



National Competitive Bidding

REQUEST FOR PROPOSAL (RFP)

For

Selection of Vehicle Tracking System & Bar Code / QR Code-Service Provider for tracking of Common Bio-medical Waste Treatment Facility (CBWTF) vehicle collecting bio-medical waste from health care facilities for 75 Districts in Uttar Pradesh.

Issue Date: 21-05-2020

Bid Reference. No.: UPMSCL/SR/VTS/ 197

UTTAR PRADESH MEDICAL SUPPLIES CORPORATION LIMITED

(A Government of Uttar Pradesh Undertaking)

SUDA Bhawan, 7/23, Sector- 7, Gomti Nagar Extension, Lucknow - 226010

Website: <http://www.upmsc.in>, <https://etender.up.nic.in>,

Email: equipment@upmsc.in, Tel. no. 0522- 2060098

UTTAR PRADESH MEDICAL SUPPLIES CORPORATION LIMITED (A
Government of

Uttar Pradesh Undertaking) SUDA Bhawan, 7/23, Sector-7,

Gomti Nagar Extension, Lucknow - 226010 Website:

<http://www.upmsc.in>, <https://etender.up.nic.in>

INVITATION FOR BID

For

**Selection of Vehicle Tracking System& Bar Code / QR Code-Service Provider for tracking of
Common Bio-medical Waste Treatment Facility (CBWTF) vehicle collecting bio-medical
waste from health care facilities for 75 Districts in Uttar Pradesh.**

Serial No.	Activity	Date and Time
1.	RFP No.	UPMSCL/SR/VTS/197
2.	Commencement of Downloading of Tender Document	21/05/2020 From 6:00PM from the website of www.etender.up.nic.in
3.	Date of Pre bid meeting	28/05/2020 at 2:30 Pm in the conference hall of UPMSCL, Lucknow
4.	Last Date and Submission of online Bids	10/06/2020 upto 3:00 PM
5.	Date, Time and Place of Opening of Technical Bids	10/06/2020 at 4:00 PM on the website of www.etender.up.nic.in
6.	Date of Completion of Examination of Technical Bid	To be declared on www.upmsc.in and www.etender.up.nic.in
7.	Date and Time of opening of financialbid	To be declared on www.upmsc.in and www.etender.up.nic.in
8.	Date of Completion of Examination of Financial Bid	To be declared on www.upmsc.in and www.etender.up.nic.in
9.	Validity of Bid	180 days
10.	ADDRESS FOR COMMUNCATION	Uttar Pradesh Medical Supplies Corporation Ltd., SUDA Bhawan, 7/23, Sector-7, Gomti NagarExtension, Lucknow-226010

1. The EMD cost of tender document is acceptable RTGS/NEFT only.
2. EMD should be deposited one day prior to the date of submission of bid from bank account of the bidder only to UPMSCCL (Detail of which is as under)
Account Holder Name: Uttar Pradesh Medical Supplies Corporation Ltd.
Account No: 37678597091
Bank Name: State Bank of India,
Branch- UP Civil Secretariat, Vidhan Sabha Marg, Lucknow, Uttar Pradesh
IFSC code: SBIN0006893
(E-Transfer receipt has to be uploaded with the Tender & UTR No. Should be mentioned clearly)
3. The Tender Inviting Authority reserves the right to extend the schedule of tender or to reject the tender without assigning any reason.
4. Note: Please number the documents with serial number on each and every page and do mention the total number of pages of bidding document. In technical Bid parallel assign the corresponding page numbers of supporting documents. Any discrepancy or misrepresentation in this aspect will not be entertained.
5. A prospective Bidder requiring any clarification of the Bidding Documents may notify the TIA in writing or by an e-mail at the TIA's mailing address indicated in the Invitation for Bids. The TIA may conduct a pre-bid meeting which will be notified in e-tender website/ website of the TIA. The purpose of the meeting will be to clarify issues and to answer questions on any query that may be raised up to that stage. TIA reserves the right to take decision on nature and extent of amendments required.
6. All communication, addendum/corrigendum related to this tender will be issued on the website of www.etender.up.nic.in
7. Uploading of the price bid in prequalification bid or technical bid will result in rejection of the tender.
8. Tender Inviting Authority reserves the right to reject any or all the applications without assigning any reason.

Managing Director,
Uttar Pradesh Medical
Supplies Corporation Ltd.

Office of Uttar Pradesh Medical Supplies Corporation Limited

(CIN: U85310UP2018SGC102425)

(A Govt. of Uttar Pradesh Undertaking)

Registered office: SUDA Building, 7/23 Sec-7, Gomti Nagar Extension, Lucknow-226010

Email Id.: equipment@upmsc.in Website: www.upmsc.in, www.etender.up.nic.in

Contact No.: 0522-2838102

Tender No. UPMSCL/SR/VTS/197

Date-21/05/2020

E-Tender Notice

(Only through E- Tender on website:-www.etender.up.nic.in)

Uttar Pradesh Medical Supplies Corporation Limited, Lucknow invites online tenders from reputed Firms for **Selection of Vehicle Tracking System & Bar Code / QR Code-Service Provider for tracking of Common Bio-medical Waste Treatment Facility (CBWTF) vehicle collecting bio-medical waste from health care facilities** for District Hospitals and CHCs in 75 districts of the state for THREE years from the date of contract and renewal for further two years annually shall be based on satisfactory performance. Tender Schedule is given below:-

Tender Schedule

S.No.	Activity	Date and Time
1.	Tender Reference No.	UPMSCL/SR/VTS/197
2.	Commencement of Downloading of Tender Document	21/05/2020 From 06:00PM from the website of www.etender.up.nic.in
3.	Date of Pre bid meeting	28/05/2020 at 2:30 Pm in the conference hall of UPMSCL, Lucknow
4.	Last Date and Submission of online Bids	10/06/2020 upto 3:00 PM
5.	Date, Time and Place of Opening of Technical Bids	10/06/2020 at 4:00 PM on the website of www.etender.up.nic.in
6.	Date of Completion of Examination of Technical Bid	To be declared on www.upmsc.in and www.etender.up.nic.in
7.	Date and Time of opening of financial bid	To be declared on www.upmsc.in and www.etender.up.nic.in
8.	Date of Completion of Examination of Financial Bid	To be declared on www.upmsc.in and www.etender.up.nic.in
9.	Validity of Bid	180 days
10.	ADDRESS FOR COMMUNICATION	Uttar Pradesh Medical Supplies Corporation Ltd., SUDA Bhawan, 7/23, Sector-7, Gomti Nagar Extension, Lucknow-226010

The details of tender notice are given on website: - www.etender.up.nic.in. Kindly read the tender notice before applying.

Note: -Tender form can be downloaded online from the website of www.etender.up.nic.in before the last date of downloading of bid document as per above mentioned schedule.

The Tender Inviting Authority reserves the right to extend the schedule of tender, issue corrigendum or to reject the tender without assigning any reason.

Jurisdiction of all legal disputes shall be the court of law at Lucknow (UP) India. The details of tender notice are available on website:-www.etender.up.nic.in.

Managing Director
UPMSCL

DISCLAIMER

The information contained in this RFP or subsequently provided to the Bidder(s), in documentary or any other form by or on behalf of the Authority or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided to the Bidder.

Whilst the information in this RFP has been prepared in good faith and contains general information in respect of the Project, the RFP is not and does not purport to contain all the information which the Bidder may require.

Neither the Authority, nor any of its officers or employees, nor any of their advisers nor consultants accept any liability or responsibility for the accuracy, reasonableness or completeness of, or for any errors, omissions or wrong statements, negligent or otherwise, relating to the proposed Project, or makes any representation or warranty, express or implied, with respect to the information contained in this RFP or on which this RFP is based or with respect to any written or oral information made or to be made available to any of the recipients or their professional advisers and liability therefore is hereby expressly disclaimed.

This RFP document is not an agreement and is not an offer or invitation by the UPMSCL (herein after referred to as “ Authority”) or its representatives to the prospective Bidders or any other person. The purpose of this RFP document is to provide interested parties with information to assist the formulation of their Proposal. The information contained in this RFP is selective and is subject to updating, expansion, revision, and amendment. Each recipient must conduct its own analysis of the information contained in this RFP or to correct any inaccuracies therein that may be in this RFP and is advised to carry out its own investigation into the proposed Project, the legislative and regulatory regime which applies thereto and by and all matters pertinent to the proposed Project and to seek its own professional advice on the legal, financial, regulatory and taxation consequences of entering into any agreement or arrangement relating to the proposed Project.

This RFP includes certain statements, estimates and targets with respect to the Project. Such statements, estimates and targets reflect various assumptions made by the management, officers, and employees of the Authority, which assumptions (and the base information on which they are made) may or may not prove to be correct. No representation or warranty is given as to the reasonableness of forecasts or the assumptions on which they may be based and nothing in this RFP is, or should be relied on as, a promise, representation, or warranty.

RFP document and the information contained therein is meant only for those applying for this Project, it may not be copied or distributed by the recipient to third parties, or used as information source by the Bidder or any other in any context, other than applying for this proposal.

The Authority, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or

expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way for participation in this Bidding process.

The Authority also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RFP.

The Authority may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP.

The issue of this RFP does not imply that the Authority is bound to select a Bidder or to appoint the Selected Bidder or Operator, as the case may be, for the Project and the Authority reserves the right to reject all or any of the Bidders or Bids at any point of time without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the Authority or any other costs incurred in connection with or relating to its Bid. All such costs and expenses shall remain with the Bidder and the Authority shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding process.

Any information/documents including information/documents pertaining to this RFP or subsequently provided to Bidder and/or Selected Bidder AND information/ documents relating to the Bidding process; the disclosure of which is prejudicial and / or detrimental to, or endangers, the implementation of the Project IS NOT SUBJECT TO DISCLOSURE AS PUBLIC INFORMATION/ DOCUMENTS.

