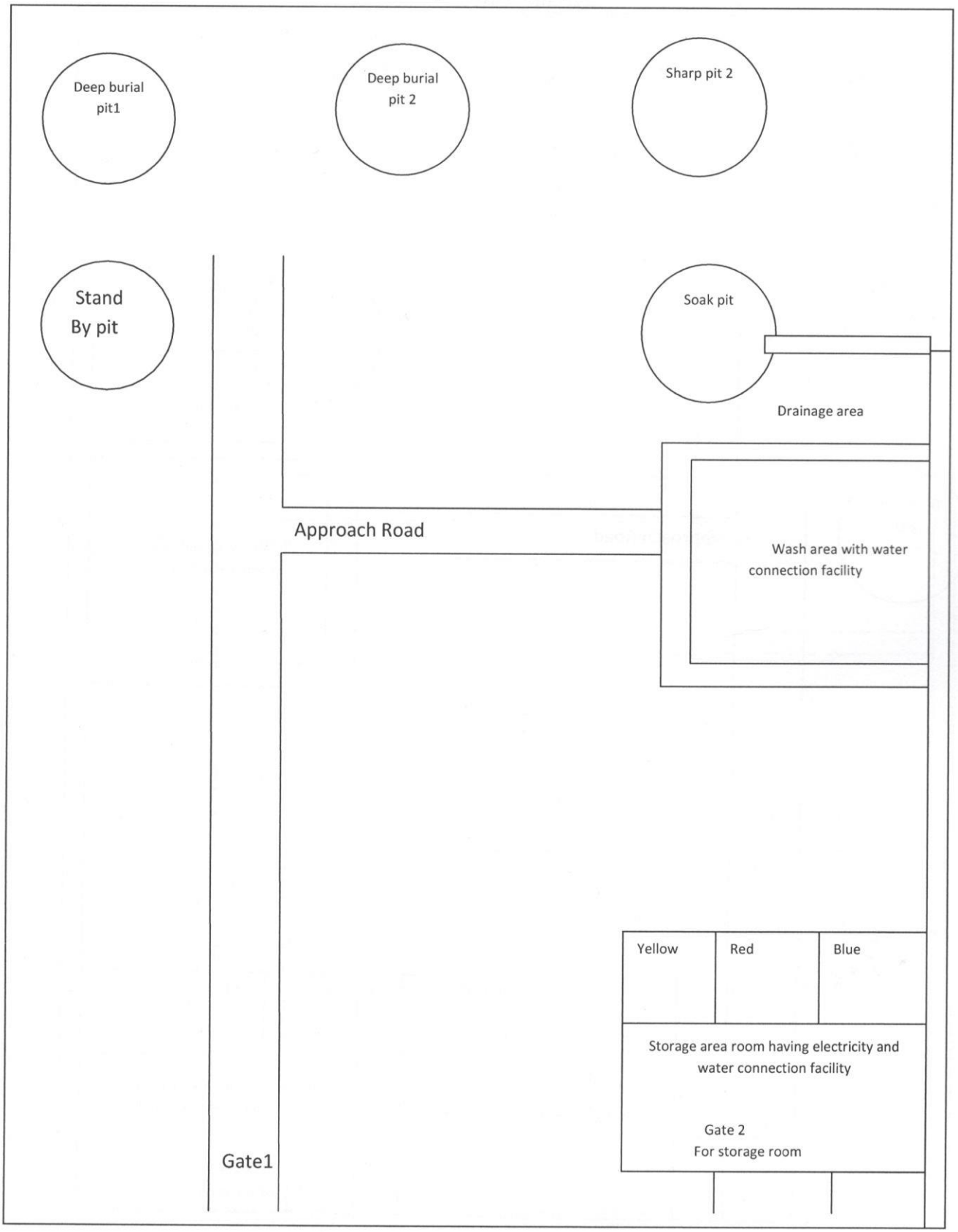
Draft Plan for Containment area at for SDH/IDH (1200 Sqft. approx)

(Source: NHM)

