

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

O.A. NO. 130 of 2021 (SZ)

IN THE MATTER OF:

SUO MOTU- Chennai's Sanitation workers live the Horrors of a broken disposal system

Sr. No.	Particulars	Page Nos.
1.	Reply on behalf of Tamil Nadu Waste Management Limited/Respondent No. 9 along with affidavit	1-12
2.	ANNEXURE A (Colly.) Copy of the Work Orders issued by GCC to the Respondent No. 9	13-23
3.	ANNEXURE B A copy of Revision 4 of the Guidelines for Handling, Treatment and Disposal of Waste generated during Treatment/ Diagnosis/ Quarantine of Covid-19 Patients, dated 21.07.2020	24-34
4.	ANNEXURE C (Colly.) A copy of the manifests collected from the hospitals and submitted to GCC by the Answering Respondent	35-43
5.	ANNEXURE D (Colly.) Copy of fortnightly reports submitted to Tamil Nadu Pollution Control Board for the months of April to June, 2021	44-55

THROUGH


**MATRUGUPTA MISHRA /RITIKA SINGHAL
ADVOCATES FOR THE RESPONDENT NO. 9**

**M/S RITAM LEGAL,
ADVOCATES AND ADVISORY,
M-15, FIRST FLOOR,
SOUTH EXTENSION PART II,
NEW DELHI-110049
Phone: 011 43552390-91
Email: desk@ritamlegal.com**

**NEW DELHI
DATE:20.08.2021
DRAWN ON: 24.08.2021**

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

O.A. NO. 130 of 2021 (SZ)

IN THE MATTER OF:

SUO MOTU- Chennai's Sanitation workers live the Horrors of a broken disposal system

**REPLY ON BEHALF OF TAMIL NADU WASTE MANAGEMENT
LIMITED/RESPONDENT NO. 9**

MOST RESPECTFULLY SHOWETH:

1. The captioned proceedings have been initiated *suo-motu* by this Hon'ble Tribunal, on the basis of the newspaper reports published in digital news platform named, the 'News Minute' dated 19.05.2021, under the caption "Chennai's Sanitation workers live the horrors of a broken waste disposal system" regarding the condition of sanitation workers employed for collection of waste (along with photographs of the dump and workers).
2. The captioned matter was first listed on 24.06.2021 on which date notice was issued to the Respondents, including, Tamil Nadu Waste Management Limited/ the Respondent No. 9 (hereinafter referred to as the 'Answering Respondent'). Thereafter, on 26.07.2021 this Hon'ble Tribunal directed all the Respondents including the Answering Respondent to file a detailed reply to the queries raised by this Hon'ble Tribunal. The Answering Respondent was directed under para 9 of the order dated 26.07.2021 to submit the details of the quantity of Bio-Medical Waste received and the methodology and practice that is being adopted by the Answering Respondent in verifying the

genuineness of the bags received and its conditions before its being taken for treatment.

Brief Background:

3. The Answering Respondent is an operator of Common Bio Medical Waste Treatment Facility (hereinafter referred to as "Waste Treatment Facility") within the meaning of Rule 3(n) of the Bio Medical Waste Management Rules, 2016 (hereinafter referred to as 'BMW Rules') and has been operating its Waste Treatment Facility, since February, 2010.
4. The Greater Chennai Corporation, Respondent No. 7 (hereinafter referred to as 'GCC'), issued multiple Work Orders to the Answering Respondent for collection and treatment of Bio Medical Waste, from quarantined houses and Covid Care/Screening Centers, falling under the Respondent No. 7's jurisdiction. Out of the total 15 zones, the Answering Respondent was entrusted with waste collection from zones 1 to 8 and asked to provide yellow bags for zones 9 to 15. The table below shows the dates on which Work Orders were issued by GCC for different zones:

S.No.	Work Order No. and Date	Zone No. of GCC
1.	SWM.C.No.A7/1530/2021, dt. 26.04.2021	Zone 1 to 8
2.	SWM.C.NO.A4/1735/2020 dt. 15.05.2021	Zone 1
3.	Z.O.II.C.No.C1/1294/2021, dt. 17.05.2021	Zone 2
4.	Z.O.3.C.No. 14408/2021, dt. 18.02.2021	Zone 3
5.	Z.O.4.C.No/3626A/2021 dt: 20.05.2021	Zone 4
6.	Z.O.V.C.No. 14408/2021, dt. 18.05.2021	Zone 5
7.	Z.OVI.V.No.E2/3093/2021, dt. 31.05.2021	Zone 6

8.	Z.O.7.C.No.C1/2616/2021, dt. 18.05.2021	Zone 7
9.	Z.O.8.C.No.SPL/2021, dt. 18.05.2021	Zone 8
10.	S.W.M.G.S.No.A3/041/2, dt. 27.05.2021	Zones 9-15

Copy of the Work Orders issued by GCC to the Respondent No. 9 are annexed herewith and marked as **Annexure A (Colly)**.

5. The Answering Respondent has been collecting, treating and disposing the waste collected from the aforementioned zones in accordance with the Bio-Medical Waste Management Rules, 2016 and the amendments thereof.
6. The Answering Respondent is filling the present reply pursuant to this Hon'ble Tribunal's Order dated 26.07.2021. It is submitted that the Answering Respondent took all necessary precautions in collection and disposal of the Bio Medical Waste collected by it, pursuant to Work Orders issued by the Respondent No. 7. The Answering Respondent has taken concrete steps to ensure that it abides by the provisions of the Bio Medical Waste Management Rules, 2016 ('BMW Rules'), the relevant guidelines of the Central Control Board in this regard (revised from time to time) ('CPCB Guidelines') read with the relevant provisions of the Environment Protection Act, 1986 (as amended from time to time) (hereinafter referred to as the 'Act'). Accordingly, the Answering Respondent submits as under:

Steps taken for workers welfare:

7. It is submitted that the Answering Respondent is conscious of the adverse consequences of improper handling and disposal of Bio

Medical Waste generated by health care facilities such as hospitals, Covid Care Centers, Screening Centers, Quarantined homes etc., and the major risk such waste poses to the frontline workers. The Answering Respondent is also aware of the serious consequences on the society, if such waste is not handled properly.

8. Being aware of the extremely hazardous and infectious nature of such Bio Medial Waste and conscious of its strict obligations and responsibilities qua the same, the Answering Respondent has always ensured the strictest adherence to and/or compliance with the environmental norms pertaining to the scientific collection, transportation, treatment, storage and disposal of Bio Medical Waste stipulated under the BMW Rules, 2016, the relevant CPCB Guidelines read with the Act and has always acted in consonance of the Standard Operating Practices.
9. It is submitted that the Answering Respondent has taken all possible steps to mitigate the adversities of the novel Corona Virus, by providing all its workers with protective gear, including gloves, masks and PPE kits to protect them. The Answering Respondent also ensured that no worker is allowed inside the Covid Care/Screening Centre without masks, gloves and PPEs. Furthermore, all the workers have been strictly instructed to follow Covid Protocols in order to safeguard their health and hygiene.
10. This Hon'ble Tribunal may however, appreciate the fact that due to the uncertain character of the Novel Corona Virus the frontline

workers, employed with the Answering Respondent, were affected even after taking proper measures like wearing PPE kits and timely sanitising themselves. However, the Answering Respondent to the greatest possible extent ensured that it provided sufficient and adequate safeguard to all of its workers and specially those engaged in collection and disposal of Bio Medical Waste.

Collection and Disposal of Waste

11. That the obligations of an operator of a Waste Treatment Facility, such as the Answering Respondent herein, are stipulated under Rule 5 of the BMW Rules, 2016. Rule 5 reads as under:

"5 Duties of the Operator of a common bio-medical waste treatment and disposal facility- It shall be the duty of every operator to-

(a) Take all necessary steps to ensure that the bio-medical waste collected from the occupier is transported, handled, stored, treated and disposed of, without any adverse effect to the human health and the environment, in accordance with these rules and guidelines issued by the Central Government or, as the case may be, the central pollution control board from time to time;

(b) Ensure timely collection of bio-medical waste from the occupier as prescribed under these rules;"

12. The Answering Respondent has always ensured strict adherence to, provisions of Rule 5 to the fullest extent within its capacity and reasonable control by taking the following steps:

- a. The Answering Respondent, in compliance with Rule 5(a), has taken all necessary steps to ensure that the Bio Medical Waste collected by it is transported, handled, stored, treated and disposed, without any adverse effect to human health and the environment by following the established environmental norms in tandem and in consonance with the relevant CPCB guidelines issued from time to time.
 - b. The Answering Respondent has always ensured timely collection of Bio Medical Waste in the zones assigned to it;
 - c. That the Answering Respondent facility follows the strictest standards and ensures complete/non-negotiable compliance with the BMW Rules and the schedules laid down thereunder, qua treatment/disposal methodologies and/or technologies of the collected Bio Medical Waste. Moreover, the same can be further corroborated from records maintained by the Respondent containing complete details of treatment/disposal of Bio Medical Waste at its facility, specifically relating to processes of autoclaving, microwaving, incineration followed by mutilation or shredding (as the case maybe), requisite for the purposes of safely and scientifically treating Bio Medical Waste.
13. The Work Orders were received by the GCC in the later part of April, 2021 (except one work order received in the month of February), and since then the Answering Respondent has been regularly collecting and sending waste for incineration, generated

in the allotted zones. The details of the waste collected from each zone is given as under:

S.No.	Zone	Places from which COVID waste was Collected	Waste Quantity collected and disposed (in tons)
1.	Zone 1 to 8	Quarantined Houses in Zones 1-8	55
2.	Zone 1	Quarantined Houses and Covid care Centres in Zone 3	33.44
3.	Zone 2	Quarantined Houses and Covid care Centres in Zone 2	14.33
4.	Zone 3	Quarantined Houses and Covid care Centres in Zone 3	21.03
5.	Zone 4	Quarantined Houses and Covid care Centres in Zone 3	23.81
6.	Zone 5	Two Nos. Covid Care Centres, two nos. of Screening centres and Quarantined houses in Division 49 to 63 in Zone 5	24.32
7.	Zone 6	Quarantined Houses and Covid care Centres in Zone 6	31.70
8.	Zone 7	Quarantined Houses and Covid care Centres in Zone 7	38.74

9.	Zone 8	Quarantined Houses and Covid care Centres in Zone 8	8.05
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It is pertinent to note here that the Answering Respondent ensures that waste collected during the day is incinerated on the same night and is not carried over to the next day.