Request for Proposal (RFP) for Selection of Vehicle Tracking System & Bar Code / QR Code-Service Provider for tracking of Common Bio-medical Waste Treatment Facility (CBWTF) vehicle collecting bio-medical waste from health care facilities for 75 Districts in Uttar Pradesh.

National Competitive Bidding (NCB)

Date of issue : 21/05/2020

No: UPMSCL/SR/VTS/197

INVITATION OF BIDS THROUGH e-PROCUREMENT PLATFORM

1. The Govt. of Uttar Pradesh is committed to treat Biomedical Waste Generated in Health care facilities in the state as per applicable norms. For this CBWTF providers have been selected and it intends to monitor the above mentioned services by hiring Vehicle Tracking System & Bar Code / QR Code-Service Provider, for tracking of Common Bio-medical Waste Treatment Facility (CBWTF) vehicle collecting bio-medical waste from health care facilities.
2. Managing Director, UPMSCL (“the Authority”) now invites e-bids for Selection of Vehicle Tracking System & Bar Code / QR Code-Service Provider for tracking of Common Bio-medical Waste Treatment Facility (CBWTF) vehicle collecting bio-medical waste from health care facilities.
3. Bidding shall be conducted through National Competitive Bidding (NCB) procedures as per established procurement procedures.
4. The initial contract period shall be for THREE years and renewal for further TWO years annually shall be based on satisfactory performance.
5. The Services are required to be installed in all the vehicles of 18 Common Bio-medical Waste Treatment Facility (CBWTF) collecting bio-medical waste from health care facilities in 75 districts of Uttar Pradesh.
6. The Bidder has to quote a price for the design, development installation of software as well as supply of Hardware for VTS & Bar Code / QR Code system for the entire state.
7. UPMSCL invites online bids through e-Procurement platform from reputed firm / companies for providing software for Barcode / QR Code as well as hardware for vehicle tracking system based Biomedical Waste Management as per Bio-medical Waste Management Rules 2016 & its amendments thereof.
8. A complete set of bidding documents can be downloaded from website www.etender.up.nic.in before the last date of downloading of bid document as per above mentioned schedule.
9. Issuance of Bidding Documents will not be construed to mean that such bidders are automatically considered qualified.
10. All bids must be submitted on or before 10/06/2020 upto 3:00 PM through e-Procurement platform only (online).
11. UPMSCL will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.

12. In the event of date being declared as a closed holiday, the date for submission of bids and opening of bids will be the following working day at the appointed time.
13. The Tender Document is not transferable.
14. The proposal document shall be signed by the proposer in all the pages with official seal.
15. **Prices shall not be indicated anywhere in the technical bid. If the price is indicated anywhere in the technical bid, their offer will be rejected.**
16. Bidders are expected to examine all instructions, forms, terms specifications etc. in the Bidding documents. Failure to furnish all information as stipulated in the Bidding Documents or submission of a Bid not in compliance to the Bidding Documents will be at the Bidder's risk and may result in rejection of its bid.
17. Bidders or their authorized agents alone are allowed to participate in the opening of the tender.
18. All charges on account of sales tax, income tax, and other duties etc., shall be borne by the bidder /bidder towards the said tender.
19. In the event of the tender / bid being accepted, the contract must be signed by the bidder and in the case of a registered partnership firm, the tender should be signed by the managing partner or authorized signatory or in the case of company, tender should be signed by its secretary or authorized signatory.
20. The proper training has to be given to the DGMH officials and CBMWTF staff for operating the Bar Code / QR Code based system of biomedical waste management.
21. In the event of any dispute, both the Parties (Health Department and Service Provider) shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation. If amicably the dispute is not resolved, then the matter shall be referred to the mutually agreed Adjudicator within 14 days of the notification of disagreement of one party to the other. The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.
22. In the event of a dispute not resolved by the adjudicator between both parties (Health Department and the Service Provider), the dispute would be subject to the jurisdiction of the courts in <LUCKNOW > city.
23. The Bidder shall not assign or sublet his contract.
24. The Bidder shall carry out the work as detailed in the schedule accompanying the tender notification & documents.
25. If the bidder fails to comply with the requirements of the schedule / contract agreement, the Health Department has the right to terminate the contract with the prior one month notice and after recovery of the amounts that are due from the bidder towards the Health Department.
26. Bidders who fulfil the terms and conditions of this tender will be considered for evaluation. The bidders will undergo evaluation at every stage of processing and any bidder found at any stage, not in conformity with the stipulated tender conditions including specification / found to be having defective and incomplete documents will be rejected.
27. The below Table provides the estimated no. of vehicles of CBWTF for Bio-medical waste collection from various Health Care Facilities in Uttar Pradesh and the **Bid Security of service is also indicated in the table.**

.S. No.	No. of Estimated Vehicles in which Vehicle Tracking System is proposed to be used	Total EMD required (Rs.)
1	180	3,50,000/-

The estimated number of vehicles in which VTS is proposed to be installed has been mentioned only for the purpose of calculation of bid security. The Selected Bidder will have to survey all the

healthcare facilities/CBWTFs as directed by the “Employer” i.e. Director General, Medical & Health Service, Uttar Pradesh and the exact number vehicles in which VTS will be installed, shall be notified during the signing of the contract with the “Employer”.

The required number of Vehicle Tracking System (VTS) shall be mutually agreed upon by the contract signing authority i.e. Director General, Medical & Health Service, Uttar Pradesh and the Service Provider.

Any increase or decrease in number of Vehicle Tracking System (VTS) suggested/communicated by the “Employer” during the period of contract shall be acceptable to the “Service Provider” on same terms and conditions and at no extra cost.

28. Each bidder has to provide uniform price as per bid parameter which will be applicable for the entire contract period. The contract will be awarded to the bidder quoting the lowest price and satisfying the qualification criteria outlined in the bid document. The total price quoted by bidder should be exclusive of GST. However, GST will be paid to successful bidder at the time of releasing payments as per norms. The contract with lowest evaluated responsive bidder will be signed by Director General, Medical & Health Service, Uttar Pradesh or by His authorized representative.

29. Bidders having certificates of NSIC/MSME/STARTUPINDIA shall be exempted from EMD.

30. Bidder has to fill the Prices only in the BOQ Format downloaded with the Bid Document; the same shall be uploaded with the Bid on the e-procurement portal i.e. www.etender.up.nic.in

31. On the scheduled time & date of opening, the Tender Inviting Authority (TIA) authorizes the opening on the notified time. Bidder can access the particulars, after opening of tender in the website. The department will not be liable for any delay in submission of tender. Other details can be seen in the bidding documents.

32. In the event of specified date for the submission of bids being declared a holiday for the Purchaser’s office, the due date for submission will be the following working day at the appointed time.

33. No physical bids will accepted at UPMSCL office. However, the bidders shall be required to submit Bid Security & cost of the bid document on or before 10/06/2020 upto 3:00 PM by means of Demand Draft or Bank Guarantee in favour of “The Managing Director, UPMSCL” at the below mentioned address.

Uttar Pradesh Medical Supplies Corporation Ltd.,

SUDA Bhawan, 7/23, Sector-7, Gomti Nagar Extension, Lucknow-226010

34. MD, UPMSCL reserves the right to reject any one or all bids without assigning any reason thereof.

35. Procedure for offer submission:

The Bidders shall submit their response through e-Procurement platform at website www.etender.up.nic.in by following the procedure given below.

Instructions/ Guidelines for tenders for electronic submission of the tenders online have been annexed for assisting the prospective Bidders to participate in e- Tendering.

a) Registration of Bidders: Any bidder willing to take part in the process of e- Tendering will have to be enrolled & registered with the Government e- Procurement system, through logging on to <https://etender.up.nic.in>. The prospective Bidder is to click on the link for e-Tendering site as given on the web portal.

- b) Digital Signature certificate (DSC): Each Bidder is required to obtain a class-II Digital Signature Certificate (DSC) from NIC for submission of tenders, from the approved service provider of the National Information's Centre (NIC) on payment of requisite amount.
- c) The Bidder can search & download Bid Documents electronically from computer once he logs on to the website using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.
- d) Submission of Tenders: General process of submission, Tenders are to be submitted through online to the website at a time for each work, one in technical Proposal & the other is Financial Proposal before the prescribed date & time using the Digital Signature Certificate (DSC) the documents are to be uploaded virus scanned copy duly Digitally Signed. The documents will get encrypted (transformed into non readable formats).

36. Preparation and Submission of Bids

The Proposal in response to the RFP should be in English and shall be submitted in online.

- (a) Technical bid should contain the clause by clause compliance statement for the quoted goods vis-à-vis the technical specifications in the tender enquiry in addition to other required document as mentioned in TE Document.
- (b) Technical bid should contain the brochure, catalogue of offered/ quoted items which should reasonably explain in detail about the quoted items & it should also confirm the clause -by- clause compliance of technical specification as asked in TE Document and other technical details incorporated by the purchaser in the TE documents to establish technical responsiveness of the goods and services offered in its tender.
- (c) In case there is any variation and/or deviation between the goods & services prescribed by the purchaser and that offered by the bidder, the bidder shall list out the same in a chart form without ambiguity and provide the same along with its tender.
- (d) If a bidder furnishes wrong and/or misleading data, statement(s) etc. about technical acceptability of the goods and services offered by it, its tender will be liable to be ignored and rejected in addition to other remedies available to the purchaser in this regard.
- (e) Failure in complying above mentioned clause, may lead to rejection of tender.

Offline bids will not be entertained by the Tender Inviting Authority for the tenders published in e-Procurement portal.

Before the deadline for submission of bids, the Tender Inviting Authority (TIA) may modify the bidding documents by issuing addenda. The addendum will appear on the web page of the website www.etender.up.nic.in

Any addendum thus issued shall be part of the bidding documents and notified as Addendum / Corrigendum in the e-procurement portal i.e. www.etender.up.nic.in which shall be binding in all prospective bidders.