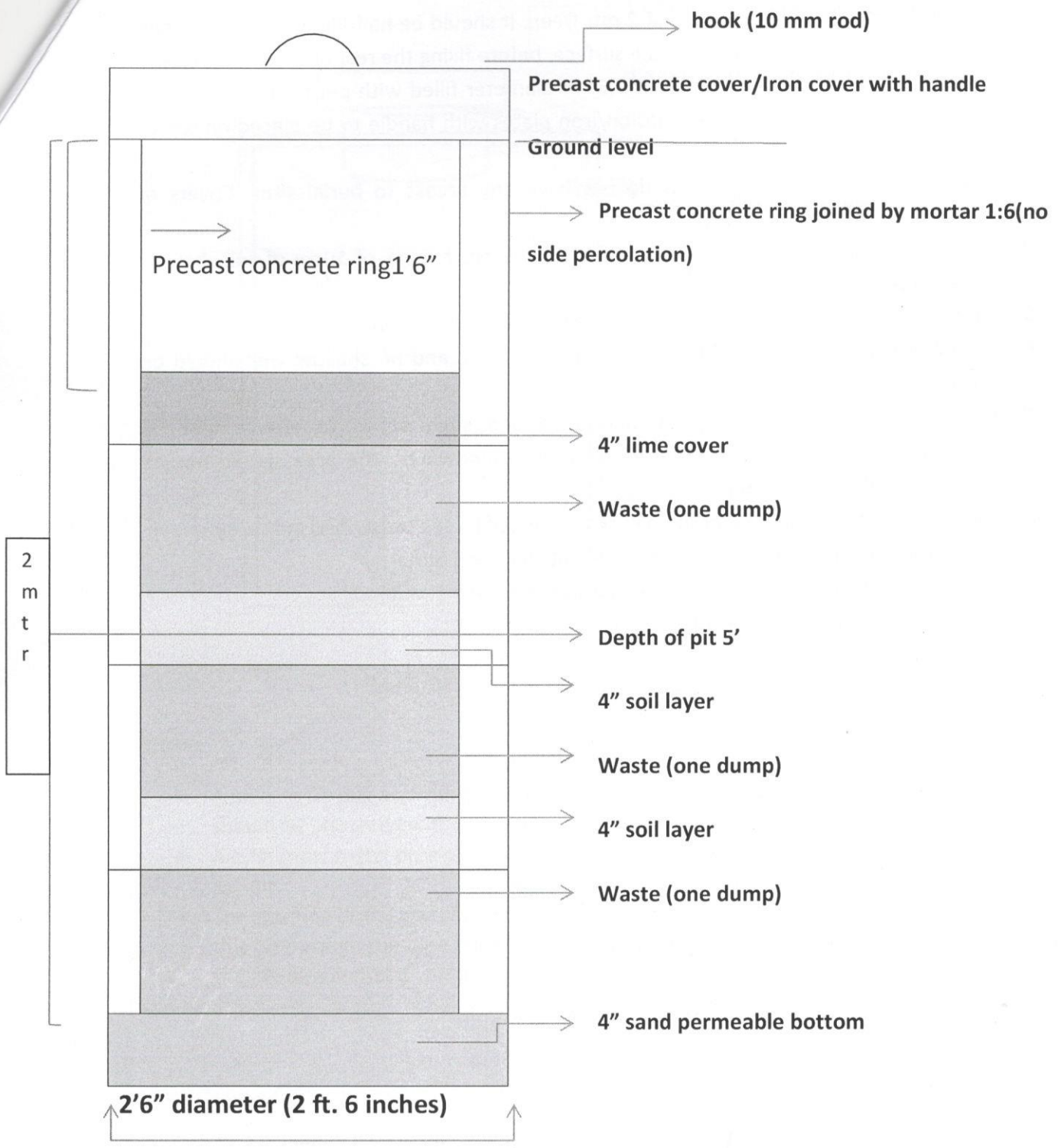


Draft Plan for Containment area at for CHC/PHC/OH (900 Sqft approx)