14. Pursuant to issuance of the Work Orders, by GCC, the Answering Respondent has been collecting Covid related waste separately, from all the hospitals falling within the zones assigned to the Answering Respondent i.e., zones 1-8. Table below shows the amount of waste collected by the Answering Respondent, from all such hospitals:

S.No.	Month	Quantity in Kgs
1.	April, 2021	58,111
2.	May, 2021	1,85,883
3.	June, 2021	99,308
	Total	3,43,302

15. It is submitted that, the Bio Medical Waste, collected from different hospitals, were categorized under three heads, each having a specific colour prescribed, depending on the nature of the Bio Medical Waste. The different types of waste collected, by the Answering Respondent, is mentioned below:

S. No.	Type of waste	Particulars	Designated bag
1.	Ambles waste	Surgery waste items	Blue bag

2.	Incinerator waste	Cotton, consumables & surgically removed parts.	Yellow bag
3.	Autoclave waste	Plastic items sent for recycling	Red bag

16. Additionally, it is pertinent to mention that the Covid Bio-Medical Waste, collected from the hospitals, was segregated from the normal Bio Medical Waste, at the hospital level itself. The segregated waste was then collected separately in different coloured bags (red, blue and yellow) by the employees of the Answering Respondent. Furthermore, the Covid Bio Medical Waste and normal Bio Medical Waste were treated separately, the former being treated by the process of incineration. Thus, the Answering Respondent is taking all necessary steps to comply with the various guidelines issued by the Central Pollution Control Board while collecting and treating waste. The Answering Respondent has been following the "Guidelines for Handling, Treatment and Disposal of Waste generated during Treatment/ Diagnosis/ Quarantine of Covid-19 Patients" and the revisions thereto.

A copy of Revision 4 of the Guidelines for Handling, Treatment and Disposal of Waste generated during Treatment/ Diagnosis/ Quarantine of Covid-19 Patients, dated 21.07.2020, is annexed herein and marked as **Annexure B**.

17. It is further submitted that the Answering Respondent submits manifests collected from the hospitals, to the GCC. These manifests contain details of the quantity of colour coded bags collected from the hospitals.

A copy of the sample manifests collected from the hospitals and submitted to GCC by the Answering Respondent are annexed hereto and marked as **Annexure C (Colly)**.

18. The Answering Respondent also submits fortnightly reports to the T.N Pollution Control Board detailing with the amount of bio-medical waste collected by the Answering Respondent. The Answering Respondent clearly mentions, date-wise, the total amount of waste collected by it and the quantum that was incinerable, sterilizable and sharp. The Answering Respondent also mentions the number of hospitals from which it collected such bio-medical waste.

Copy of fortnightly reports submitted to Tamil Nadu Pollution Control Board for the months of April to June, 2021 are annexed hereto and marked as **Annexure D (Colly)**.

19. This Hon'ble Tribunal may consider that the Answering Respondent facility has been in continuous service for 11 years and has an excellent track record in respect of collection, handling transportation, treatment and subsequent disposal of Bio Medical Waste. That, further it is reiterated that the Answering Respondent is taking all necessary precautions so that no worker is affected in the process of collecting hazardous Bio Medical Waste and also that the waste is collected and disposed in the correct manner.

20. The Answering Respondent is deeply committed to continue to provide Bio Medical Waste management services in the future and it is humbly submitted that this Hon'ble Tribunal may be pleased to appreciate the strict measures taken by the Answering Respondent to restrict the spread of Corona Virus among its employees and the efforts taken by it to collect and dispose-off the waste generated during the second wave of Covid.
21. This Hon'ble Tribunal may be pleased to decide accordingly.

THROUGH



**MATRUGUPTA MISHRA /RITIKA SINGHAL
ADVOCATES FOR THE RESPONDENT NO. 9**

**M/S RITAM LEGAL,
ADVOCATES AND ADVISORY,
M-15, FIRST FLOOR,
SOUTH EXTENSION PART II,
NEW DELHI-110049
Phone: 011 43552390-91
Email: desk@ritamlegal.com**

**NEW DELHI
DATE: 20.08.2021
DRAWN ON: 24.08.2021**

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
AT NEW DELHI, SOUTHERN ZONE**

ORIGINAL APPLICATION NO. 130 OF 2021 (SZ)

IN THE MATTER OF:

Suo-Moto- Chennai's Sanitation workers live the Horrors of a broken waste disposal system"

VERSUS

The Chief Secretary to Government of Tamil Nadu and Ors.

...RESPONDENTS

AFFIDAVIT

I, Sridhar Reddy Meka, S/o Siva Reddy Meka, aged about 45 years, authorized representative of Tamil Nadu Waste Management Limited, the Respondent No. 9 herein, resident of Jain Sundarbans, 13th Block, 2G. Nolambur, Chennai-600095, presently at do hereby solemnly affirm and state as follows:

1. That I am the authorized representative of the Respondent No. 9 in the abovementioned matter, I have been dealing with the matters relating to the above-mentioned case and I am conversant with the facts of the case.
2. I have read the accompanying reply and I say that its contents are true to my knowledge or belief and based on records which are believed to be true and correct.
3. The annexures filed along with the accompanying reply are true copies of their respective originals.

[Signature]


...DEPONENT

VERIFICATION:

I, the deponent above named do hereby verify that the contents of the above affidavit are true to my knowledge or belief, no part of it is false and nothing material has been concealed therefrom.

Verified at *Chennai* on this *20th* day of August, 2021.



[Signature]
P. JAYARAMAN, B.A., B.L.
 ADVOCATE & NOTARY PUBLIC
 EGMORE COURT ADVOCATES
 ASSOCIATION, CH-600 008
 Cell: 94440 11605

[Signature]


DEPONENT

Annexure -A(Colly)**From**

Zonal Officer,
Zone-3 (Madhavaram)
Greater Chennai Corporation,
No.1, Thattankulam Salai,
Madhavaram,
Chennai-600 060.

To

M/S. Tamilnadu Waste management
Pvt.Ltd.,
No.323, P.H. Road,
Aminjikai,
Chennai- 600 029.

Z.O.3.C.No./2082/2021

Date:- 18.02.2021

Sir/Madam

Sub:- Greater Chennai Corporation – Zone-3 (Madhavaram) –Solid Waste Management – Work for the collection and end disposal of Bio-Medical waste generated from quarantined houses and screening Centre in Zone-3 – Work Order issued – Reg.

Ref:- S.W.M.G.S.C.No.A4/1732/2020 dated:- 15.05.2021

Sanction has been obtained from the competent authority for the collection and end disposal of Bio Medical Waste generated from the quarantined houses and screening centre in Zone-3 of Greater Chennai Corporation.

The approved rates and tabulated below:-

Rates per tonnage	Total Quantity	Total Amount (Rs.) (Inclusive of all expenses and Taxes)
Rs.44,500	100 tons	Rs.44,50,000/- (Rupees Forty four Lakhs Fifty Thousand only)

The following condition to be made:

1. The bills will be settled for the actual wright of collection and end disposal of Bio Medical Waste generated from quarantined houses and screening Centres in Zone-3.
2. Income Tax will be deducted at source.

[Handwritten Signature]
18/02/21

[Handwritten Signature]
18/02/21

[Handwritten Signature]
18/02/21
Zonal Officer/Z3

From:

Zonal Officer,
Zone-2,
Greater Chennai Corporation,
No.1, Kamarajar Salai,
Manali,
Chennai- 600 068

To:

M/s. Tamil Nadu Waste Management, Pvt. Ltd.
No.323, P.H Road,
Aminjikarai,
Chennai – 600 029

Z.O.H.C.No.C1/1294/2021

Date: 17.05.2021

Sir/Madam,

Sub: Greater Chennai Corporation – Zone-2 – Solid Waste Management – Work for the collection and end disposal of Bio-Medical waste generated from quarantined houses and screening Centre in Zone-2 – Work order issued – Reg.

Ref: S.W.M.G.S.C.No.A4/1735/2020 dated 15.05.2021

Sanction had been obtained from the competent authority for the collection and end disposal of Bio Medical waste generated from quarantined house and screening centre in zone-2 of Greater Chennai Corporation.

The approved rates are tabulated below.