To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the TIA shall extend, as necessary, the deadline for submission of bids.

INSTRUCTION TO BIDDER-

The Bidders shall submit their eligibility, qualification details, Technical details and Financial details as mentioned below:

Eligibility criteria& Qualifying criteria-

1. The bidder company should be a legal entity registered under companies Act of Central/state government in India for Software Development, selling of electronic /electric equipments with the necessary Income Tax, GST registrations.
2. The bidders at the time of bidding should have a valid License from respective statutory bodies/authority for manufacture of the electronic Equipment's/Accessories as specified in the "Terms of Reference" (TOR).

Or

In case the Bidder is not the manufacturer, then a valid Authorization is required from the manufacturer/s or its Authorized Distributor for each electronic Equipment's/Accessories as specified in the "Terms of Reference" (TOR) for participating in this Tender.

3. Bidder should have prior experience of making software system for implementation of Bar coding/ QR code for bio Medical Waste Management system.
4. The Bidder must have all valid statutory registrations in place such as GST registration, Permanent Account Number (PAN) of the Income Tax Department, and Start Up India certificate.
5. Average Annual Turnover of the Bidder during last three financial years (i.e. 2016-17, 2017-18& 2018-19) shall not be less than **1.00 Crores. To qualify against this clause Bidder should submit relevant documents.**
6. Bidder should have successfully executed Information Technology related projects in the last 2 years.
7. Joint ventures or Consortiums or Sub contracting are NOT allowed to bid or meet the above eligibility criterion. Bidder should bid on own strength and meet all eligibility criterions.
8. The bidder shall submit a self-declaration for being not under legal action for corrupt or fraudulent practices (blacklisted) by any Ministry/State/ Central Govt./UT Administration/ Semi Government Organization/ PSU. The Bidder should not have been barred/blacklisted by the Government of Uttar Pradesh, any other State Government or Government of India from participating in any project, and also if such bar/blacklisting subsists as on the Proposal Due Date, the bidder would not be eligible to submit the proposal, either individually or as member of a Consortium. The bidder or each Consortium member, as the case may be, shall have to submit a notarized affidavit to this effect.
9. Also any entity/bidder/Consortium Member which has been punished for any offence or the Director/President/Chairperson/Trustee of that entity is convicted for any offence or against whom any criminal cases is/are pending before competent court, shall not be eligible to submit the proposal. The bidder or each member of Consortium (if Consortium is bidder), as the case may be, shall have to submit a notarized affidavit to this effect .If it was found that the bidder had submitted a false affidavit the bid will be deemed void (rejected) and due legal / penal proceedings shall be initiated against the bidder.
10. Priority will be given to the firms, who have already developed similar application duly following "Guidelines for Bar Code System for Effective Management of Bio-medical Waste" issued by the CPCB with presentation of documentary evidence.

11.Manpower: The Bidder must have own team of manpower for software development and should also produce declaration & documentary evidence regarding the same. Details of the staff are as mentioned below:

S. No.	Designation of Employee	Minimum no of Employee
1	Sr. Software Engineer	2
2	Android Developer	2
3	Database Engineer	1
4	Software Tester Engineer	1
5	UI (User Interface) and UX Designer (User Experience)	1
6	Project Manager	2
7	Telecaller Executive	2

The Bidders shall upload the scanned copies of all the relevant certificates, documents, etc, in support of their eligibility criteria /technical bids and other certificates /documents in the e-procurement portal.

2.EVALUATION CRITERIA: Based upon an examination of the documentary evidence of the bidders qualification uploaded by the bidder, TIA will determine the capabilities with respect of technical, production and manpower etc,

a. The decision of the TIA in selection of agency shall be final and binding on the participating agencies.

b. Even though an applicant may satisfy the above requirements, he would be liable to disqualification if he has:

- Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the technical bid document.
- Record of poor performance such as abandoning work, not properly completing the contract or financial failures/weaknesses etc.

3. PERIOD OF VALIDITY OF BIDS:

- Bids shall remain valid for 180 days from the date of opening of tender. A Bid expressed to be valid for a shorter period may be rejected by the TIA as non - responsive.
- In exceptional circumstances, the TIA may solicit the Bidders consent to an extension of the period of validity. The request and the response thereto shall be made in writing or by cable. Bidder may refuse the request without thereby forfeiting their Bid security. A bidder granting their request will not be required nor permitted to modify its Bid.

4. OPENING OF BIDS BY TIA (Tender Inviting Authority)

- TIA will open the technical bids on the date prescribed in the tender document.
- Commercial Bids of Bidders whose offers (Technical Bid) are found technically substantially responsive to the Bid Documents will be opened on a date to be intimated

later to these Bidders. All other Bids shall be deemed to have been rejected for any further consideration / evaluation.

- Financial Bids of Bidders whose offers (Technical Bid & Commercial Bid) are found technically and commercially substantially responsive to the Bid Documents will be opened on a date to be intimated later to these Bidders. All other Bids shall be deemed to have been rejected for any further consideration / evaluation.
- Financial Bids of Bidders whose Techno – Commercial Bids have been rejected shall not be opened and shall not be considered further for re-evaluation irrespective of the circumstances.

5. AWARD OF CONTRACT:

a. The TIA reserves the right to accept or reject any bid without assigning any reason thereof.

b. Tie Bidders

The bidders are requested to quote till three decimal points. In the event that two or more Bidders quote the same Bid Amount which results in a tie between such Bidders (“Tie Bidders”), the Authority shall identify the Selected Bidder by draw of lots, which shall be conducted, with prior notice, in the presence of the Tie Bidders who choose to attend.

C. The bidder whose has quoted the lowest price for software and Hardware device shall be considered L1 for Award of contract .

6. CONTRACT SIGNING AUTHORITY:

The contract will be signed between the Director General Medical and Health and the successful Bidder and the contract management shall be done by the Environment Management cell at DGMH. Since NHM is the funding Agency the invoice for payment to the service provider will be send to NHM after verification of the invoice by the in charge of the Environment Management cell at DGMH.

7. COMMENCEMENT OF WORK:

The date on which this Contract shall come into effect is *date of signing of contract*. The Starting Date for the commencement of Services is *within 30 days after the signing of contract*.

8. DURATION AND TERMINATION:

a. Duration period -The initial contract period shall be for THREE years and renewal for TWO years annually shall be based on satisfactory performance. The service Provider shall have to renew the Performance security approximately in case of renewal of the contract beyond three years. In case the service provider does not intend to renew the Contract he needs to notify six months in advance failing which his Performance Security shall be forfeited.

- b. The DG Medical and Health shall be entitled to unilaterally terminate the contract granted to the service provider without assigning any reasons thereof by giving one calendar months' notice.
- c. The DG Medical and Health shall be entitled to terminate the contract forthwith in the event of service provider committing breach of any of the terms and conditions of this agreement. The decision of the DG Medical and Health that the Service Provider has committed such breach shall be final and binding on the service provider.

9. EARNEST MONEY DEPOSIT:

- a. The Bidder shall upload as part of its bid an EMD of Rs. **3, 50,000/-** (Rupees three lakhs and fifty thousand only).
- b. The EMD is required to protect the Tender Inviting Authority against the risk of Bidder's conduct, which warrants security's forfeiture.
- c. The EMD of unsuccessful bidders will be refunded after the tenders are finalized. The EMD shall not bear any interest.
- d. The Earnest Money Deposit of the successful bidder will be refunded after the receipt of performance security deposit along with contract agreement.
- e. Exemption on Earnest Money will be done on documentary evidence of NSIC / MSME/Start up India certification.
- f. EMD may be forfeited:
 - i. If the bidder withdraws or its bid during the period of bid validity or
 - ii. In the case of successful bidder, if the bidder fails to sign the contract in accordance with tender clause.

10. PERFORMANCE SECURITY:

- a. Within 15 days after receipt of the letter of award from the TIA, the Demand Draft of amount equivalent to 5% of the contract price in accordance with the conditions of the contract to be made in favor of Director General, Medical & Health Service, Lucknow in the prescribed format - annexure G
- b. In case of unsatisfactory services, the performance security will be forfeited and in this regard the decision of the Authority i.e. Director General, Medical & Health Service, Lucknow is final.
- c. Successful bidder shall furnish the employer a performance security in the form of Bank guarantee from any Nationalized Schedule Bank.
- d. The successful bidder to comply with the requirements sub clause above shall constitute sufficient grounds for cancellation of the award and forfeiture of the bid security.

11. OWNERS RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDS:

The TIA reserves the right to accept or reject any Bid during the Bidding process and reject all Bids at any time prior to award of contract, without thereby incurring any liability to the affected Bidder or Bidders on the grounds of the TIA's action.

12. NOTIFICATION OF AWARD AND SIGNING OF CONTRACT:

Prior to the expiry of the period of Bid validity, the TIA will notify the successful Bidder by registered post / mail that its Bid has been accepted by enclosing detailed order copy in duplicate. This will constitute the formation of the contract and the date of the contract shall be the date of such notification.