(Source: NHM)



Specification for a Deep Burial Pit(Source NHM)



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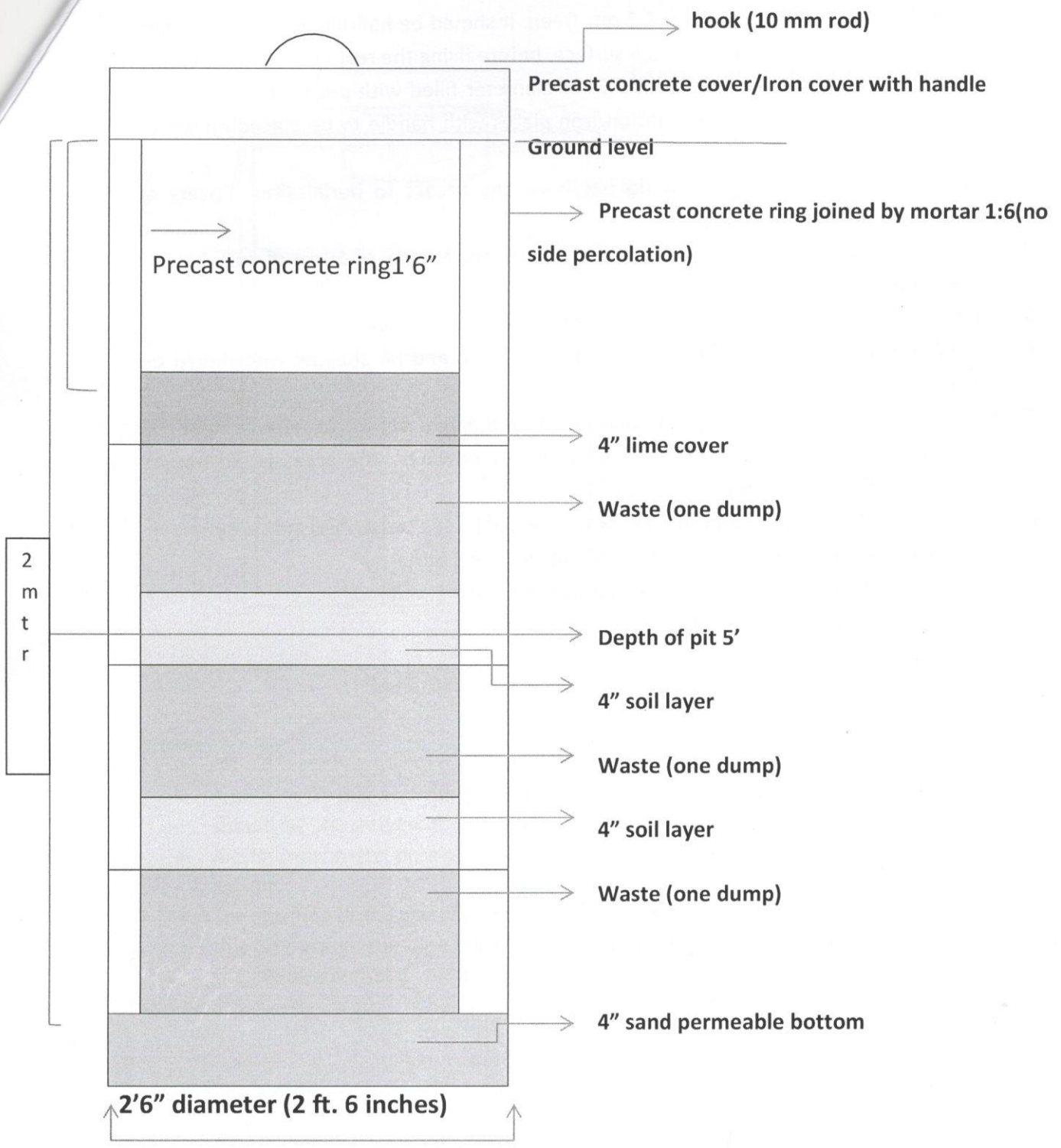
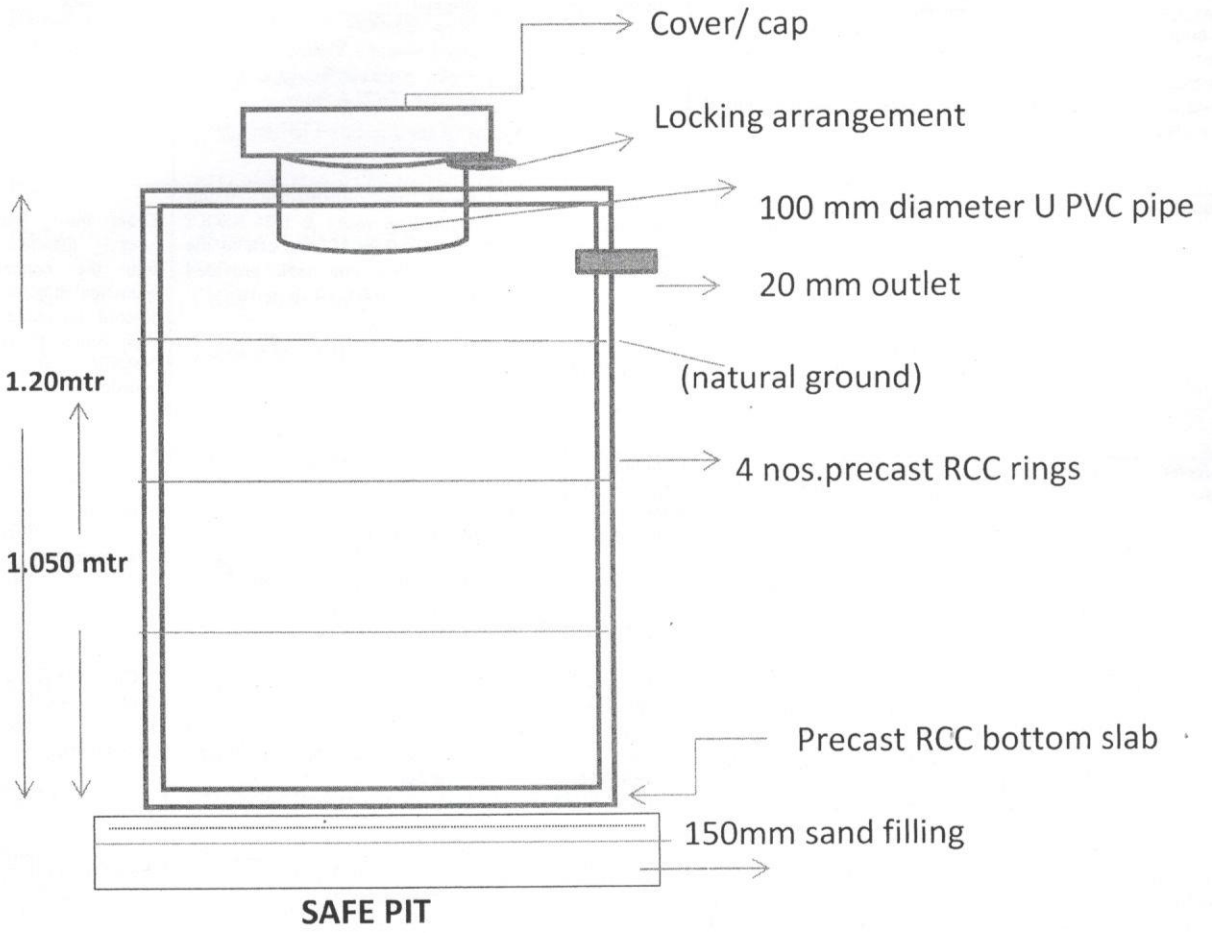