Rates per tonnage	Total Quantity	Total Amount (Rs.) (inclusive of all expenses and Taxes)
Rs.44,500	100 tons	Rs.44,50,000/- (Rupees Forty Four Lakhs Fifty Thousand only)

The following condition to be made:

1. The bills will be settled for the actual weight of collection and end disposal of Bio Medical waste generated from quarantined houses and screening Centre in Zone-2.
2. Income Tax will be deducted at source.

Zonal Officer
Zone-II

17/05/2021

17/05/2021
Suptd C.

2/2

From

The Zonal Officer-5,
Zone-5,
Greater Chennai Corporation,
No.81, Basin Bridge road,
Chennai- 600 021.

Z.O.V.C.No.14402/2021

To

M/s. Tamilnadu Waste Management Pvt. Ltd.

Dated: 18.05.2021

Sir,

Sub: Greater Chennai Corporation – Zone-5 – Solid Waste Management work for the collection and disposal of Bio Medical Waste generated from quarantined houses in Zone-5 – Work order issued – Reg.

Sanction has been obtained from the Competent authority for the Collection and Disposal of Bio Medical Waste generated from two Nos. of Covid Care Center Centers, two Nos. of Screening Centers and quarantined houses in Division-49 to 63 in Zone-5 of Greater Chennai Corporation.

The approved rates are tabulated below.

Locations	Approved rate	Total Quantity	Total Amount (Inclusive of all expenses and Taxes)
two Nos. of Covid Care Center Centers, two Nos. of Screening Centers and quarantined houses in Division-49 to 63 in Zone-5	Rs. 44,50/- per KG	100 Tons	Rs. 44,50,000/- (Rupees Forty Four Lakhs Fifty Thousand only)

The Following Conditions to be made:

1. The bills will be settled for the actual weight of Collection and end disposal of Bio-Medical Waste Generation from above said locations in Zone-5.
2. Daily Collection and end disposal of Bio-Medical Waste reports with location details to be sent to Zonal Office-5.
3. Income tax and all other taxes will be deducted at source.

[Signature]
20/5/21
Zonal Officer-5

[Signature]
20/5/21
Zonal Officer-5

From,

Zonal Officer-5,
Zone-5
Greater Chennai Corporation
No. 61, Basin Bridge Road,
Chennai – 600 021

To,

M/s. Tamil Nadu Waste
Management Pvt. Ltd.

Z.O.V.C.No. 14408/ 2021

Dated: 18.05.2021

Sir,

Sub: Greater Chennai Corporation – Zone 5 – Solid Waste Management work for the collection and disposal of Bio-Medical Waste generated from quarantined houses in Zone-5 – Work Order issued – Reg.

Sanction had been obtained from the Competent authority for the Collection and the Disposal of Bio Medical Waste generated from two Nos. of Covid Care Center Centers, two Nos. Of Screening Centers and quarantined houses in Division-49 to 63 in Zone-5 of Greater Chennai Corporation.

The approved rates are tabulated below:

Locations	Approved rate	Total Quantity	Total amount (Inclusive of all expenses and Taxes)
Two Nos. of Covid Care Center Centers, two Nos. of Screening Centers and quarantined houses in	Rs. 44.50 Per KG	100 Tons	Rs. 44,50,000 (Rupees Fourty Four Lakhs Fifty Thousand Only)

Division-49 to 63 in Zone-5			
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The following conditions to be made

1. The Bill will be settled for the actual weight of collection and end disposal of Bio Medical waste generation from above said locations in Zone-5.
2. Daily Collection and disposal of Bio-Medical Waste reports with locations details to be sent to Zonal Office-5.
3. Income Tax will be deducted at source.

Sd/-
Zonal Officer-5

SD/-

(True Typed copy)

From,

Zonal Officer,
Zone-7,
Greater Chennai Corporation,
Ambatur,
Chennai-53

To,

M/S. Tamil Nadu Waste Management
Pvt. Ltd
No.523, P.H. Road,
Ambur,
Chennai-600 029

Z.O.7.C.NO.C1/ 2816 /2021

Date: 18.05.2021

Sir/Madam,

Sub: Greater Chennai Corporation – Zone-7 – Solid Waste Management – Work for the collection and end disposal of Bio-Medical Waste generated from quarantined house and screening centre in Zone-7 – Work Order issued-Reg.

Ref: 1. S.W.M.G.S.C.NO.A4/1735/2020 Dated: 15.05.2021
2. Orders of Competent authority Dated: 18.05.2021

Sanction had been obtained from the competent authority for the Collection and the disposal of Bio Medical Waste generated from quarantined house and screening centre in Zone-7 of Greater Chennai Corporation.

The approved rates are tabulated below.

Rates per Tonnage	Total Quantity	Total Amount (Rs.) (Inclusive of all expenses and Taxes)
RS.44.50	65,000Kgs	Rs. 2892,500 - (Rupees Twenty Eight Lakhs Ninety Two Thousand Five Hundred only)

The Following condition to be made

1. The Bill will be settled for the actual weight of collection and end disposal of Bio Medical waste generated from quarantined houses and screening centre in Zone-7.
2. Income Tax will be deducted at source.

Executive Engineer -I

Executive Engineer -II

Zonal Officer-7

From,

Zone Officer,
Zone-7
Greater Chennai Corporation
Ambatur
Chennai – 53

To,

M/s. Tamil Nadu Waste
Management Pvt. Ltd.
No. 323, P.H. Road,
Illegible
Chennai – 500 029

Z.O.7.C.No. C1/2616/ 2021

dated: 18.05.2021

Sir/ Madam,

Sub: Greater Chennai Corporation – Zone 7 – Solid Waste Management
– work for the collection and end disposal of Bio-Medical Waste
generated from quarantined house and screening center in Zone-
7 – Work Order issued – Reg.

- Ref: 1. S.W.M.G.S.C. NO. A41735/2020 Dated 15.05.2021
2. Orders of Competent Authority Dated 15.05.2021

Sanction had been obtained from the competent authority for the
Collection and the disposal of Bio Medical Waste generated from
quarantined house and screening centre in Zone-7 of Greater Chennai
Corporation.

The approved rates are tabulated below:

Rates per Tonnage	Total Quantity	Total amount (Rs.) (Inclusive of all expenses and Taxes)
RS. 44.50	65,000 Kgs	Rs. 28,92,500 (Rupees Twenty Eight Lakhs Ninety Two Thousand Five Hundred Only)

The following conditions to be made

1. The Bill will be settled for the actual weight of collection and end disposal of Bio Medical waste generated from quarantined houses and screening centre in Zone-7.

2. Income Tax will be deducted at source.

SD/-
Executive Engineer-1

SD/-
Executive Engineer-II

SD/-
Zonal Officer-7

(True Typed copy)

From,
District Revenue Officer/
Zonal Officer,
Zone - 8,
Greater Chennai Corporation,
Shenoy Nagar,
Chennai - 600 030.

To,
M/s. Tamil Nadu Waste
Management Pvt. Ltd.,
No.323, P.H. Road,
Aminjikarai,
Chennai - 600 029.

Z.O.8.C.No.SPL/2021

Date: 18.05.2021

Sir,

Sub.: Greater Chennai Corporation - Zone-8 - Solid Waste Management - Work for the collection and end disposal of Bio-Medical waste generated from quarantined houses and Screening Centre in Zone-8 - Work order issued - reg.

Ref.: 1. S.W.M.G.S.C.No.A4/1735/2020 dated 15.05.2021.

Sanction had been obtained from the competent authority for the collection and end disposal of Bio Medical Waste generated from quarantined house and screening centre in Zone-8 of Greater Chennai Corporation.

The approved rates are tabulated below.

Rates per Tonnage	Total Quantity	Total Amount (Rs.) (Inclusive of all Expenses and Taxes)
Rs.44,500/-	25 tons	Rs.11,12,500/- (Rupees Eleven Lakhs Twelve Thousand and Five Hundred only)

The following condition to be made:

1. The bills will be settled for the actual wright of collection and end disposal of Bio-Medical waste generated form quarantined houses and Screening Centre in Zone-8
2. Income Tax will be deducted at source.

[Handwritten signatures and dates]
D.R.O./Zonal Officer-8
18/5/21

From
Zonal Officer,
Zone - 6
Greater Chennai Corporation
No.158, Strahans Road,
Otteri,
Chennai-600012.

To
M/S.Tamilnadu Waste Management Pvt Ltd.
No:323, P.H.Road,
Aminjikaral,
Chennai-600029.

Z.O.V.I.C.No. E2/3093/2021

Dated: 31.05.2021

Sir/Madam,

Sub: Greater Chennai Corporation - Zone-6 - Solid Waste Management - Work for the collection and disposal of Bio Medical waste generated from quarantined houses and screening centre in Zone-6 -Work Order Issued - Regarding

Ref: 1. Z.O.V.I.C.No.E2/3093/2021 Dated : 26.05.2021

Z.S.W.M.G.S.C.No.A4/1735/2020 Dated :15.05.2021.

As per the reference cited sanction has been obtained from the Regional Joint Commissioner for the collection and disposal of Bio Medical Waste generated from the quarantined houses and Covid care centre in Zone-6 of Greater Chennai Corporation. The approved rates are tabulated below.

Rates per Tonnage	Total Quantity	Total Amount (Rs.) (Inclusive of all expenses and Taxes)
Rs.44,500	100 Tons	Rs.44,50,000/- (Rupees Fourty Four Lakshs Fifty Thousand Only)

The following condition to be made:

1. The bills will be settled for the actual weight of collection and disposal of Bio Medical Waste generated from quarantined houses and Covid care centre in Zone-6.
2. Income tax will be deducted at source.
3. A trip sheet should be submitted containing of weighed garbage details received from quarantined house and covid centre of Zone-6 on daily basis as a report.