13. Manpower: The Bidder must have own team of manpower for software development and should also produce declaration & documentary evidence regarding the same. Details of the staff are as mentioned below:

S. No.	Designation of Employee	Minimum no of Employee
1	Sr. Software Engineer	2
2	Android Developer	2
3	Database Engineer	1
4	Software Tester Engineer	1
5	UI (User Interface) and UX Designer (User Experience)	1
6	Project Manager	2
7	Telecaller Executive	2

TERMS OF REFERENCE:

I. Background:

1. The Department of Medical, Health & Family Welfare, Government of Uttar Pradesh (GoUP) has prepared detailed plans to strengthen the management capability of the Directorate of Health by strengthening various Cells (Environment Management Cell, Strategic Planning Cell and Data Resource Centre Cell) in the Directorate of Medical & Health and to improve quality public service delivery by better engagement with the private sector.
2. Bio-medical Waste Management Rules, 2016 were notified on 28.03.2016 under the Environment (Protection) Act, 1986, stipulates that it is the duty of every Health Care Facility (HCF) to establish a barcode system for bags or containers containing biomedical waste (BMW) to be sent out of the premises or place for any purpose. Also, Rule 5 of the BMW Rules, 2016 stipulates that it is the duty of every Operator of Common Bio-medical Waste Treatment Facility (CBWTF) to establish the barcode system for handling of bio-medical waste.
3. The Govt. of Uttar Pradesh is committed to treat Biomedical Waste Generated in Health care facilities in the state as per applicable norms. For this CBWTF providers have been selected and it intends to monitor the above mentioned services by hiring Vehicle Tracking System & Bar Code / QR Code-Service Provider, for tracking of Common Bio-medical Waste Treatment Facility (CBWTF) vehicle collecting bio-medical waste from health care facilities

2. Objectives of the assignment:

Primary objective of the assignment is to provide a complete solution (including design, specifications of hardware & software, supply of equipment, operationalization and maintenance) for tracking of Common Bio-medical Waste Treatment Facility (CBWTF) vehicle collecting bio-medical waste from health care facilities and to electronically send the data of biomedical waste collected using an android device/mobile to BMW MIS system of the Project.

3. SCOPE OF WORK

The Scope of work of the System Integrator shall be as following:

- a. Coverage: The system is to be operational in 75 districts covering about 174 district level hospitals with 35 MCH wings, 853 Block level Community Health Centers 592 Urban Primary Health Centers (in total of approx. 47774 beds)
- b. and All Common Bio-Medical Waste Treatment Facilities (approx. 18).
- c. Complete solution covering specifications of devices/equipment to be used, networking connectivity, operationalization and maintenance of the system
- d. Supply, installation and maintenance of Hardware/Equipment:
- e. Following hardware/equipment shall have to be supplied and installed in the vehicles of the 18 CBWTF -SP are as follows:

- Vehicle Tracking System fitted in each CBWTF waste collection vehicle (in a tamper-proof manner).
 - Platform based Electronic Bluetooth Weighing Machine with a capacity of 30 Kg and blue-tooth feature to transfer data on weight to the android device/mobile.
 - Android based device/Mobile (having atleast 8 MP camera) provided with each CBWTF waste collection vehicle to capture data on weight from the electronic weighing machine using blue-tooth, Colour of bag, location (HCF), Date and time. This data should be captured without any manual intervention. This data should be sent to the server of UPHSSP. This mobile should be disabled for making calls, email and social sites.
 - Bar Code /QR Code Printer to print adhesive labels containing data on - Health Care Code. Data to be printed in QR code should be in English.
 - Thermal Printer for real time Date & Time of data capturing, color and weight of bag. Data to be printed in English.
 - SIM cards for android device/mobile and VTS.
- f. The Bidder will be responsible for installation of hardware in all the CBWTF-SP and integration of software.
 - g. Mapping and Geo-fencing of plant of each CBWTF and all healthcare facilities at district and block level.
 - h. The solution should cover interface with Vehicle Tracking System, android device/mobile, networking of these devices, integration with BMWIS and operationalization & maintenance of the entire system for two years. This period may be extended on mutually agreed terms.
 - i. Software/Services:
 - The software should provide interface to do real-time tracking of vehicle movement (including historical visits). The history of vehicle tracking system should be provided to DGMH in archive mode. History of vehicle tracking system should be available on-line for 90 days
 - The data from android device/Mobile should come to BMWIS server by integration.
 - System should generate suitable SMS and email alerts from Mobile and Vehicle Tracking System
 - j. Selective access of the System to different stakeholders of the System
 - k. Training of staff of CBWTF and DGMH officials on use of system and devices
 - l. Data security to avoid risk of data tampering as per Cert-in standards.
 - m. Development of an mobile application (Android) and web application for Implementation of Barcode / QR Code Based Bio Medical Waste Management System as per the “Guidelines for Bar Code System for Effective Management of Bio-medical Waste” issued by the CPCB during April-2018. (Annexure-H)
 - n. The mobile application should be able to integrate to the blue tooth weighing machine to record the weight of the waste.
 - o. Mobile application shall be able to capture the details of HCF and waste by scanning the bar code / QR code.
 - p. The software shall be hosted in the Service Provider’s server / cloud after support / maintenance period of 3 years and further for another 2 years on renewal of the contract on satisfactory performance.

- q. All the data should be stored in the cloud storage space which the service provider has to maintain on its own server and shall be made available to all the users at least for a period of five years.
- r. GPS location shall be captured whenever scanning of Bar code / QR code to validate the locations of the HCF and CBWTF.
- s. Consolidation of data generated by the CBWTFs based on barcoding and shall generate day wise / month wise / year wise summary.
- t. Auto generation of notices to the HCF, if they do not handover BMW once in 2 days based on barcode/QR code data of CBMWTF.
- u. Development of Web APIs as per the requirements to integrate other applications of the Health Department (dash board) if required.
- v. Dashboard -User should be given an option to view the Dashboard for the data summarized and graphically represented and also to provide admin, HCF, CBWTF and UPPCB access.
- w. Reports.-The software should be able to generate with all types of combination like collection reports, missing reports, NIL report, overall reports using the parameters like category of waste, route wise, weight wise, day, month, year wise, location wise etc.
- x. Generation any other information as and when requested by the Health Department, GoUP during the maintenance.
- y. The Intellectual Property Rights of the Data base will rest with the Health Department GOUP.
- z. The developer shall interact with the Health Department officials and incorporate any suggestions / modifications without any extra cost.

4. Timeline and Deliverables

Hardware Supply

- Supply of The essential equipment to be made available to all the 18 CBWTF -SP Vehicles by the Bidder shall be
 1. Vehicle Tracking System fitted in each CBWTF waste collection vehicle (in a tamper-proof manner).
 2. Platform based Electronic Bluetooth Weighing Machine with a capacity of 30 Kg and blue-tooth feature to transfer data on weight to the android device/mobile.
 3. Android based device/Mobile (having at least 8 MP camera) provided with each CBWTF waste collection vehicle to capture data on weight from the electronic weighing machine using blue-tooth, Color of bag, location (HCF), Date and time.
 4. Bar Code/QR Code Printer to print adhesive labels containing data on- Health Care Code. Data to be printed in English.
 5. Thermal Printer for real time Date & Time of data capturing, color and weight of bag. Data to be printed in English
 6. SIM cards for android device/mobile and VTS.

* Service provider has to provide 1 year warranty for all the equipment's and is liable to replace them in case of any technical fault. No replacement of equipment's shall be done in case of any physical damage or loss of equipment by the CBWTF -SP. After completion of 1 year if any equipment needs replacement it shall be provided by the bar code service provider on the same per unit cost mentioned in the bid after thorough verification of the equipment by the DGMH officials ,the payment of which shall be reimbursed to the Bar code service provider by the government.

Software Requirements-

- Requirement study, Design, Development and Deployment (go live) of the project should be completed within the time period as mentioned below.

Time period

Activity	Period
Understanding of the BMW MIS system and requirements	D1 - D5
Solution Design and finalization .	D6 - D15
Approval of Solution Design and finalization .	D16 - D30
Geo-fencing of Health Care Facilities and CBWTFs	D16 - D50
Software development and system integration with BMW MIS	D31 - D60
Piloting in two districts and improvisation in the system	D61 - D90
Roll out in 6 CBWTF district locations (including training)	D91 - D120
Roll out in next 6 CBWTF district locations (including training)	D121 - D140
Roll out in 6 CBWTF district locations (including training)	D141 - D150
Operation and maintenance	For 3 years, further 2 years in case of renewal
Handover to Directorate Medical and Health	after completion of contract period

D1 is the Start Day; only working days to be considered.

The system should be operational for three years and further two years on renewal of the contract based on satisfactory performance

5. Maintenance period of project period -

For three years and further two years on renewal of the contract based on satisfactory performance

- Service Provider has to share the Design Documents.
- User Manual, Admin Manual, Test Cases, Test Plan and QA Results for User Acceptance testing.
- Application Code, Web API's.
- Deployment document.

6. Assistance/facilities to be provided to the Service Provider

The Health Department, Uttar Pradesh shall provide the following assistance/ facilities to the Service Provider:

- a) Letters to all CBWTFs and Health Care Facilities (through CMOs) to assist in geo-fencing of plants and facilities
- b) Letters to all CBWTFs to take services from the Service Provider
- c) Integration with Bio-Medical Waste Management Information System
- d) Mobile numbers and email-id of personnel involved from Health Care Facilities and CBWTFs for sending SMS alert and emails.

7. Reports to be submitted by the Service Provider are as following:

- a) Technical Solution report covering methodology, specifications of equipment being used, networking connectivity, integration with BMW MIS
- b) Report containing GPS co-ordinates of all Health Care Facilities and CBWTFs
- c) User Manual of the system

- d) System documentation of programs
- e) Monthly report on non-functional Vehicle Tracking System, Mobile, QR Code Printers and Electronic Weighing Machine

8. PAYMENT

Payment will be made in following stages.

- 80% of the contract value (plus GST taxes thereof, less deduction if any) would be released within 30 days of receipt of the invoice and relevant documents regarding successful development, implementation, deployment & integration of the software and also successful supply of the hardware to the CBWTF -SP as per scope of works to DGMH and on its verification and acceptance of the work done by the in charge of BMW cell at the Directorate.
- 20% of the contract value (plus GST taxes thereof, less deductions if any) would be released on submission of invoice to DGMH after completion of 12 months from date of award of contract and successful operation and maintenance of software & Hardware (within the warranty period) and also resolution of all issues .
- Payments for the second year will be done only for operations & maintenance of the server and for resolution of all the issues on quarterly basis. Quarterly payments shall be based on the software maintenance cost quoted in the financial bid.

Annexure – A

PRICE BID-Bid value shall cover both software & server maintenance cost i.e.(collection, transportation, treatment & disposal data) and hardware cost i.e supply of complete equipment/ materials specified in the bid document .