Standard specification of Sharp pit:



SAFE PIT

Note:

- A pit is to be dug according to the requirements of the hospital. All the sides of the pit should be plastered with cement.
- A cylindrical metal pipe of 4 inches diameter or mores should be fixed at the ceiling of the pit.
- The opening of the metal pipe should have locking facility. The sharps are deposited in this pit through the pipe from the puncture proof translucent container after mutilating the needles & metal sharps.

SUMMARY TABLE: Bio-MedicalWaste Management- DHH/SDH/CHC/PHC

WasteType	Requirement	Pre Treatment	Disposal	Post Disposal
Human anatomical waste,soiled waste,chemical waste,foetus below 20 weeks	1. Yellow bag/bin 2. Incinerator 3. Deep burial pit 4. Weighing Machine/Spring Balance	Not required	Deep burial Or Hand over the Yellow Bag to the waste collector&transporter of CBMWTF/OS Agency.	1. Cover it with Soil and lime. 2. Record Maintenance.
Liquid waste	1. Separate collection system at the point of generation. (drum of 25L/30L/50L) 2. Two small cans/tanks 3. 10% sodium hypochlorite solution. 4. OT test kit	Pretreatment of waste effluent to be done with 10% sodium hypochlorite solution for disinfection at source point..	Drain the disinfected liquid biomedical waste & 10% NaOCl solution from 10L/5L can to the disinfection unit tank provided (25L/30L/50L).	Drain the liquid after disinfection into the common municipal rain. Record maintenance daily consumption of NaOCl/ bleaching powder used& also the results of OT test.
Infected plastic waste	1. Scissors/ knife for mutilation 2. Red bin / bag 3. Weighing Machine/Spring Balance 4. Autoclave & shredder	Mutilate the Plastics and send for autoclaving& shredding	Hand over the bag to the collector &transporter of OS Agency /CBMWTF Or Store in Common Storage area for collection by OS agency for Treatment and Disposal.	1.Recycling after mutilation / shredding. 2. Record Maintenance.
Waste Sharps	1 Needle cutter/ NST 2 .10% Sodium hypochlorite solution 3. White puncture proof translucent container 4. Weighing balance. 5. Sharp pit	Mutilate the Needle& nozzle of the syringe and disinfect with with10% Hypochlorite Solution	Hand over the bag to transporter of OS Agency/CBMWTF Or Put it into the sharp pit/cement bunker.	1.Close the sharp pit with lock and Key. 2. Record maintenance.
Discarding used/contaminated glassware and metallic waste	1. Blue bin /bag 2. Weighing machine 3. 10% sodium hypochlorite solution. 4. Autoclave	Disinfection (by soaking the washed glass waste after cleaning with detergent and Sodium Hypochlorite treatment) or through autoclaving or microwaving .	Send to CBMWTF/ OS agency for Autoclaving	Sent for recycling & Record maintenance.
General waste	Black bin/bag	Not required	Send to municipality for sanitary landfill.	Sanitary landfill.

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ACRONYMS

BMW	: Biomedical Waste
BMWM	: Biomedical Waste Management
PPE	: Personal Protective Equipment
HCF	: Health Care Facilities
SPCB	: State Pollution Control Board
RPCB	: Regional Pollution Control Board
NST	: Needle Syringe Terminator
IEC	: Information Education & Communication
M&S	: Monitoring & Supervision
IMA	: Indian Medical Association
NGO	: Non Government Organization
DHH	: Dist. Head Quarter Hospital
SDH	: Sub-Divisional Hospital
CHC	: Community Health Centre
DPM	: District Programme Manager
BBO	: Blood Bank Officer
RWSS	: Rural Water Supply & Sanitation
PHED	: Public Health Engineering Department
MPHS	: Multi Purpose Health Supervisor
GP	: Gram Panchayat
OSA	: Out Sourcing Agency
WMT	: Waste Management Team
MCH	: Medical College & Hospital
OH	: Other Hospital
IDH	: Infectious Disease Hospital
CBWTF	: Common Biomedical Waste Treatment Facility
PPC	: Puncture Proof Container
STP	: Sewage Treatment Plant
ETP	: Effluent Treatment Plant
LWM	: Liquid Waste Management