31/5/21
31.05.2021
Zonal Officer - VI

The Superintending Engineer(SWM)
Solid Waste Management Dept.,
Greater Chennai Corporation,
Ripon Buildings,
Chennai - 600 003

M/s. Tamil nadu Waste Management Ltd.,
(Ramky Group)
Level-4, 'Diamond Dune'
No. 323, Poonamallee High road,
Chennai - 600 029

S.W.M.G.S.C No A3/041/2021

Date: 27.05.2021

Sir,

Sub: Greater Chennai Corporation - Solid Waste Management -
Supply of 5,00,000 nos Yellow Bag for the use of collection
of biomedical waste in Zones 9 to 15 - as per specifications -
Purchase order issued - regarding

Ref: 1. A.S approval of the Deputy Commissioner(Health)
Dt. 26.05.2021
2. Your letter dated . 27.05.2021

In the reference cited, your rates have been accepted by the competent authority for the Supply of 5,00,000 nos Yellow Bag for the use of collection of biomedical waste in Zones 9 to 15, Greater Chennai Corporation as details given below.

Description of Material	Rate per unit	Total amount without tax	G.S.T 18%	Total Amount including all taxes
Supply of 5,00,000 nos Yellow Bag for the use of collection of biomedical waste. Size 18" X 24"	Rs. 7.00	35,00,000	6,30,000	Rs.41,30,000/- (Rs. Forty one lakh and thirty thousand only)

- You are requested to Supply of 5,00,000 nos Yellow Bag for the use of collection of biomedical waste in Zones 9 to 15 in Greater Chennai Corporation, within Ten days from the date of receipt of this order.
- Materials should be delivered at General Stores, No.37, Basin Water Works Street, Chennai-79 at free of cost.
- Payment will be made after receipt and verification of the materials.

P.K.
27.5.2021
Exe Engineer (SWM)

S.S.
27/5/21
Superintending Engineer(SWM)

Copy to
27/5/21
27.5.21
ABB/SWM
Copy to : General Stores

Revision 4

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

21st July, 2020

**[In suppression of earlier guidelines uploaded at CPCB website on 10.06.2020. Text pertaining to
additional information is underlined]**



Central Pollution Control Board

(Ministry of Environment, Forest & Climate Change)

Parivesh Bhawan, East Arjun Nagar

Delhi – 110032

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. This revision-4 of guidelines issued to provide revised guidance on segregation of general solid waste and biomedical waste from quarantine centers/home-care/healthcare facilities treating COVID-19 patients and to recommend on disposal of PPEs.

Guidelines brought out by WHO, MoH&FW, ICMR, CDC and other concerned agencies from time to time may also be referred for understanding other aspects related to COVID-19.

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

(a) COVID-19 Isolation wards: (isolation wards are those where COVID-19 positive patients are being kept for treatment / diagnosis)

Healthcare Facilities having isolation wards including temporary Healthcare Facilities like rail coach wards, COVID Care Centers etc.¹ 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 (with foot operated lids)²/bags/containers in wards and maintain proper segregation of waste as per BMW 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.

¹ Para amended in Rev. 4 dated 17.07.2020

² Inserted in Rev. 3 of guidelines dated 10.06.2020

- General solid waste comprising of wrappers of medicines/syringes, fruit peel offs, empty juice bottles or tetra packs, used water bottles, discarded papers, carton boxes of medicines, empty bottles of disinfectants, left-over food, disposable food plates etc., should be collected separately as per SWM Rules, 2016. In order to minimize waste generation, as far as possible, non-disposable items must be used for serving food, which are to be handle with appropriate precautions and cleaned and disinfected as per hospital guidelines. If use of disposable items is inevitable, use bio-degradable cutlery. The wet and dry solid waste bags to be tied securely in leak-proof bags, sprayed with sodium hypo-chlorite solution and hand over to authorized waste collector of ULB's on daily basis. Yellow colored bags should not be used for collecting general solid waste. Compostable bags should be used for collecting wet-waste.¹
- Maintain separate records of waste generated from COVID-19 isolation wards.
- 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 daily.
- Report opening or operation of COVID-19 ward and COVID-19 ICU ward to SPCBs/PCCs and respective CBWTF located in the area.
- Register in CPCB mobile application namely ‘COVID19BWM’ to update the details of COVID-19 biomedical waste generation.
- Depute dedicated sanitation workers separately for biomedical waste and general solid waste so that waste can be collected and transferred timely to temporary waste storage area.
- Feces from COVID-19 confirmed patient, who is unable to use toilets and excreta is collected in diaper, must be treated as biomedical waste and should be placed in yellow bag/container. However, if a bedpan is used, then faeces to be washed into toilet and cleaned with a neutral detergent and water, disinfected with a 0.5% chlorine solution, then rinsed with clean water.²
- Collect used PPEs such as goggles, face-shield, splash proof apron, Plastic Coverall, Hazmet suit, nitrile gloves into Red bag;³
- Collect used mask (including Triple layer mask, N95 mask etc.), head cover/cap, shoe-cover, disposable linen Gown, non-plastic or semi-plastic coverall in Yellow bags.⁴
- Used masks, tissues and toiletries, of COVID-19 patient shall become biomedical waste and shall be segregated in yellow bag.⁵
- Segregation of biomedical waste and general solid waste should be done at the point of generation in wards / isolation rooms. There should be no segregation of biomedical waste and

¹ Para revised in Rev. 3 dated 10.06.2020 & Rev 4 dated 17.07.2020

² Para Inserted in Rev. 2 dated 18.04.2020

³ Para inserted in Rev. 2 dated 18.04.2020

⁴ Para inserted in Rev. 2 dated 18.04.2020

⁵ Inserted in Rev. 3 dated 10.06.2020 and revised in Rev 4 dated 17.07.2020

solid waste at temporary waste collection / storage area of Healthcare Facility to ensure occupational safety.¹

- Provide training to Waste handlers about infection prevention measures such as Hand hygiene, Respiratory etiquettes, social distancing, use of appropriate PPE, etc. via videos and demonstration in local language. Designated nodal officer for biomedical waste management in hospital shall provide training. Nodal officers, in turn, need to be trained by Health Departments / professional agencies in association with SPCB/ PCC of the States/ UTs.²

(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/PCC. Guidelines given at section (a) for isolation wards should be applied suitably in in case of test centers and laboratories. Pre-treat viral transport media, plastic vials, vacutainers, eppendorf tubes, plastic cryovials, pipette tips as per BMW Rules, 2016 and collect in Red bags.³

(c) Responsibilities of persons operating Quarantine Centers/Camps/Home Quarantine or Home-Care facilities⁴

Less quantity of biomedical waste is expected from quarantine Camps / Quarantine Home/ Home-care facilities. However, the persons responsible for operating quarantine camps/centers/home-care for suspected COVID-19 persons need to follow the below mentioned steps to ensure safe handling and disposal of waste;

- General solid waste (household waste) generated from quarantine centers or camps should be collected in bags, securely tied and handed-over to municipal solid waste collector identified by Urban Local Bodies for final disposal.⁵
- General solid waste should comprise of waste generated from kitchen, packaging material, waste food material, waste papers, waste plastics, floor cleaning dust, etc. including left-over food, disposable utensils, water bottles, tetra packs, used by suspected quarantined persons and COVID-19 patient at homecare or home quarantine.⁶
- Only the used masks, gloves and tissues or swabs contaminated with blood / body fluids of COVID-19 patients, including used syringes, medicines, etc., if any generated should be treated as biomedical waste⁷
- Biomedical waste if any generated from quarantine centers/camps should be collected separately in yellow-bags (suitable for biomedical waste collection) provided by ULBs. These bags can be placed in separate and dedicated dust-bins of appropriate size. General waste should not be stored in yellow bags.⁸

¹ Inserted in Rev. 4 dated 17.07.2020

² Inserted in Rev. 3 dated 10.06.2020

³ Para amended in Rev. 2 dated 18.04.2020

⁴ Section inserted in Rev. 1 dated 25.03.2020

⁵ Para amended in Rev. 4 dated 17.07.2020

⁶ Para inserted in Rev. 3 dated 10.06.2020 and Rev. 4 dated 17.07.2020

⁷ Para inserted in Rev. 3 dated 10.06.2020 and Rev. 4 dated 17.07.2020

⁸ Para amended in Rev. 3 dated 10.06.2020

- Agency responsible for operation of Quarantine Centre/camp shall designate a nodal person who will be responsible for waste management and for maintenance of its record.¹
- Designated nodal person of the Quarantine Centre/Camp shall register the Centre/Camp on CPCB's biomedical waste Tracking App 'COVID19BWM' (available on Google play store) and update the details of waste generated on daily basis.²
- Persons operating Quarantine camps/centers should call the CBWTF operator to collect biomedical waste as and when it gets generated. Contact details of CBWTFs would be available with Local Authorities.
- Persons taking care of quarantine home / Home-care should deposit biomedical waste if any generated from suspected or confirmed COVID-19 patients in homecare, by following any of the following methods as may be arranged by ULBs;³
 - Hand over the yellow bags containing biomedical waste to authorized waste collectors at door steps engaged by local bodies; or
 - Deposit biomedical waste in yellow bags at designated deposition Centers established by ULBs. The bag again be stored in yellow bag or container; or
 - Handover the biomedical waste to waste collector engaged by CBWTF operator at the doorstep.
- Persons operating Quarantine camps/centers or Quarantine-homes/Home-care should report to ULBs in case of any difficulty in getting the services for disposal of solid waste or biomedical waste.