(Table – 1)

S. No.	Description of Item	Approx No of Beds	Unit Cost/ Bed/ Year (INR)	Total Cost (annually) (Exclusive of GST) (INR)
		(A)	(B)	(A) X (B) =(C)
1	Software design, development and implementation for Web Application and Mobile Application including Security Audit and SSL (Secure Sockets Layer) certificate and cost per Bed per year Maintenance and support of software for 3 years which shall continue on renewal of the contract for further 2 years.	Dist hospital & MCH Wings Beds = 21000 CHC Beds = 25590 UPHC Beds = 1184 Total No of Beds = 47774		

(Table – 2)

SI No.	Name of the Equipment	Approx. Quantity (in Nos.)	Rate Offered for single unit inclusive of all taxes and levies BUT exclusive of applicable GST	Total Cost (in Rs.) (Exclusive of GST)
		(A)	(B)	(A) X (B) =(C)
1	Vehicle Tracking System for each CBWTF waste collection vehicle (in a tamper-proof manner) inclusive of necessary software for operation of the VTS.	180		
2	Platform based Electronic Bluetooth Weighing Machine with a capacity of 30 Kg and blue-tooth feature to transfer data on weight to the android device/mobile.	180		
3	Android based device/Mobile (having atleast 8 MP camera) provided with each CBWTF waste collection vehicle to capture data on weight from the electronic weighing machine using blue-tooth, Colour of bag, location (HCF), Date and time.	180		
4	Bar code /QR Code Printer to print adhesive labels containing data on - Health Care Code. Data to be printed in English	18		
5.	Thermal printer for date &time of data capturing ,colour and weight of bag. Data to be printed in English	180		
6.	SIM cards for android device/mobile and VTS	360		
	TOTAL			

(Table –3)

S. No.	Items	Cost
1	Total Software server and maintenance cost per year	
2	Total Hardware Cost inclusive of 1 year warranty	
	TOTAL	

Evaluation shall be based on the total of Table - 3 i.e. total cost of software server and maintenance cost per year plus total Hardware cost.

The above Cost shall be exclusive of GST. GST will be paid on as applicable on the date of invoice generation.

We understand that the above Rates shall remain fixed till validity of the Contract Agreement.

We also understand that the cost is inclusive of all the taxes, duties and overheads BUT exclusive of GST. GST will be paid on as applicable on the date of invoice generation.

Declaration: We agree to deliver above mentioned services in accordance with the General Conditions of Contract and Description of Services (ToR/Scope of work) given in the Bidding Document for the prices of Rs. (in words)..... as described above up to the period specified in the Bidding Document.

Place:

Name:

Date:

Business Address:

Signature of Bidder/Service Provider with seal

NOTE: THE ABOVE FORMAT IS FOR INDICATIVE PURPOSE ONLY. PRICES ARE TO BE FILLED ONLY IN THE BOQ FORMAT DOWNLOADED WITH THE BID DOCUMENT; THE SAME SHALL BE UPLOADED WITH THEIR BID ON THE E-PROCUREMENT PORTAL i.e. www.etender.up.nic.in

Annexure –B

UNDERTAKING

To

The Managing Director

Uttar Pradesh Medical Supplies Corporation,

Tender No. _____

For _____

Sir,

I, Shri _____ on behalf of M/s _____

having registered office at _____ and branch office at _____, do hereby declare that I have gone through the terms and conditions mentioned for the above and undertake to comply with all tender terms and conditions. The rates quoted by me/us are valid and binding on me/us for acceptance for a period of ___year from the date of award of contract to us.

We agree to the conditions of the tender under which the EARNEST MONEY DEPOSIT and PERFORMANCE SECURITY DEPOSIT Shall be forfeited by the TIA.

The tender inviting authority has the right to accept or reject any or all the tenders without assigning any reason.

We understand all the terms and conditions of the contract and bind myself/ourselves to abide by them.

We hereby declare that there is no vigilance/CBI or court case pending/contemplated against us at the moment.

SIGNATURE :
NAME & DESIGNATION :
DATE :
NAME & ADDRESS OF THE FIRM :

Annexure -c
Bid Security (Bank Guarantee)

[The Bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated.]

Beneficiary: _____

Date: _____

BID GUARANTEE No.: _____

We have been informed that _____ (hereinafter called "the Bidder") has submitted to you its bid dated (hereinafter called "the Bid") for the execution of _____ under Invitation for Bids No. _____ ("the IFB").

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

At the request of the Bidder, we _____ hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of _____ (_____) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- (a) has withdrawn its Bid during the period of bid validity specified by the Bidder in the Form of Bid; or
- (b) having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity, (i) fails or refuses to execute the Contract Form; or (ii) fails or refuses to furnish the performance security, if required, in accordance with the Instructions to Bidders.

This guarantee will expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the contract signed by the Bidder and the performance security issued to you upon the instruction of the Bidder; or (b) if the Bidder is not the successful bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder of the name of the successful bidder; or (ii) twenty-eight days after the expiration of the Bidder's Bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC(International Chamber Of Commerce) Publication No. 458.

[signature(s)]

Annexure D

Information of the Bidder

1	Name of the Bidder	
2	Registration No and Valid Up to	
3	Address of the Registered Office	
	Phone No:	
	Fax No:	
	Official Email ID:	
4	Year of Establishment	
5	Type of Organization (Govt. Undertaking/ Corporation/ Public Limited/ Private Limited)	
6	Name & Designation of the Authorized Signatory	
7	Contact	
	Person Name:	
	Designation:	
	Phone No:	
	Fax No:	
	Mobile No:	
	Email ID:	
8	Website	
9	Date of Operational of Service in India	
10	Brief Description of the organization	

Annexure D

Detail list of Projects related to implementation of bio medical waste management in software / mobile app development / tracking / bar code system developer :

Sno	Name of the Project	Project executed for	Brief Description of the Project	Technical Specification including technology used	Duration of the Project	Remarks

Note: Supporting documents like present works under execution / under contract, Completion Certificate, satisfactory certificates in the similar field at least.

Annexure E

Annual Turnover Statement

The Annual Turnover of M/.s _____ for the past three years and concurrent commitment for the current financial year are given below and certified that the statement is true and correct.

Sl	Year	Turnover (Rs. In Lakh)
1		
2		
3		
Total		
Average turnover per annum		

Date :

Signature of Auditor/
Chartered Accountant

Seal :

(Name in Capital)

Annexure F

AFFIDAVIT

(To be furnished by the Bidder)-
(On Non – judicial stamp paper of Rs 100 duly attested by notary public)

1. I, the undersigned, do hereby certify that all the statements made in our proposal are true and correct.
2. The undersigned hereby certifies that neither our Company/Society/Trust/LLP/Partnership Firm M/s _____ nor any of its directors/President/Chairperson/Trustee has abandoned any work for the Government of Uttar Pradesh or any other State Government during last five years prior to the date of this Bid.
3. The undersigned also hereby certifies that neither our Company/Society/Trust/LLP/Partnership Firm M/s _____ nor any of its directors/ President/Chairperson/Trustee have been debarred/blacklisted by Government of Uttar Pradesh, or any other State Government or Government of India for any work.
4. The undersigned further certifies that
 - a) Our Company/Society/Trust.....has not been punished for any offence and/or
 - b) The Director/President/Chairman/Trustee/Partner of our Company/Society/Trust LLP/Partnership Firm.....has/has neither been convicted of any offence nor is/are any criminal case pending before any Competent Court.
 - c) We have not been found guilty and are not found to be involved in any pending /ongoing CBI Litigations.
5. The undersigned hereby authorize(s) and request(s) any bank, person, firm, Competent Authority or corporation to furnish pertinent information deemed necessary and requested by Government of Uttar Pradesh, to verify this statement or regarding my (our) competence and general reputation.
6. The undersigned understands and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the Government of Uttar Pradesh,

Signed by an authorized Officer of the Company / Society /Trust /LLP /
Partnership Firm :
Title of Officer:
Name of Company/Society/Trust
LLP/Partnership Firm : Date:

Annexure G

Format for bank guarantee for Performance security

[To be issued by SBI or any Nationalized Bank or Indian Scheduled Commercial Bank]

To,
MD, UPMSCL

WHEREAS

.....
(name and address of the Service Provider) (herein after called "the Supplier") has undertaken , in pursuance of contract numberdated.....to supply (description of goods or services) (hereinafter called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract.;

AND WEHERAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you , on behalf of the supplier , up to a total of(amount of guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument , any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sums specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modifications of the terms of the contract to be performed there under or of any of contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change , addition or modification.

The guarantee shall be valid until theday of....., 20....

.....
.... (Signature of the authorized officer of the Bank)

.....
.....
Name and designation of the officer

.....
..... Seal, name and address of the Bank/Branch

Annexure- H

Extract of the CPCB Guidelines for Bar Code System for Effective Management of Bio-medical Waste CONTENTS

S.No	Particulars
1	Introduction
2	Need for the Bar Code System
3	Stakeholders responsible for Implementation of the Bar Code System
4	Bar Code Label
5	Implementation of Bar Code Based Waste Management System
6	Specifications of the Bar code Scanner and/or App based mobile scanner
7	Responsibility of the Occupier/Operator of a CBWTF
8	Flow-chart of implementing Bar coding system
9	Time frame for compliance to the Guidelines
10	Actions in case of violation of bar code system
11	Data maintenance and output formats
12	Additional Optional Features
	List of Figures
	Figure 1. Typical Bar Code or QR Code label
	Figure.2 Dedicated App based Mobile barcode scanner
	Figure 3. Dedicated bar code scanner used for collection of waste from HCFs
	Figure 4. Responsible agencies for implementation of the Bar Code System
	Figure 5. Implementation of the Bar Code System
	List of Annexures
	Annexure-I: Name of the State and the respective Code
	Annexure-II: Format for Daily Report of BMW Management

Guidelines for Bar Code System for Effective Management of Bio-medical Waste

1. Introduction

Bio-medical Waste Management Rules, 2016 notified on 28.03.2016 and as amended thereof under the Environment (Protection) Act, 1986, stipulates that it is the duty of every Health Care Facility (HCF) to establish a bar code system for bags or containers containing biomedical waste (BMW) to be sent out of the premises or place for any purpose, by 27.03.2019. Also, Rule 5 of the BMW Rules, 2016 stipulates that it is the duty of the every Operator of Common Bio-medical Waste Treatment Facility (CBWTF) to establish bar code system for handling of bio-medical waste.

