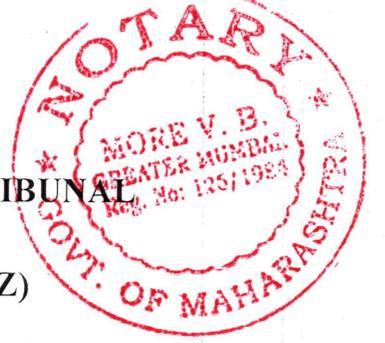


BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH , PUNE
ORIGINAL APPLICATION NO.33/2024 (WZ)



Madhura Rajesh Tawde

---Applicant

Vs

State of Maharashtra & Ors

---Respondents

**Additional Affidavit on behalf of Respondent -Maharashtra
Pollution Control Board.**

I, Pratap Jagtap, Age-adult, Occupation -Service, the Sub-Regional Officer of the Maharashtra Pollution Control Board at Mumbai-I, having my office address at Kalpataru Point, 2nd Floor, Near Sion Circle, Sion (East), Mumbai-400 001, do hereby state on solemn affirmation as under:-

- 1) I am filing this Additional -Affidavit in compliance of Order dated 21/02/2025 passed by this Hon'ble NGT, on behalf of the Respondent -Maharashtra Pollution Control Board (MPCB) before this Hon'ble Tribunal.
- 2) I say and submit that in compliance of the Order dated 28/9/2022 and 15/3/2023 passed by this Hon'ble NGT, the Maharashtra Coastal Zone Management Authority(MCZMA) vide Office Order dated 18/4/2023 constituted a Technical

Committee, to estimate the quantity of C & D Waste in and around the salt pan area of Wadala.



3) I say and submit that as decided in the 2nd Meeting of the Task Force Committee held on 10/12/2024, the Technical Committee visited to the site in question on 1/4/2025 and observed as under :

- (i) There are total nine numbers of pits, which were excavated by JCB of MCGM at site on 1/4/2025 upto the original strata, to determine the level of filled C & D Waste along the entire length of the bandh / road within the salt pan premises.
- (ii) The Committee observed that Pit Nos.1 to7 shows, no signs of C & D Waste.
- (iii) The stretch between Pit Nos.8 & 9 observed with mixed C & D waste, which is evident from the photographs etc.

4) I say and submit that the based on the studies and analysis of the Technical Committee, it was concluded as under :-

- (a) Total volume of waste estimated is 12,160 m³ out of which 5,185 m³ comprised of mixed C & D Waste along with the heap of C & D Wase dumped on the left site of the entrance. The remaining quantum of 6,975 m³ is freshly filled up soil.



(b) Considering the bulk density of C & D waste, the waste is 1900 kg./ m³. The total quantum of mixed C & D waste used on the site in the stretch from Pit Nos. 8 & 9 is estimated to be 9,852 MT.

(c) From the Google Image before 2016, it is observed that the mixed C & D Waste is dumped before 2016.

(d) The quantum of the soil used for the bund in the stretch between Pit Nos.1 to 7 is estimated to be 10,463 MT mostly of soil having bulk density of 1500 kg/ m³. Apart from this, a huge heap of C & D Waste is dumped on the left side entrance of the salt pan.

A copy of the Report of the Technical Committee on Waste Estimation of Salt Pan site at Wadala , April 2025 is annexed as an Exhibit-A.

Solemnly affirmed on this 7th day of April, 2025 at Mumbai

For and on behalf of
Maharashtra Pollution
Control Board,

(Signature)

(Pratap Jagtap)
Sub-Regional Officer, Mumbai-I



BEFORE ME

(Signature)
07-04-2024

VASANT B. MORE

Notary Gr. Mumbai
7, Vijaya Sadan, Flat No. 304,
Above Axis Bank,
Station West, Mumbai-400022

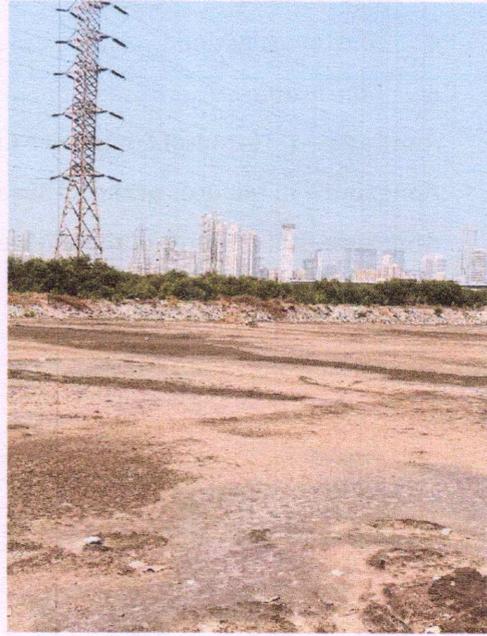
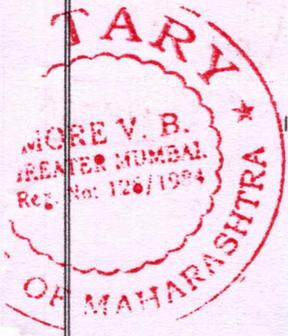