Clarifications:

- Quarantine Camps / Quarantine-Home are the places where suspected people or the contacts of suspected / confirmed cases who have been directed by authorized hospitals or local authorities to stay at home for at least 14 days or more for observation for any symptom of COVID-19, if any.
- Homecare – Home care facility is a home where care is to be provided to a COVID-19 positive patient at home.⁴
- Biomedical waste at Quarantine Camps / Home-care may also comprise of used syringes, date expired or discarded medicines, used masks/gloves and in case of patients with other chronic diseases may also include drain bags, urine bags, body fluid or blood soaked tissues/cotton, empty ampules etc.
- Biomedical waste generated from Quarantine Camps / Quarantine-Home / Home-care would be treated as 'domestic hazardous waste' as defined under Solid Waste Management Rules, 2016, and shall be disposed as per provisions under Biomedical Waste Management Rules, 2016 and these guidelines.

¹ Para inserted in Rev. 3 dated 10.06.2020

² Para inserted in Rev. 3 dated 10.06.2020

³ Para amended in Rev. 4 dated 17.07.2020

⁴ Para inserted in Rev. 2 dated 18.04.2020

- General solid waste from Quarantine Camps / Quarantine-Home / Home-care shall be segregated separately and disposed as solid waste as per provisions under SWM Rules, 2016.
- Left-over food, empty juice bottles or tetra packs, empty water bottles, packaging material, and any other items, generated or handled by COVID-19 patient should be collected along with other general solid waste in bags securely tied for handing over to waste collectors engaged by ULBs. Yellow colored bag should not be used for general solid waste.¹
- Only the used masks, gloves and tissues or swabs contaminated with blood / body fluids of COVID-19 patients, including used syringes, medicines, etc., if any generated should be treated as biomedical waste and collect the same in yellow bag.²
- Masks and gloves used by persons other than COVID-19 patients should be kept in paper bag for a minimum of 72 hours prior to disposal of the same as general waste after cutting the same to prevent reuse.³

(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.
- 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.
- CBWTF operator shall register on 'COVID19BWM' Tracking App developed by CPCB and also ensure registration of Waste Handler (with vehicle) for entering the data of COVID-19 biomedical waste received and disposed.⁴

¹ Para inserted in Rev. 2 dated 18.04.2020, amended in Rev. 3 dated 10.06.2020 and Rev. 4 dated 17.07.2020

² Para inserted in Rev. 3 of guidelines dated 10.06.2020 and Rev. 4 dated 17.07.2020

³ Amended in Rev. 2 of guidelines dated 18.04.2020 and Rev. 4 dated 17.07.2020; Criteria for 72 hours is as per CDC guidelines for Decontamination and Reuse of Filtering Facepiece Respirators

⁴ Para inserted in Rev. 3 dated 10.06.2020

- Provide training to Waste handlers on infection prevention measures, hand hygiene, respiratory etiquettes, social distancing, use of PPE, etc. via videos and demonstrations etc. translated in local language. Sanitation workers more than 50-yr of age should be posted for management of non-COVID waste.¹

(e) Duties of SPCBs/PCCs

- Shall maintain records of COVID-19 treatment wards / quarantine centers / quarantine homes in respective States.
- Ensure proper segregation, collection and disposal of biomedical waste as per BMW Rules, 2016 and 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;
- In case of States not having CBWTFs as well as rural or remote areas, not having access to CBWTFs, the existing captive facilities of any hospital may be identified for disposal of COVID-19 waste as per provisions under BMW Rules, 2016 and these guidelines. This may include permitting use of deep burial pits for disposal of yellow category waste as per standards prescribed in Schedule II of Bio-medical Waste Management Rules, 2016.²
- Coordinate with CBWTFs and ULBs in establishing adequate facilities for collection and disposal of COVID-19 waste.
- In case of generation of large volume of yellow color coded (incinerable) COVID-19 waste beyond the capacity of existing CBWTFs and the captive BMW incinerators; permit HW incinerators at existing TSDFs or captive industrial incinerators if any exist in the State/UT. In such case, ensure separate arrangement for handling and waste feeding.³
- During COVID 19 pandemic, SPCBs/PCCs may direct the ULBs to collect dry general solid waste in bags from quarantine Centers / Quarantine homes / Homecare units, and sprayed with disinfectant solution, for disposal in waste to energy plants/ industrial incinerators/ landfills, as per existing practice or availability in the state.⁴
- Every SPCB/PCC shall use 'COVID19BWM' web-portal developed by CPCB to track and verify COVID-19 biomedical waste and to submit daily data to CPCB through said portal.⁵

(f) Duties of Urban Local Bodies⁶

Urban Local Bodies are responsible for ensuring safe collection and disposal of biomedical waste, if any, generated from Quarantine Camps/ Quarantine Homes/ Home Care for COVID-19 suspected persons.

¹ Para inserted in Rev. 3 dated 10.06.2020

² Para inserted in Rev. 2 dated 18.04.2020

³ Para amended in Rev. 3 dated 10.06.2020

⁴ Para inserted in Rev. 3 dated 10.06.2020

⁵ Para inserted in Rev. 3 dated 10.06.2020

⁶ Section inserted in Rev. 1 dated 25.03.2020

- Information on each Quarantine Camps/ Quarantine Homes/ Home-Care should be available with local administration and provide updated list to SPCBs/PCCs from time to time;
- Ensure that general solid waste and biomedical waste generated from quarantine camps/ quarantine homes / Homecare is not mixed. The biomedical waste and general solid waste should be collected separately. Inform the persons responsible for operating isolation wards, quarantine centers and residents of homecare units to collect solid waste and biomedical waste in separate bags securely tied prior to hand over to authorized waste collectors of ULBs. ULBs should ensure that left-over food and general solid waste is not collected in yellow bags;¹
- In quarantine camps, ensure that biomedical waste is collected directly by CBWTFs identified by ULB. Biomedical waste from quarantine camps to be lifted by CBWTFs on call basis as and when the biomedical waste gets generated. Provide contact details of CBWTF operator at Quarantine Camps;
- Provide necessary support, security including authorisation to staff of CBWTFs;
- ULB shall engage CBWTF operator for ultimate disposal of biomedical waste collected from quarantine home/home care or waste deposition centers or from door steps as may be required depending on local situation; ULB shall make agreement with CBWTF in this regard.
- ULBs may envisage the following practices to facilitate safe collection and disposal of biomedical waste from quarantined homes/Home care;
 - a) Engage authorized waste collectors for door steps collection of biomedical waste and transfer to collection points for further pick-up by CBWTF; and/or
 - b) In case number of quarantined homes/Home-care units are less, ULBs may engage services of CBWTFs to collect the waste directly from door-steps.
- Provide yellow colored bags (designated for BMW) to the persons responsible for operating Quarantine Camp or home-care. If required, such bags may be provided through CBWTF.
- ULBs shall ensure the following in engaging authorized waste collectors at door-steps or at waste deposition centers;
 - Create a separate team of workers who shall be engaged in door step waste collection at waste deposition centres or at quarantine homes or home care.
 - Ensure that only designated staff collects biomedical waste from quarantine homes or home care.
 - Training should be provided for sanitization, about collection of biomedical waste, precautionary measures to handle biomedical waste.
 - Impart training to waste collector in handling of biomedical waste including methods of sanitization. Training to waste collectors should be arranged through CBWTF operators;
 - The staff involved in handling and collection of general solid waste and biomedical waste from isolation wards, quarantine homes or home care centers shall be provided with adequate Personnel Protective Equipment such as three layer masks, splash proof aprons/gowns, heavy-duty gloves, gum boots and safety goggles. These PPEs are

¹ Para inserted in Rev. 3 dated 10.06.2020 and amended in Rev. 4 dated 17.07.2020

required to be worn all the time while collecting of waste from quarantine center/quarantine homes/home care/waste deposition centers.