These guidelines have been prepared to facilitate and provide guidance to both the Occupier as well as Operator of CBWTF to establish bar code system and also to have uniformity in adoption of the bar code system throughout the country, thereby ensuring effective enforcement of the BMW Rules, 2016.

2. Need for Bar Code System

Bar code system would help in accounting the quantity of biomedical waste being collected, treated and disposed. This system would also help the prescribed authorities in monitoring the implementation of BMW Rules, 2016. The benefits of Bar code system are summarized below;

- (i) Tracking of biomedical waste from source of generation to intended destination for final treatment and disposal;
- (ii) Daily check on the Occupier, transporter (involved in transportation of bio-medical waste within HCF as well as transportation of bio-medical waste from HCF to the CBWTF premises) and Operator of a CBWTF;
- (iii) Preventing pilferage of bio-medical waste at HCFs as well as during transportation of waste from HCF to the CBWTF;
- (iv) Keeping record of visits made by CBWTF to the member HCFs for collection of waste;
- (v) Identification of source of generation of bio-medical waste in case waste is disposed of improperly;
- (vi) Creates real time online monitoring of waste generation, collection, transportation, treatment and disposal; and
- (vii) Quantification of bio-medical waste generated, colour coding-wise waste handed over to the CBWTF operator by the Occupier and waste collected daily by the Operator of a CBWTF from the member HCFs for further treatment and disposal.

3. Stakeholders responsible for Implementation of the Bar Code System

According to BMWM Rules, 2016 as amended, following stakeholders are responsible for implementation of the Bar Code system as detailed below:

- (a) **Prescribed Authority:** The State Pollution Control Board (SPCB) in respect of the State, Pollution Control Committee (PCC) in respect of the Union Territory (UT) and Director General, Armed Forces Medical Services (DGAFMS) in respect of Armed Forces Health Care Establishments fall under the jurisdiction of the Ministry of Defense are the prescribed authority for overall enforcement of the BMWM Rules, 2016 including implementation of Bar code system..
- (b) **Health Care Facility:** The person having administrative control over the institution and the premises generating bio-medical waste, which includes a hospital, nursing home, clinic, dispensary, veterinary institution, animal house, pathological laboratory, blood bank, health care facility and clinical establishment, is responsible to implement bar code labelling system.
- (c) **Operator of a Common Bio-medical Waste Treatment Facility (CBWTF):** The person who owns or controls a Common Bio-medical Waste Treatment Facility (CBWTF) for the collection, reception, storage, transport, treatment and disposal or any other form of handling of bio-medical waste is also responsible for implementing a Bar coding system.

BMWM Rules does not stipulate any responsibility to the bar code vendor (that is a person supplying and distributing bar coded bags or container with bar coded labels). However, such vendors may provide bar code labels compatible with bar-code management system software and in accordance with these guidelines.

4. Bar Code Label

1. Bar code labeling may be of two types as given below

- A .Bar code or QR code label can be pre-printed directly on the designated colour coded bags /containers, which may be procured by HCF through the Operator of a CBWTF providing services to them or through any vendor, fulfilling the specifications stipulated under these guidelines;
- B .Bar code or QR code labels can be pasted on the designated colour coded bags/containers, which can be procured by the HCF either through the Operator of a CBWTF providing treatment services to the HCF or through Vendor.

In both cases, thickness of colour coded bag used for segregation and handling of bio-medical waste should be as per Plastic Waste Management Rules, 2016 as amended thereof i.e. equal to or more than 50 μ .

The charges for bar coded labels or pre-printed bar coded label or QR code label may be levied by the Operator of a CBWTF or a Vendor as per the prevailing rates to the Occupier or as per the agreement between the Occupier and Operator of

CBWTF/Vendor. Vendors shall consult the CBWTF and the Software Provider so as to ensure compatibility with software system being adopted by Operator of CBWTF.

2. Specifications of Bar-code or QR Code label;-

The Bar code label for use on the colour coded bags or containers for handling bio-medical waste should have following specifications;

- a) **Colour mark on the label:** A colour mark or text is required on bar code label for easy identification of the bar code (by the workers handling bio-medical waste) with designated colour coded bag or container. The bar code should have a colour mark (in Yellow/Red/White/Blue) in the form of block of size at least 7 mm X 7 mm or Text of font size 12 specifying the colour of the BMW in the bags or containers. The colour mark or Text shall be placed at the top left corner of the bar code label.



In case of cytotoxic drugs, the alphabet 'C' should be printed on yellow colour block.

In case of B/W label, colour mark can be specified in the form of 'Text' specifying the colour of BMW waste as "YELLOW" / " RED" / " WHITE" /" BLUE" printed on top left side of the bar code label.



b)Unique Number of the HCF and its specification: Unique number to each HCF shall be developed and provided by concerned SPCB/PCC/DGAFMS. Unique number can be produced based on following criteria:-

- i. **Name of the Health Care Facility (HCF):** The name of the HCF shall be indicated by first five alphabets in the name of the HCF. In case the name of HCF is less than 5 letters, the rest of spaces may be filled with *. (E.g., All India Institute of Medical Sciences-ALLIN). Followed by;
- ii. **Name of the Place where HCF is located: Name of the place where HCF is located** shall be indicated by 6 digit local Pincode provided by Postal department. Followed by;
- iii. **Name of the State/UT :** Name the State/UT should be in the form of two alphabetical number (as given digit **Annexure-I**). Followed by;
at
- iv. **Type of HCF:** Type of HCF should be in the form of alphabetical number in capital but not more than two letter i.e., first two letters of a type of HCF/first letter in two words of a HCF) as given below:

BH	-	Bedded Hospital
CL	-	Clinic
DI	-	Dispensary
HO	-	Homeopathy
MH	-	Mobile Hospital
SI	-	Siddha
UN	-	Unani
		Veterinary
VH	-	Hospital
YO	-	Yoga
AH	-	Animal House
BB	-	Blood Bank,
DH	-	Dental Hospital
NH	-	Nursing Home,
PL	-	Pathological Laboratory
FA	-	Institutions/Schools/Companies etc. with First Aid facilities
HC	-	Health Camp

and followed by;

- v. **Numerical Number of the HCF:** Numerical number of the health care facility shall not be more than five numerical numbers to be assigned to the HCF in between i.e., 00001 to 99999.
- vi. Concerned SPCB/PCC shall upload a list of HCFs along with their unique number of HCF at their website. In case of long list, SPCBs may provide search option on their website for retrieving unique code vis-à-vis name of HCF.

- c) **Label sequence Number:** CBWTFs should use central software to generate unique label sequential number. The operator of CBWTF should provide range of such sequence numbers to label vendors to produce labels or produce labels by themselves. The records of label sequence numbers and to whom allotted should be maintained for verification of SPCBs/PCCs.

Eg. For handling of yellow colour bio-medical waste bag by a bedded hospital viz., All India Institute of Medical Sciences (ALLIN) located at New Delhi, Delhi State (DH) and having unique number (say 00578), in such a case, the bar code or QR code label shall be as given in Figure 1 below



Figure 1. Typical Bar code or QR Code label

- d) **Specifications for the bar code label:** In addition to the specification of Bar code as given at Sl.No. 4 (a), the bar code label should have following specifications as detailed below:
- i. The bar code label should be pasted only at the centre or close to centre of the colour coded bag or container prescribed under the BMWM Rules, 2016 and further amendments made thereof.
 - ii. Size of bar code label should be such that it should be able to accommodate desired information specified in this section.
 - ii. The bar code / QR code should be black in colour and its back ground should be white colour and it should be clearly legible on the label.
 - iii. The bar code label should be tamper proof, water proof and its colour should not be faded in due course of at least for 48 hours after its use.
 - iv. The bar code label should be able to resist the prevailing atmospheric temperatures and should not fade its colour till its end of life.
 - v. Bar code labels should not have any traces of heavy metals or any other objectionable chemical constituent.

- vi.* All bar coded labels should be of good quality preferably avery chromo paper label having specifications prescribed under these guidelines.
- vii.* The adhesive used for bar code label should be pressure sensitive, tear resistance and should be of acrylic based adhesive and after use of labels on the colour coded bag (s) or container (s), the label should not peel off on its own or by normal abrasion during handling.

5. Implementation of Bar Code Based Waste Management System

Implementation of the bar code system is the joint responsibility of the Occupier as well as Operator of a CBWTF as prescribed under the BMWWM Rules, 2016 as amended thereof. Bar Code Based Waste Management software should be installed and operated by the CBWTF who is providing services of bio-medical waste treatment and disposal. Each member HCF shall obtain access to the Bar Code Based Waste Management System from the facility operator. Requirements of barcode based waste management system and the role of HCFs and the Operator of CBWTF are given below:

(a) Healthcare Facilities;

- i.* In case of Health Care Facilities (HCFs) having 30 or more no. of beds shall have to procure their own digital weighing machine and bar code scanner (scanning equipment or app based mobile scanner). The weighing machine and scanner unit shall have wired or wireless connection and the data pertaining to the weight of the scanned bags should get transferred automatically. Also, the HCF is required to scan all the bar coded bags containing bio-medical waste. Upon scanning of all the bags by the HCF, the data shall be transmitted to the data base of bar code waste management system, however, the data gets lodged into the data base only after the operator of the facility accepts the waste on his console and generates waste acceptance receipt. The waste acceptance receipt shall be printed (it should be clearly legible and should not fade atleast for a period of five years) on the spot and handed over to the HCF before departure of the transportation vehicle from the premises. Such receipt can also be generated digitally and sent by e-mail to all the concerned.