REGISTER Sr. No. 258/2025

REPORT OF TECHNICAL COMMITTEE

ON WASTE ESTIMATION OF SALT PAN SITE AT WADALA

IN COMPLIANCE OF THE ORDER OF HON'BLE NGT DT. 15/03/2023 IN THE MATTER OF NGT OA NO 343/2021



APRIL 2025

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Wadala Salt Pan Site: Waste dumping estimation

1. Introduction:

The Government of Maharashtra, Department of Environment and Climate Change constituted a technical committee with respect to the compliance of Hon'ble NGT orders dt. 15.03.2023 in the OA no. 343/2021. The committee was constituted (copy attached as **Annexure – I**) to estimate the quantity of C&D waste dumped in and around the salt pan area as mentioned in the above referred Hon'ble NGT order.

2. Approach and Methodology:

Accordingly, the committee had its first meeting at the MPCB office, Sion in the chamber of Regional Officer, Mumbai, Kalpataru Point, Sion Circle East on 26.04.2023. The minutes of the said meeting are attached as **Annexure – II**. In the said meeting it was decided to conduct the core test examination for the estimation of the depth of the C & D waste dumped on the periphery of the salt pan site. The MCGM was asked to provide the necessary support for the said investigation. It was also delved to refer the time series images of the Google Earth and satellite images to observe any notable changes in and around the salt pan works.

In compliance with the Hon'ble NGT Order dated 06.03.2025 in OA No. 33/2024, MISC Application 01/2024, 02/2024, and Interlocutory Application No. 60/2025 (WZ), the technical committee had its second meeting at the MPCB Office on 22.01.2025 at 12:30 pm. The meeting commenced with a discussion on the letter from the Deputy Salt Commissioner dated 21.11.2024. The technical committee estimated that 23,084 MT of C&D waste was present at the site, while the salt pan operator reported only 6,000 MT of waste had been dumped and 1,775 MT had been lifted for scientific disposal. It was decided during the meeting to visit the site and verify the current status. The minutes of the said meeting are attached as **Annexure – III**.

In this regard, a site visit was scheduled on 01.04.2025 to re-verify the quantity of C&D waste and submit a revised report based on the current site conditions. The objective of the visit was to assess the actual amount of C&D waste present at the site, taking into account any changes since the previous assessment. The following technical committee members are present during the site visit: -

1. Anil Sharma, Metro Waste Handling Pvt. Ltd,
2. Rahul Koli, Sub Engineer, SWM, F/N ward, MCGM, Matunga, Mumbai.
3. Sanddep Arekar, Maintenance Surveyor, City Survey and Land Record Officer, Collector Office, Mumbai.
4. D. A. Patil, Consultant.
5. Shridhar Pandya, Consultant.
6. Pratap Jagtap, Sub Regional Officer, MPC Board, Mumbai-I.

