Guidelines for Handling, Treatment, and Disposal of Waste Generated during Treatment/Diagnosis/ Quarantine of COVID-19 Patients

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Central Pollution Control Board
(Ministry of Environment, Forest & Climate Change)
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Guidelines for Handling, Treatment, and Disposal of Waste Generated during 
Treatment/Diagnosis/ Quarantine of COVID-19 Patients

In order to deal with COVID-19 pandemic, State and Central Governments have initiated various steps, which include setting up of quarantine centers/camps, isolation wards, sample collection centers and laboratories.

Following specific guidelines for management of waste generated during diagnostics and treatment of COVID-19 suspected / confirmed patients, are required to be followed by all the stakeholders including isolation wards, quarantine centers, sample collection centers, laboratories, ULBs and common biomedical waste treatment and disposal facilities, in addition to existing practices under BMW Management Rules, 2016.

These guidelines are based on current knowledge on COVID-19 and existing practices in management of infectious waste generated in hospitals while treating viral and other contagious diseases like HIV, H1N1, etc. These guidelines will be updated if need arises.

Guidelines brought out by WHO, MoH&FW, ICMR and other concerned agencies from time to time may also be referred.

Guidelines for handling, treatment and disposal of COVID-19 waste at Healthcare Facilities, Quarantine Camps/Home-care, Sample Collection Centers, Laboratories, SPCBs/PCCs, ULBs and CBWTFs:

(a) COVID-19 Isolation wards:

Healthcare Facilities having isolation wards for COVID-19 patients need to follow these steps to ensure safe handling and disposal of biomedical waste generated during treatment;

- Keep separate color coded bins/bags/containers in wards and maintain proper segregation of waste as per BMWM Rules, 2016 as amended and CPCB guidelines for implementation of BMW Management Rules.

- As precaution double layered bags (using 2 bags) should be used for collection of waste from COVID-19 isolation wards so as to ensure adequate strength and no-leaks;

- Collect and store biomedical waste separately prior to handing over the same CBWTF. Use a dedicated collection bin labelled as “COVID-19” to store COVID-19 waste and keep separately in temporary storage room prior to handing over to authorized staff of CBWTF. Biomedical waste collected in such isolation wards can also be lifted directly from ward into CBWTF collection van.

- In addition to mandatory labelling, bags/containers used for collecting biomedical waste from COVID-19 wards, should be labelled as “COVID-19 Waste”. This marking would enable CBWTFs to identify the waste easily for priority treatment and disposal immediately upon the receipt.

- General waste not having contamination should be disposed as solid waste as per SWM Rules, 2016;

- Maintain separate record of waste generated from COVID-19 isolation wards.
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- Use dedicated trolleys and collection bins in COVID-19 isolation wards. A label “COVID-19 Waste” to be pasted on these items also.

- The (inner and outer) surface of containers/bins/trolleys used for storage of COVID-19 waste should be disinfected with 1% sodium hypochlorite solution.

- Report opening or operation of COVID-19 ward to SPCBs

- Depute dedicated sanitation workers separately for BMW and general solid waste so that waste can be collected and transferred timely to temporary waste storage area.

(b) Sample Collection Centers and Laboratories for COVID-19 suspected patients

Report opening or operation of COVID-19 sample collection centers and laboratories to concerned SPCB. Guidelines given at section (a) for isolation wards should be applied suitably in in case of test centers and laboratories also.

(c) Quarantine Camps/Home Care for COVID-19 suspected patients

Less quantity of biomedical waste is expected from quarantine centers. However, quarantine camps_centers/home-care for suspected COVID-19 cases need to follow these steps to ensure safe handling and disposal of waste;

- Treat the routine waste generated from quarantine centers or camps as general solid waste and the same need to be disposed as per SWM Rules, 2016. However, biomedical waste if any generated from quarantine centers/camps should be collected separately in yellow coloured bags and bins.

- Quarantine camps/centers shall inform CBWTF operator as and when the waste is generated so that waste can be collected for treatment and disposal at CBWTFs.

- In case of home-care for suspected patients, biomedical waste should be collected separately in yellow bags and the same shall be handed over to authorized waste collectors engaged by local bodies. ULB should engage CBWTFs to pick-up such waste either directly from such quarantined houses or from identified collection points.

(d) Duties of Common Biomedical Waste Treatment Facility (CBWTF):

- Report to SPCBs/PCCs about receiving of waste from COVID-19 isolation wards / Quarantine Camps / Quarantined homes / COVID-19 Testing Centers;

- Operator of CBWTF shall ensure regular sanitization of workers involved in handling and collection of biomedical waste;

- Workers shall be provided with adequate PPEs including three layer masks, splash proof aprons/gowns, nitrile gloves, gum boots and safety goggles;

- Use dedicated vehicle to collect COVID-19 ward waste. It is not necessary to place separate label on such vehicles;

- Vehicle should be sanitized with sodium hypochlorite or any appropriate chemical disinfectant after every trip.

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- COVID-19 waste should be disposed-off immediately upon receipt at facility.
- In case it is required to treat and dispose more quantity of biomedical waste generated from COVID-19 treatment, CBWTF may operate their facilities for extra hours, by giving information to SPCBs/PCCs.
- Operator of CBWTF shall maintain separate record for collection, treatment and disposal of COVID-19 waste.
- Do not allow any worker showing symptoms of illness to work at the facility. May provide adequate leave to such workers and by protecting their salary.

(e) Duties of SPCBs/PCCs

- Shall maintain records of COVID-19 treatment wards/quarantine centers/quarantine homes in respective States.
- Ensure proper collection and disposal of biomedical waste as per BMW Rules, 2016 and SoPS given in this guidance document;
- Allow CBWTFs to operate for extra hours as per requirement;
- May not insist on authorisation of quarantine camps as such facilities does not qualify as health facilities. However, may allow CBWTFs to collect biomedical waste as and when required;

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