- ULBs may adopt following practices in handling of solid waste and biomedical waste from quarantine camps / Isolation Wards / Home Care / Home Quarantine;¹
 - Use dedicated carts / trolleys / vehicles for transport of biomedical waste and general solid waste separately. Ensure sanitization of vehicles with 1% sodium hypochlorite after each trip;
 - As a matter of caution, the bags containing general solid waste may be sprayed with disinfectant solution (1% sodium hypochlorite solution) prior to disposal;²
 - Waste collectors arriving at quarantine center or at home care may spray the disinfectant (1% sodium hypochlorite solution) on the solid waste bags and the bin used for yellow bags.³
- Establish common waste deposition centers (as stipulated under SWM Rules, 2016) for receiving / collection of biomedical waste. For this purpose, existing Dhalaos if any may be converted suitably.
- The general solid waste collected from quarantine homes or home care shall be disposed off as per SWM Rules, 2016.
- Create awareness among citizens regarding segregation of municipal solid waste and biomedical waste (as part of Domestic Hazardous Waste) generated from homes/ quarantine homes/ home care facilities.⁴
- Services of Common Biomedical Waste Treatment & Disposal Facilities (CBWTFs) and staff associated with CBWTFs for collection, transportation, treatment and disposal of biomedical waste generated from hospitals including COVID-19 isolation wards, Quarantine Camps, etc. may be considered an essential service as part of health infrastructure.
- Facilitate smooth operations of CBWTFs.
- Local agencies / ULBs may take additional measures considering prevailing ground situations and feasibility, however while implementing such measures requirements outlined in these guidelines should be complied.⁵
- ULB shall designate a Nodal person who will be responsible for waste management for specific quarantine center or an area and for maintenance of its record.⁶
- Designated nodal person shall download and use biomedical waste Tracking App 'COVID19BWM' developed by CPCB to feed daily data on quantity of biomedical waste collected from home-cares or home quarantines.⁷

¹ Para inserted in Rev. 3 dated 10.06.2020

² Para inserted in Rev. 3 dated 10.06.2020

³ Amended in Rev 4 dated 17.07.2020

⁴ Para inserted in Rev. 3 dated 10.06.2020

⁵ Para Inserted in Revision 2 dated 18.04.2020

⁶ Para Inserted in Rev. 3 dated 10.06.2020

⁷ Para Inserted in Rev. 3 dated 10.06.2020

- Waste handlers must be given basic/elementary training by ULBs/SPCBs/PCCs with help from NGOs on SWM, Hand hygiene, Respiratory etiquettes, social distancing, Use of PPEs and its disposal, and screening clinics via videos and practical demonstrations in local language.¹
- **ULBs required to ensure daily collection of segregated general solid waste from quarantine centers, home-care and hospitals in securely tied bags (without opening to ensure waste collector safety and to avoid pilferage). As a precautionary measure, liquid disinfectant (1% sodium hypochlorite solution) may be sprayed over bags containing general wastes prior to collection or disposal. General solid waste may be disposed as per SWM Rules, 2016, which may include disposal in landfills, waste to energy plants, depending on available infrastructure. In case of landfilling, identify dedicated area on landfill and the bags should be spread and covered daily with layer of soil or stabilized waste after sprinkled with lime / bleaching powder. Access to landfills sites should be strictly restricted;**²
- In case ULBs are unable to manage solid waste with their existing staff, professional solid waste management agencies may be engaged/authorized during COVID-19 situation for timely collection of solid waste and biomedical wastes separately from quarantine centers, home-care, COVID-19 isolation wards and quarantine homes.³

(g) Management of wastewater from HCFs / Isolation Wards⁴

As per the information available at CDC, the risk of transmission of virus that causes COVID-19 through sewerage systems is thought to be low. Transmission to operators may be possible during treatment of sewage treatment plants, however there is no evidence to date that this has occurred. Therefore, following guidance recommended for HCFs and the operators of STPs;

- Responsible agencies are Healthcare Facilities / Isolation Wards / operators of terminal sewage treatment plants (PHED/Jal Board/etc.).
- HCFs and the agencies operating Sewage Treatment Plants should continue to ensure disinfection of treated wastewater as per prevailing practices to inactivate corona viruses.
- Operators of ETPs/STPs attached with discharge from Healthcare Facilities and isolation wards should adopt standard operational practices, practice basic hygiene precautions, and wear personal protective equipment (PPE) prescribed for operation of STPs. PPEs should include Goggles, face mask, liquid repellent coveralls, waterproof gloves and Rubber boots.
- During the period of COVID-19 pandemic, utilization of treated wastewater in utilities within HCFs may be avoided.

(h) Disposal of used PPEs⁵

- **Waste masks and gloves in general households should be kept in paper bag for a minimum of 72 hours prior to disposal of the same as dry general solid waste after cutting the same to prevent reuse.**⁶

¹ Para Inserted in Rev. 3 dated 10.06.2020

² Para Inserted in Rev. 3 dated 10.06.2020 and amended in Rev 4 dated 17.07.2020

³ Para Inserted in Rev. 3 dated 10.06.2020

⁴ Section inserted in Rev 2 dated 18.04.2020

⁵ Section inserted in Rev 4 dated 17.07.2020

⁶ Amended in Rev. 2 of guidelines dated 18.04.2020; Criteria for 72 hours is as per CDC guidelines for Decontamination and Reuse of Filtering Facepiece Respirators

- Discarded PPEs from general public at commercial establishments, shopping malls, institutions, offices, etc. should be stored in separate bin for 3 days, thereafter disposed of as dry general solid waste after cutting/shredding.
- At Material Recovery Facilities (MRFs), discarded PPEs containing plastic should be shredded and sent to SPCB authorised plastic waste recyclers, or may be converted into refuse derived fuel (RDF) for co-processing or energy recovery (in Waste to Energy Plants) or for road making. Shredded PPEs may be disposed at landfill only in case the requisite infrastructure as required under SWM Rules is not available in the State.
- PPEs doffed by healthcare workers accompanying diseased body of COVID-19 patient to crematorium / graveyards should be treated as biomedical waste and disposed as per provisions under SWM Rules, 2016 and BMW Management Rules, 2016. Crematoriums/graveyards may opt for disposal of such PPEs is given below;
 - Should be collected in separate bin with yellow-bag and handed over to authorized waste picker engaged by of ULBs for disposal through CBWTFs.
Or
 - Dispose as domestic hazardous waste (biomedical waste) and may be deposited at designated deposition centers identified by ULBs for pick-up by CBWTFs.
Or
 - May ask healthcare staff to take-back the PPEs after collecting it in red and yellow bags/bins provided in the hospital ambulance itself.
Or
 - May ask the healthcare workers to doff the PPEs at the hospital or healthcare unit from where they collected the corpse.

Used masks from visitors to crematorium/ graveyards including crematorium staff should be collected in separate bins and stored for 72 hours prior to disposal as dry general solid waste through local bodies.

**Government of Tamilnadu
Bio Medical Waste Management
Collection Receipt**

Serial No. **45340** Date: **7/4/2021**

Name of the CTF : **Tamilnadu Waste Management Ltd.,**

Address of the CTF : **323, P. H. Road, Chennai - 29.**

Name of the Hospital : **Gummidipondi G.H.**

District : **Thiruvallur [Election waste]**

Date : **7/4/2021**

Vehicle No. :

Time In : **1.58pm** Time Out :

Description	No. of Bags	Weight in kgs / gms
Red 15 Lts.	—	—
Red 25/50 Lts.	—	—
Blue 15/25/50 Lts.	—	—
Yellow 15/25/50 Lts.	114	88.6 kgs
Black 15 Lts.	—	—
Puncture Proof Containers	—	—

Copy to be Retained with the CTF

Sign of CTF Rep

Sign of Person Incharge

**Government of Tamilnadu
Bio Medical Waste Management
Collection Receipt**

Serial No. **44757** Date: **7/11/21**

Name of the CTF: **Tamilnadu Waste Management Ltd.,**

Address of the CTF: **323, P. H. Road, Chennai - 29.**

Name of the Hospital: **GH, Uthukottai**

District: **Thiruvallur. [Election Waste]**

Date: **7/11/21**

Vehicle No.: **TN 18. AJ. 1229.**

Time In: **5pm** Time Out: **5.10pm**

Description	No. of Bags	Weight in kgs / gms
Red 15 Lts.	—	—
Red 25/50 Lts.	—	—
Blue 15/25/50 Lts.	—	—
Yellow 15/25/50 Lts.	157	345kg + 400gms
Black 15 Lts.		
<u>Puncture Proof Containers</u>	Total	345.400kgms

Copy to be Retained with the CTF

DR. Sivakanesan
9865102719

Sign of CTF Rep

for **Sivakanesan**
Sign of Person Incharge

**Government of Tamilnadu
Bio Medical Waste Management
Collection Receipt**

Serial No. **44755** Date: **7/4/21**

Name of the CTF: **Tamilnadu Waste Management Ltd.,**

Address of the CTF: **323, P. H. Road, Chennai - 29.**

Name of the Hospital: **GH - Pallipet.**

District: **Thiruvallur - Election West**

Date: **7/4/21**

Vehicle No.: **TN 18A31229**

Time In: _____ Time Out: _____

Description	No. of Bags	Weight in kgs / gms
Red 15 Lts.		
Red 25/50 Lts.		
Blue 15/25/50 Lts.		
Yellow 15/25/50 Lts.	45	90kg
Black 15 Lts.		
Puncture Proof Containers		

Copy to be Retained with the CTF

Sign of CTF Rep

Sign of Person Incharge

**Government of Tamilnadu
Bio Medical Waste Management
Collection Receipt**

Serial No. **46318** Date : **21/05/21**

Name of the CTF : **Tamilnadu Waste Management Ltd.,**

Address of the CTF : **323, P. H. Road, Chennai - 29.**

Name of the Hospital : **Stanley Hospital**

District : **Chennai**

Date :

Vehicle No. : **Covid**

Time In : Time Out :

Description	No. of Bags	Weight in kgs / gms
Red 15 Lts.		
Red 25/50 Lts.		
Blue 15/25/50 Lts.		
Yellow 15/25/50 Lts.	85	225-500
Black 15 Lts.		
Puncture Proof Containers		

Copy to be Retained with the CTF

[Signature]
Sign of CTF Rep

[Signature]
Sign of Person Incharge

**Government of Tamilnadu
Bio Medical Waste Management
Collection Receipt**

Serial No. **46317** Date : **21/5/21**

Name of the CTF : **Tamilnadu Waste Management Ltd.,**

Address of the CTF : **323, P. H. Road, Chennai - 29.**

Name of the Hospital :