- ii. Whereas, HCFs having < 30 no. of beds as well as all other Occupiers as defined under the BMW Rules, 2016, are not required to scan their bags containing biomedical waste. Same shall be done by the CBWTF operator on arrival at the premises. The CBWTF shall always carry scanning and weighing machines alongwith portable printer (connected with wired or wireless systems with automatic transfer of data pertaining to weight of scanned bags). The Occupier shall obtain receipt printed by facility operator prior to his departure from HCF premises (the receipt should be clearly legible and should not fade atleast for a period of five years). The data gets lodged into the data base once the waste picker (CBWTF Operator) generates waste acceptance receipt.
- iii. Obtain access Login and password for Bar Code Based Waste Management System software from the CBWTF Operator.
- iv. Collect proof (counter signed by the CBWTF Operator) of waste collection or Waste acceptance receipt comprise of date, time, no. of bags, total weight of colour coded bags/containers.
- v. Generate reports from Bar Code Based Waste Management System and maintain records periodically and update in the website.
- vi. In case of non-availability of wireless weighing machine, the scanner system should have an option of manual entry of data pertaining to weight of scanned bags using conventional weighing machine.

(b) Operator of CBWTFs

- i. The Operator of a CBWTF should purchase and operate Bar Code Based Waste Management System software. The software should support multiple user logins for each HCF (Occupier), admin login and regulatory login for respective SPCB/PCC/DGAFMS, CPCB, MoEF& CC, Central/State Health Departments. Such logins should be provided to the regulatory authorities voluntarily without any charges. The application software should be loaded at any cloud server or servers of SPCB/PCC as per the discretion of SPCBs/PCCs.

- ii. The CBWTF Operator shall procure dedicated bar code scanners or develop suitable app for scanning with mobile phone and integration with central software.
- iii. In case of hospitals i.e., < 30 no. of beds and other HCFs as defined under the BMWM Rules, 2016 and further amendments made thereof, the Operator of a CBWTF providing treatment services to such HCFs shall scan the bar coded bags/containers containing bio-medical waste.
- iv. The CBWTF Operator shall have to carry scanner along with printer and weighing machine in its transportation vehicle while it is used for collection of waste from member HCFs in accordance with BMWM Rules, 2016 and further amendments made thereof and the CBWTF Operator shall maintain all the records as per BMWM Rules.
- v. Upon completion of scanning and weighing all bags/containers, the scanner system should generate print of a waste receipt automatically which shall be signed and handed over to the HCF immediately. The Operator shall also send the daily waste collection statement or monthly comprehensive statement by email periodically to the Occupier and such data to be maintained in the bar code waste management system.
- vi. Upon receipt of the waste at the facility, each bag shall have to be scanned by the CBWTF Operator prior to its treatment so as to ensure no pilferage during transportation between HCFs and CBWTF premises and updating of data in the bar code waste management system. For this purpose, the CBWTF operator may explore possibility of installation of automatically scanned verifiers if feasible.
- vii. In case of failure to re-scan of waste at CBWTF for more than 24 hours after collection, an alert should be sent to SPCBs/PCCs.
- viii. The Operator of a CBWTF should have adequate hardware and all necessary provision for maintaining the bar code based waste management system.
- ix. The CBWTF Operator shall have to maintain all the records for a period of five years as per BMWM Rules, 2016.

6. **Specifications of the Bar code Scanner and/or App based mobile scanner.**-Dedicated Bar code Scanner and /or Bar Code Scanner Based Mobile App should have the following provisions:
- i. The bar code scanner should have the provision of data storage (in case of problem in server connectivity) for its retrieval, as and when required. Once the server system is restored, stored data should be transferred immediately to the server.
 - ii. Bar code Scanner and /or Bar Code Scanner Based Mobile App. should preferably have connectivity (wire or wireless) with the digital weighing machine.
 - iii. For each bag scanned by the Bar code scanner and /or Bar Code Scanner Based Mobile App. should automatically transfer the information (which include label information, date, time and weight of each bag/container) to centrally located Bar Code Based Waste Management System software. There should not be any scope for manual intervention of the Occupier/Operator of a CBWTF with respect to the data transfer.
 - iv. If the barcode scanner/app has any breakdown due to problem in network or app or scanner software in transferring the data to the server, in such a case there should be a provision for updating the information through alternate means with prior intimation by the Operator of a CBWTF to SPCB/PCC/DGAFMS.
 - v. Upon scanning the barcode label, the software system should capture fixed barcode label data (sequence number of label, name of HCF, code of HCF, type of HCF, colour code of waste and location) along with dynamic data pertaining to weight, date, time and GPS coordinates of each bag/container scanned.
 - vi. There should preferably be wire or wireless based connectivity between bar code scanner and weighing machine. The Bar code waste management system should also support manual data entry only in case of weight input, where digital weighing machines could not be provided by CBWTF operator or procured by the Occupier.
 - vii. Upon receipt of waste by the CBWTF operator, the system should generate print out of waste receipt at the designated waste collection point or shall send auto-generated receipt by e-mail to the concerned Health Care Facility.

(i) App based Mobile bar code scanner

In this system, app based mobile bar code scanner automatically synchronizes with Android phone and the user can capture bar code or QR code data and weight automatically. There can also be a provision for manual entry of weight data. App based

mobile bar code scanner is given in **Figure 2**. Also, the app based mobile bar code scanner should require following hardware:-

- 1 GB and above internal memory or minimum memory should be able to retrieve the 2 to 3 months data
- 5+ MP camera
- AGPS or GPS supported
- Internet 2G and GPRS
- Bluetooth 2.0

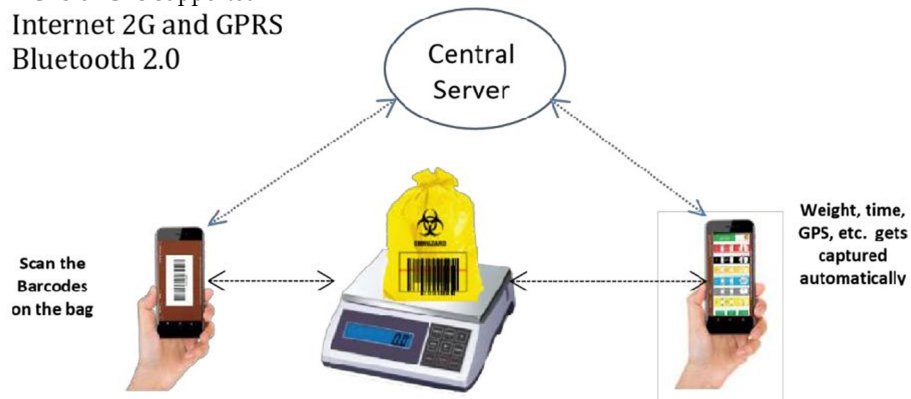


Figure.2 Dedicated App based Mobile barcode scanner

(ii) Dedicated bar code scanner

In this system, the bag is kept on weighing scale and scanned by scanner device by the person collecting waste. Weight of bio-medical waste is automatically transferred from weighing scale to device along with bar code or QR code information. There can also be a provision of manual entry of weight data. A dedicated bar code scanner is given in **Figure 3**. Also, the bar code scanner should require following hardware:-

- 1 GB and above internal memory or minimum memory should be able to retrieve the 2 to 3 months data
- 2G and GPRS
- AGPS or GPS supported

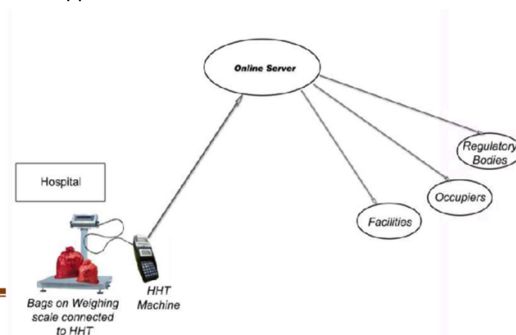


Figure3. Dedicated bar code scanner used for collection of waste from HCFs

(iii) Digital Printer

Dedicated bar code scanner can have a provision of in-built printer or it can have wired or wireless connectivity to printer. App based bar code scanner if used by facility operator should also have provision of printing receipts.

(iv) Weighing machine

Weighing machine should be able to weigh about 25 Kg (max.), with 0.05 Kg accuracy and have provision for connectivity with bar-code scanner.

7. Responsibility of the Occupier/Operator of a CBWTF

Responsibility of the Occupier and Operator of a CBWTF with regard to the implementation of Bar Code system is given **Figure 4** as well as details are given in the subsequent paras:

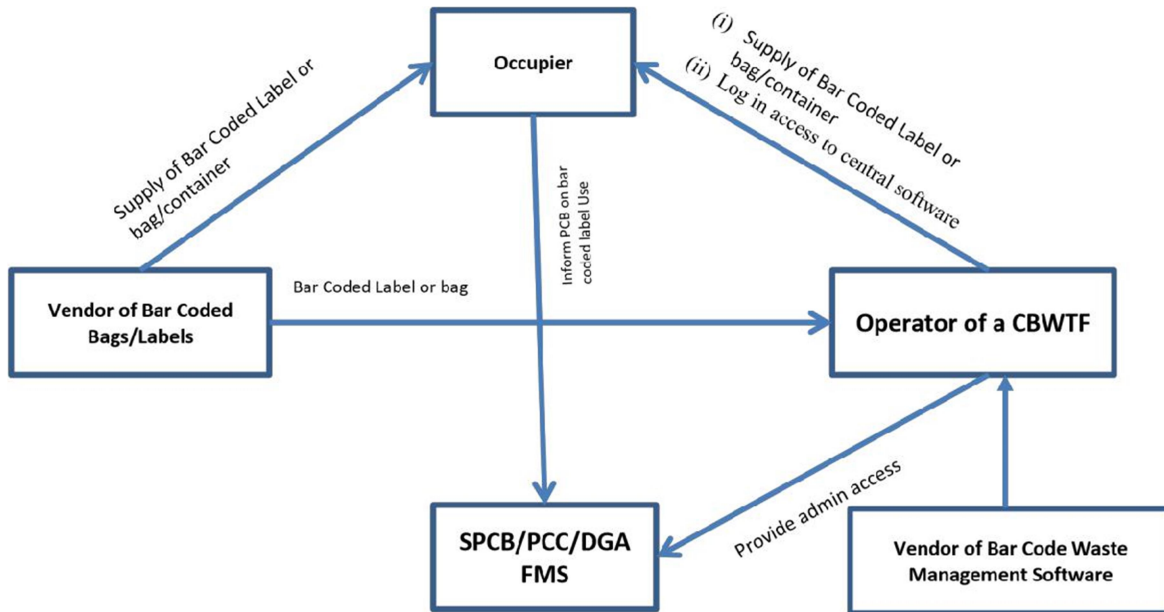


Figure 4. Responsibilities agencies for implementation of the Bar Code System

(i) Responsibility of the Occupier w.r.to the Bar Code System.