District : **21/5/21 தியேட்டர்**

Date :

Vehicle No. : **TN1RA2229 (கேள்விகள்) 19**

Time In :

Time Out : **Railway**

Description	No. of Bags	Weight in kgs / gms
Red 15 Lts.		
Red 25/50 Lts.		
Blue 15/25/50 Lts.		
Yellow 15/25/50 Lts.	220	340 kg
Black 15 Lts.		
Puncture Proof Containers		

Copy to be Retained with the CTF

A. Bha. Rathi
Sign of CTF Rep

Sign of Person Incharge

**Government of Tamilnadu
Bio Medical Waste Management
Collection Receipt**

Serial No. **46328** Date : **22/5/21**

Name of the CTF : **Tamilnadu Waste Management Ltd.,**

Address of the CTF : **323, P. H. Road, Chennai - 29.**

Name of the Hospital : **METHA HOSPITAL**

District :

Date : **22/5/21**

Vehicle No. :

Time In :

Time Out :

Description	No. of Bags	Weight in kgs /gms
Red 15 Lts.		
Red 25/50 Lts.		
Blue 15/25/50 Lts.	17	19.300kg
Yellow 15/25/50 Lts.	3	2900
Black 15 Lts.	28	40.290kg
Puncture Proof Containers	1	9.400kg

Copy to be Retained with the CTF

M. Prakash.

Sign of CTF Rep

7188

Sign of Person Inchar

**Government of Tamilnadu
Bio Medical Waste Management
Collection Receipt**

Serial No. **46147** Date : **20/06/21**

Name of the CTF : **Tamilnadu Waste Management Ltd.,**

Address of the CTF : **323, P. H. Road, Chennai - 29.**

Name of the Hospital : **new railway hospital**

District : **Chennai (Covid)**

Date : **20/06/21**

Vehicle No. : **TN 18 A) 1229**

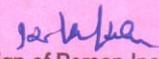
Time In :

Time Out :

Description	No. of Bags	Weight in kgs / gms
Red 15 Lts.		
Red 25/50 Lts.		
Blue 15/25/50 Lts.		
Yellow 15/25/50 Lts.	84	210 Kg
Black 15 Lts.		
Puncture Proof Containers		

Copy to be Retained with the CTF


Sign of CTF Rep


Sign of Person Incharge

**Government of Tamilnadu
Bio Medical Waste Management
Collection Receipt**

Serial No. **46059** Date: **21/6/21**

Name of the CTF : **Tamilnadu Waste Management Ltd.,**

Address of the CTF : **323, P. H. Road, Chennai - 29.**

Name of the Hospital : **R.S.R.M**

District :

Date : **21/6/21**

COVID-19

Vehicle No. : **TN18AS1229**

Time In :

Time Out :

Description	No. of Bags	Weight in kgs / gms
Red 15 Lts.		
Red 25/50 Lts.		
Blue 15/25/50 Lts.		
Yellow 15/25/50 Lts.	4 Bags	15 kg
Black 15 Lts.		
Puncture Proof Containers		

Copy to be Retained with the CTF

Sign of CTF Rep

Sign of Person Incharge

**Government of Tamilnadu
Bio Medical Waste Management
Collection Receipt**

Serial No. **46102** Date: **22/6/21**

Name of the CTF : **Tamilnadu Waste Management Ltd.,**

Address of the CTF : **323, P. H. Road, Chennai - 29.**

Name of the Hospital : **Stanley Hospital**

District : **Chennai**

Date : **Covid**

Vehicle No. :

Time In : Time Out :

Description	No. of Bags	Weight in kgs / gms
Red 15 Lts.		
Red 25/50 Lts.		
Blue 15/25/50 Lts.		
Yellow 15/25/50 Lts.	52	166.600
Black 15 Lts.		
Puncture Proof Containers		

Copy to be Retained with the CTF

52

166.600

Sign of CTF Rep

Sign of Person Incharge

Annexure - D (Colly)

44

Ref.: TNWML/BMW/PCB/21-22/02
Dated: 12th May 2021



TAMILNADU WASTE MANAGEMENT LTD.
Level - 4, 'Diamond Dune',
No. 323, Poonamallee High Road, Chennai - 600 029.
Tel : 4344 3650 E-mail : financetnwml@ramky.com

To,
The District Environmental Engineer,
Tamil Nadu Pollution Control Board,
CP-5B, SIPCOT Industrial Growth Board
Oragadam, Sriperumbudur Taluk,
Kancheepuram Dist.602 102.

Dear Sir,

Sub: TNWML – BMW – Fortnight Reports– Submitting - Reg.

Ref.: 1) Proceeding No. TNPCB/BMWM/WATER/0591/2016 Dated 27.08.2016.
2) Proceeding No. TNPCB/BMWM/AIR/0591/2016 Dated 27.08.2016.

With reference to the above, we are submitting herewith the fortnight report for the period from 01.04.2021 to 15.04.2021.

This is for your kind information.

Thanking you

Yours faithfully,
For TAMILNADU WASTE MANAGEMENT LTD,

Authorised Signatory

Encl: Annexure – I



Managing Hazardous Waste

Corporate Office : Ramky Grandiose, 12th & 13th Floor, Ramky Tower's Complex, Gachibowli,
Hyderabad - 500 032. Telangana. Tel : 040 2301 5000, E-mail : ramky@hd2.vsnl.net.in

1-Apr-21	4164.32	309.31	90.41	4564.04
2-Apr-21	4275.98	321.58	94.62	4692.18
3-Apr-21	4673.20	338.96	97.76	5109.92
4-Apr-21	4897.66	329.52	96.45	5323.63
5-Apr-21	4972.93	313.15	92.81	5378.89
6-Apr-21	2763.52	208.62	69.54	3041.68
7-Apr-21	4720.60	359.81	117.93	5198.34
8-Apr-21	4918.45	367.48	123.62	5409.55
9-Apr-21	4359.73	328.79	98.91	4787.43
10-Apr-21	5241.37	331.27	96.48	5669.12
11-Apr-21	3969.70	289.68	90.72	4350.10
12-Apr-21	4461.06	304.49	92.27	4857.82
13-Apr-21	4997.55	292.73	91.56	5381.84
14-Apr-21	4377.05	287.29	89.42	4753.76
15-Apr-21	4956.68	312.07	93.68	5362.43
Total	67749.80	4694.75	1436.18	73880.73

List of Hospitals :-	
Govt.	56
Semi Govt.	8
Private	610
Total	674



Annexure - I				
Tamilnadu Waste Management Ltd.,				
Bio Medical Waste Quantity Details from 16.05.2021 to 30.05.2021				
Date	Incinerable	Sterilizable	Sharps	Total Weight
16-Apr-21	5178.48	326.81	97.24	5602.53
17-Apr-21	5188.20	321.82	95.44	5605.46
18-Apr-21	4501.02	304.19	91.62	4896.83
19-Apr-21	4374.61	312.68	92.54	4779.83
20-Apr-21	4530.23	327.25	94.69	4952.17
21-Apr-21	4831.34	316.85	93.27	5241.46
22-Apr-21	4746.61	334.91	96.52	5178.04
23-Apr-21	5102.30	359.62	104.84	5566.76
24-Apr-21	4465.12	318.94	95.61	4879.67
25-Apr-21	6613.66	365.92	109.33	7088.91
26-Apr-21	533.68	321.09	96.99	951.76
27-Apr-21	7382.34	351.19	108.26	7841.79
28-Apr-21	7457.86	339.99	106.28	7904.13
29-Apr-21	4737.30	325.62	98.84	5161.76
30-Apr-21	6798.82	303.17	91.28	7193.27
Total	76441.57	4930.05	1472.75	82844.37

List of Hospitals :-	
Govt.	56
Semi Govt.	8
Private	610
Total	674

[Handwritten signature and circular stamp]



TAMILNADU WASTE MANAGEMENT LTD.
Level - 4, 'Diamond Dune',
No. 323, Poonamallee High Road, Chennai - 600 029
Tel : 4344 3650 E-mail : financetnwml@ramky.com

Ref.: TNWML/BMW/PCB/21-22/01
Dated: 14th Aug 2021

To,
The District Environmental Engineer,
Tamil Nadu Pollution Control Board,
CP-5B, SIPCOT Industrial Growth Board
Oragadam, Sriperumbudur Taluk,
Kancheepuram Dist.602 102.

Dear Sir,

Sub: TNWML – BMW – Fortnight Reports– Submitting - Reg.

Ref.: 1) Proceeding No. TNPCB/BMWM/WATER/0591/2016 Dated 27.08.2016.
2) Proceeding No. TNPCB/BMWM/AIR/0591/2016 Dated 27.08.2016.

With reference to the above, we are submitting herewith the fortnight report for the period from 01.05.2021 to 15.05.2021.

This is for your kind information.