- Procurement of the Bar Coded Labels or Pre-printed colour coded Bags and containers fulfilling the specification as given under these guidelines from the vendor (s) or the operator of CBWTF on charge basis is the sole responsibility of the occupier;
- Intimate prescribed authority about the bar coded labels or pre-printed bar coded bags or containers as and when procured.
- Ensure use of bar coded label or pre-printed bar coded and specified colour coded bag or container for segregation of waste at source of its generation.
- A representative of HCF to ensure that all the bags and containers are scanned at waste collection point. He shall also collect waste collection receipt generated by waste picker (CBWTF Operator).
- In case of Health Care Facility (with less than 30 beds) or clinics or laboratories, concerned HCF /Clinic/Laboratory is not required to pre-scan the bags, the same shall be carried out by waste picker after arrival at site.
- In case of Health Care Facility (with more than 30 beds) it is the responsibility of the Occupier to scan the bags containing bio-medical waste.
- In any State/UT, where CBWTF is not accessible to the HCFs, in such a case, the respective HCF is required to scan the bar coded bags on their own prior to disposal at their captive facilities. In such case, the bar code waste management system operated by SPCB/PCC / DGAFS shall receive the data.
- While scanning the bar coded bags (more than 30 bed HCFs), it shall be ensured that the waste handlers shall have adequate PPEs (gloves, goggles, mask, aprons and safety shoes).

(ii) Responsibility of the Operator of CBWTF w.r.to the Bar Code System

- Supply of Bar Coded Labels or Pre-printed colour coded Bags and containers fulfilling the specification as given under these guidelines to the Occupier (s) or member HCFs of the facility, on charge basis, and on demand. However, the Occupier may also opt to procure directly from the vendors.
- Intimate prescribed authority (i.e., SPCB/PCC) about the launch of bar coded based waste management system.
- To accept only the specified colour coded bags or containers labelled with indicated bar code system or pre-printed bar coded specified colour coded bag or container.

- Scan all such bio-medical waste collected in the specified colour coded bags or container at the waste collection point only and generate waste acceptance receipt.
- Ensure that all the data should be stored and made available to all the users or member HCFs, atleast for a period of five years.
- Access to the software system should be provided to the prescribed authority i.e. SPCB/PCC, CPCB, MoEF& CC, Central/State Health Departments) voluntarily.
- To ensure procurement of standby or spare hardware like Bar-code scanners and weighing balance etc. to ensure hassle free collection of bio-medical waste in case of break-down.
- In case of bedded Health Care Facility (with more than 30 no. of beds), the hospital authorities are responsible for scanning of all the bar coded bags/containers containing bio-medical waste.
- The Operator is required to re-scan all the bags at the facility to report the activity of final treatment or disposal.
- While scanning the bar coded bags (more than 30 bed HCFs), it shall be ensured that the representative of the CBWTF Operator (waste pickers) shall have adequate PPEs (gloves, goggles, mask, aprons and safety shoes).

(iii) Responsibility of the supplier or vendor of the Bar Code System:

The vendor can supply bar coded label or Pre-printed bar coded Bags and containers fulfilling the specification as given in these guidelines. Such labels should be printed only in consultation with CBWTF Operator who has installed bar code based waste management software.

8. Flow-chart of implementing Bar coding system

For easy understanding of the bar coding system for its implementation, the procedure to be adopted by the Occupier or Operator of a CBWTF is shown in a flow-chart given at **Figure 5** below

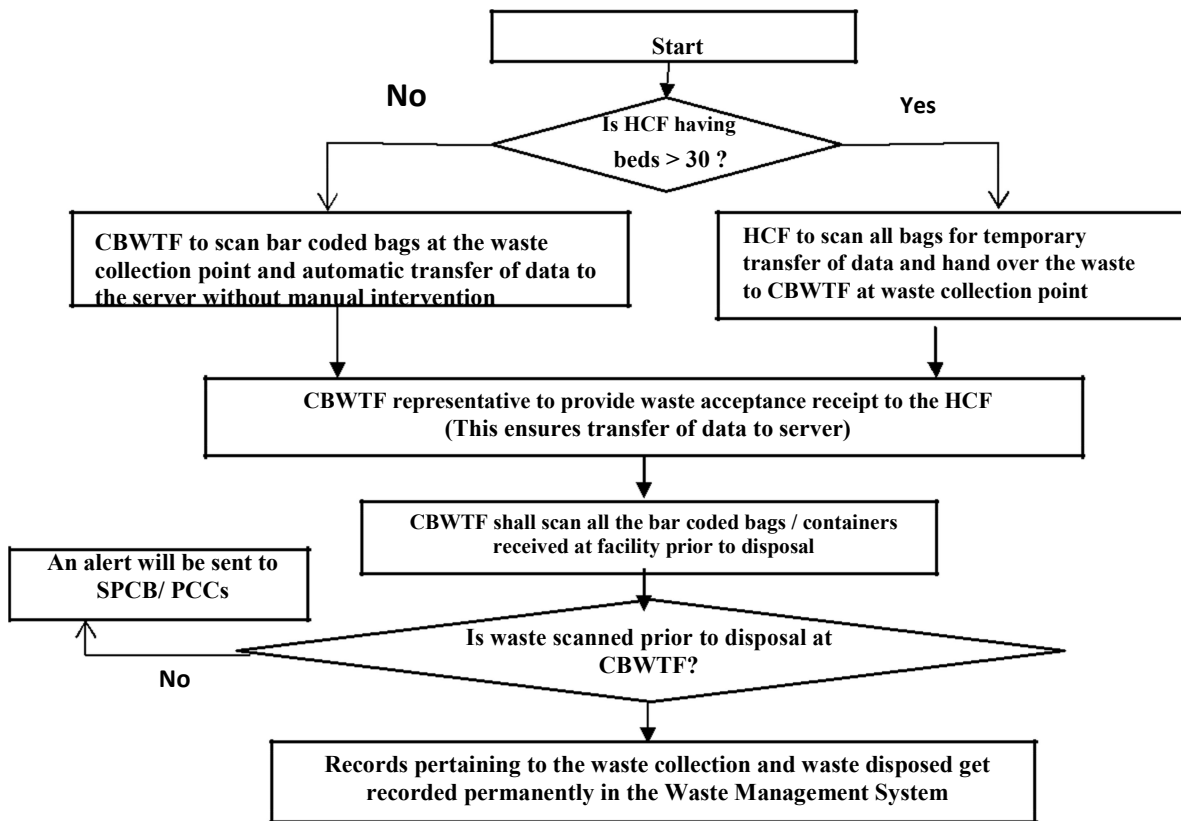


Figure 5. Implementation of the Bar Code System

9. Time frame for compliance to the Guidelines

As per BMW Rules, 2016 as amended all the Occupiers and Operator of a CBWTF are required to implement barcode system by 27/03/2019.

10. Actions in case of violation of bar code system

In case of improper operation of the Bar-code Based Software by either occupier /operator of CBWTF, the Prescribed Authority may take action against the responsible person(s) as per Rule 18 of the BMW Rules, 2016 and further amendments made thereof.

11. Data maintenance and output formats

Barcode system should have quarry menu for verification or tracking of waste bags through bar-code label information. The software system should also generate standard reports as may be required for SPCBs/PCCs.

A format for generating daily report on biomedical waste generated, collected and treated or disposed by a CBWTF is given at **Annexure-II**. The software should also have features for generating user specific reports both in the form of data sheets as well as graphs.

12. Additional Optional Features

The software provided for tracking of bio-medical waste using bar code system can have an additional features for tracking bar coded bags or containers within the HCF prior to hand over to the representative of the CBWTF (waste picker). Such tracking would avoid pilferage of recyclable bio-medical waste (red category) prior to reaching waste collection point.

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Annexure-I

Name of the State/UT and the respective Code

S.No	Name of the State/UT	State/UT Code
(1)	Uttar Pradesh	UP

Checklist to Bidders:

- I. Annexure - A : Price Bid (Not to be filled in technical bid)
- II. Annexure - B : Undertaking
- III. Annexure - C : Bid Security
- IV. Annexure - D : Information of the bidder
- V. Annexure - E : Detail list of projects related to implementation of BMW
- VI. Annexure - F: Annual Turn over statement
- VII. Annexure - G: Affidavit
- VIII. Annexure - H: Format for Performance security
- IX. Annexure - I: Guidelines for Bar coding by CPCB
- X. Tender document fee
- XI. DD / BG for EMD
- XII. Self declaration (corrupt or fraudulent practices)
- XIII. Photo type presentation on implementation of Methodology, Work plan etc.
- XIV. Any other documents as per the tender document
- XV. Submission of technical bid to the tender inviting authority