Thanking you

Yours faithfully,

For TAMILNADU WASTE MANAGEMENT LTD,

Authorised Signatory



Encl: Annexure – I

Managing Hazardous Waste

Corporate Office : Ramky Grandiose, 12th & 13th Floor, Ramky Tower's Complex, Gachibowli,
Hyderabad - 500 032. Telangana, Tel : 040 2301 5000, E-mail : ramky@hd2.vsnl.net.in

Annexure - I				
Tamilnadu Waste Management Ltd.,				
Bio Medical Waste Quantity Details from 01.05.2021 to 15.05.2021				
	<i>Incinerable</i>	<i>Sterilizable</i>	<i>Sharps</i>	<i>Total Weight</i>
1-May-21	7016.22	307.29	98.73	7422.24
2-May-21	6104.59	284.18	106.71	6495.48
3-May-21	5525.73	291.24	109.68	5926.65
4-May-21	5404.10	276.53	107.92	5788.55
5-May-21	5452.39	287.92	103.49	5843.80
6-May-21	5525.63	309.17	102.69	5937.49
7-May-21	5405.87	322.53	98.32	5826.72
8-May-21	4783.81	314.24	96.77	5194.82
9-May-21	4301.27	278.48	90.32	4670.07
10-May-21	5213.73	298.76	97.89	5610.38
11-May-21	6069.97	308.32	99.66	6477.95
12-May-21	4927.98	284.58	97.24	5309.80
13-May-21	4916.39	297.27	104.68	5318.34
14-May-21	5129.09	261.36	98.29	5488.74
15-May-21	6130.11	319.87	105.71	6555.69
Total	81906.88	4441.74	1518.10	87866.72

List of Hospitals :-	
Govt.	56
Semi Govt.	8
Private	613
Total	677





TAMILNADU WASTE MANAGEMENT LTD.
Level - 4, 'Diamond Dune',
No. 323, Poonamallee High Road, Chennai - 600 029
Tel : 4344 3650 E-mail : financetnwmml@ramky.com

Ref.: TNWML/BMW/PCB/21-22/02
Dated: 14th Aug 2021

To,
The District Environmental Engineer,
Tamil Nadu Pollution Control Board,
CP-5B, SIPCOT Industrial Growth Board
Oragadam, Sriperumbudur Taluk,
Kancheepuram Dist.602 102.

Dear Sir,

Sub: TNWML – BMW – Fortnight Reports– Submitting - Reg.

Ref.: 1) Proceeding No. TNPCB/BMWM/WATER/0591/2016 Dated 27.08.2016.
2) Proceeding No. TNPCB/BMWM/AIR/0591/2016 Dated 27.08.2016.

With reference to the above, we are submitting herewith the fortnight report for the period from 16.05.2021 to 31.05.2021.

This is for your kind information.

Thanking you

Yours faithfully,

For TAMILNADU WASTE MANAGEMENT LTD,

Authorised Signatory



Encl: Annexure – I

Managing Hazardous Waste

Corporate Office : Ramky Grandiose, 12th & 13th Floor, Ramky Tower's Complex, Gachibowli,
Hyderabad - 500 032. Telangana, Tel : 040 2301 5000, E-mail : ramky@hd2.vsnl.net.in

Annexure - I				
Tamilnadu Waste Management Ltd.,				
Bio Medical Waste Quantity Details from 16.05.2021 to 31.05.2021				
	<i>Incinerable</i>	<i>Sterilizable</i>	<i>Sharps</i>	<i>Total Weight</i>
16-May-21	5699.17	308.92	104.37	6112.46
17-May-21	5797.62	337.21	107.82	6242.65
18-May-21	9288.69	322.57	104.46	9715.72
19-May-21	8481.85	272.39	109.62	8863.86
20-May-21	7882.81	341.72	107.59	8332.12
21-May-21	8272.52	371.36	114.24	8758.12
22-May-21	7654.29	313.84	111.92	8080.05
23-May-21	8109.63	306.91	104.36	8520.90
24-May-21	8619.42	291.62	101.73	9012.77
25-May-21	8161.08	322.91	97.24	8581.23
26-May-21	8398.68	303.48	99.62	8801.78
27-May-21	8366.71	287.29	94.35	8748.35
28-May-21	8459.47	314.62	108.36	8882.45
29-May-21	8525.89	321.47	103.81	8951.17
30-May-21	8374.63	305.25	107.63	8787.51
31-May-21	7537.12	319.49	102.92	7959.53
Total	127629.58	5041.05	1680.04	134350.67

List of Hospitals :-	
Govt.	56
Semi Govt.	8
Private	613
Total	677



Ref.: TNWML/BMW/PCB/21-22/03
Dated: 14th Aug 2021



TAMILNADU WASTE MANAGEMENT LTD.
Level - 4, 'Diamond Dune',
No. 323, Poonamallee High Road, Chennai - 600 021
Tel : 4344 3650 E-mail : financetnwml@ramky.com

To,
The District Environmental Engineer,
Tamil Nadu Pollution Control Board,
CP-5B, SIPCOT Industrial Growth Board
Oragadam, Sriperumbudur Taluk,
Kancheepuram Dist.602 102.

Dear Sir,

Sub: TNWML – BMW – Fortnight Reports– Submitting - Reg.

Ref.: 1) Proceeding No. TNPCB/BMWM/WATER/0591/2016 Dated 27.08.2016.
2) Proceeding No. TNPCB/BMWM/AIR/0591/2016 Dated 27.08.2016.

With reference to the above, we are submitting herewith the fortnight report for the period from 01.06.2021 to 15.06.2021.

This is for your kind information.

Thanking you

Yours faithfully,
For TAMILNADU WASTE MANAGEMENT LTD,

Authorised Signatory



Encl: Annexure – I

Managing Hazardous Waste

Corporate Office : Ramky Grandiose, 12th & 13th Floor, Ramky Tower's Complex, Gachibowli,
Hyderabad - 500 032. Telangana, Tel : 040 2301 5000, E-mail : ramky@hd2.vsnl.net.in

Annexure - I				
Tamilnadu Waste Management Ltd.,				
Bio Medical Waste Quantity Details from 01.06.2021 to 15.06.2021				
	<i>Incinerable</i>	<i>Sterilizable</i>	<i>Sharps</i>	<i>Total Weight</i>
1-Jun-21	8172.08	269.91	98.42	8540.41
2-Jun-21	7071.70	314.68	106.71	7493.09
3-Jun-21	7940.53	317.12	102.69	8360.34
4-Jun-21	8307.97	306.51	111.34	8725.82
5-Jun-21	7986.12	325.26	105.71	8417.09
6-Jun-21	7310.60	338.72	109.86	7759.18
7-Jun-21	7227.12	329.69	107.32	7664.13
8-Jun-21	6974.11	331.72	94.34	7400.17
9-Jun-21	6118.55	308.17	103.72	6530.44
10-Jun-21	5850.65	274.58	90.52	6215.75
11-Jun-21	5396.67	311.64	101.72	5810.03
12-Jun-21	6502.61	289.33	104.86	6896.80
13-Jun-21	4979.08	267.82	93.71	5340.61
14-Jun-21	5353.74	304.61	97.27	5755.62
15-Jun-21	7261.98	359.82	115.69	7737.49
Total	102453.51	4649.58	1543.88	108646.97

List of Hospitals :-	
Govt.	56
Semi Govt.	8
Private	618
Total	682





TAMILNADU WASTE MANAGEMENT LTD.
Level - 4, 'Diamond Dune',
No. 323, Poonamallee High Road, Chennai - 600 029
Tel : 4344 3650 E-mail : financetnwml@ramky.com

Ref.: TNWML/BMW/PCB/21-22/04
Dated: 14th Aug 2021

To,
The District Environmental Engineer,
Tamil Nadu Pollution Control Board,
CP-5B, SIPCOT Industrial Growth Board
Oragadam, Sriperumbudur Taluk,
Kancheepuram Dist.602 102.

Dear Sir,

Sub: TNWML – BMW – Fortnight Reports– Submitting - Reg.

Ref.: 1) Proceeding No. TNPCB/BMWM/WATER/0591/2016 Dated 27.08.2016.
2) Proceeding No. TNPCB/BMWM/AIR/0591/2016 Dated 27.08.2016.

With reference to the above, we are submitting herewith the fortnight report for the period from 16.06.2021 to 30.06.2021.

This is for your kind information.

Thanking you

Yours faithfully,
For TAMILNADU WASTE MANAGEMENT LTD,

Authorised Signatory



Encl: Annexure – I

Managing Hazardous Waste

Annexure - I				
Tamilnadu Waste Management Ltd.,				
Bio Medical Waste Quantity Details from 16.06.2021 to 30.06.2021				
	<i>Incinerable</i>	<i>Sterilizable</i>	<i>Sharps</i>	<i>Total Weight</i>
16-Jun-21	6558.11	337.43	108.06	7003.60
17-Jun-21	5716.95	337.46	105.73	6160.14
18-Jun-21	4907.17	314.59	102.35	5324.11
19-Jun-21	4500.19	306.21	98.54	4904.94
20-Jun-21	4447.44	334.13	104.62	4886.19
21-Jun-21	5186.62	342.74	108.52	5637.88
22-Jun-21	4001.05	305.36	96.59	4403.00
23-Jun-21	6767.92	331.52	106.75	7206.19
24-Jun-21	3533.62	285.17	91.84	3910.63
25-Jun-21	4559.54	323.82	99.43	4982.79
26-Jun-21	1985.48	337.46	106.78	2429.72
27-Jun-21	3598.91	293.58	93.81	3986.30
28-Jun-21	3826.02	308.31	97.54	4231.87
29-Jun-21	4010.83	319.71	103.58	4434.12
30-Jun-21	4200.72	303.52	106.17	4610.41
Total	67800.57	4781.01	1530.31	74111.89

List of Hospitals :-	
Govt.	56
Semi Govt.	8
Private	618
Total	682