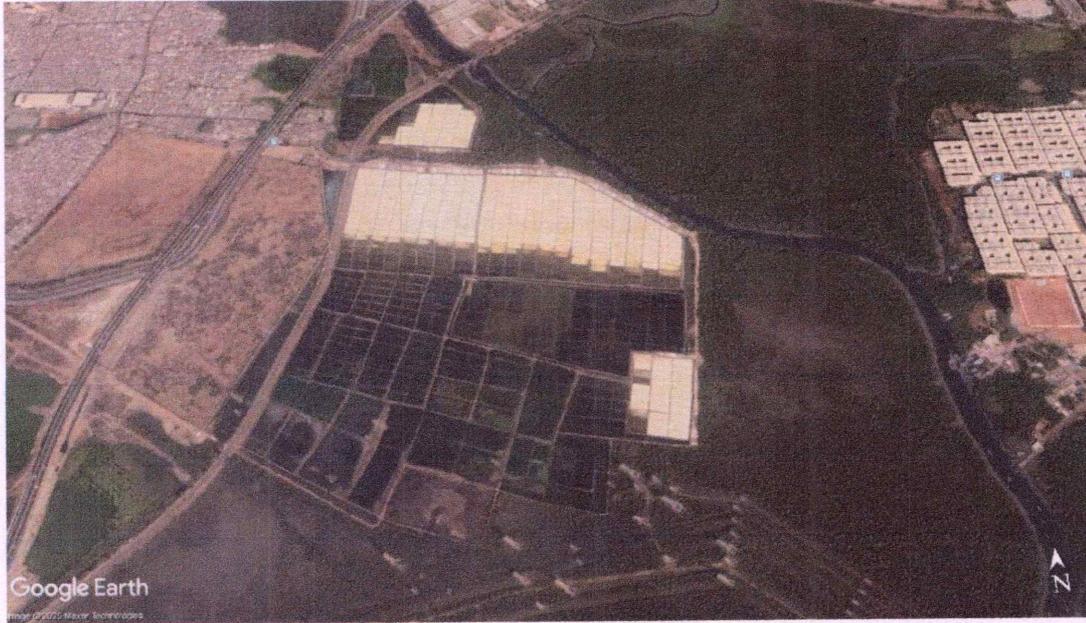
As per request of the technical committee, P. K. Sing, Superintendent of Salt, RO, Mumbai & S.K. Thakur, Dy. Superintendent of Salt, Wadala, Mumbai are present during the site visit. Shri Muralial Garodia and Shri Manoj Garodia, operator of salt pan is present during the visit.

3. Site Investigations:

A. Time series Google Images and Satellite data analysis

To understand the site geography, the desk assessment of the site was done based on the time series images from the Google Earth. The assessment and details of the google images with visible changes are given below.

Feb 2015



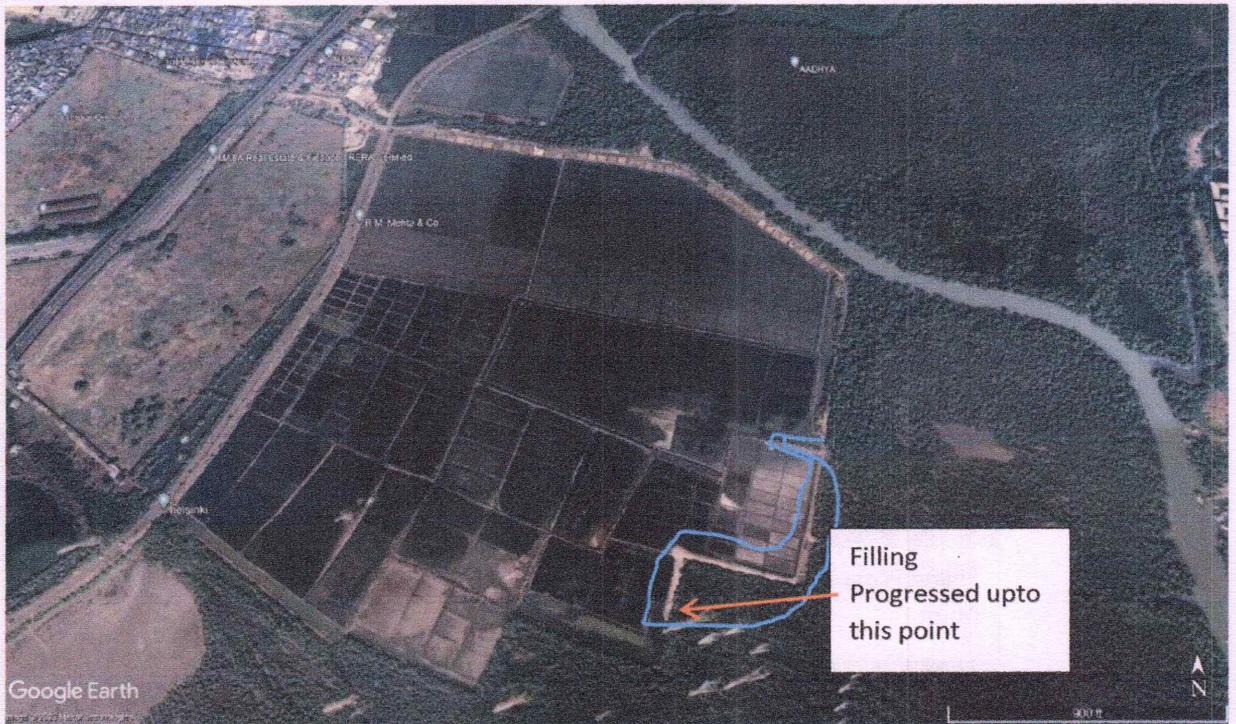
Nov 2016



March 2018



Dec - 2021



March 2022



April 2022



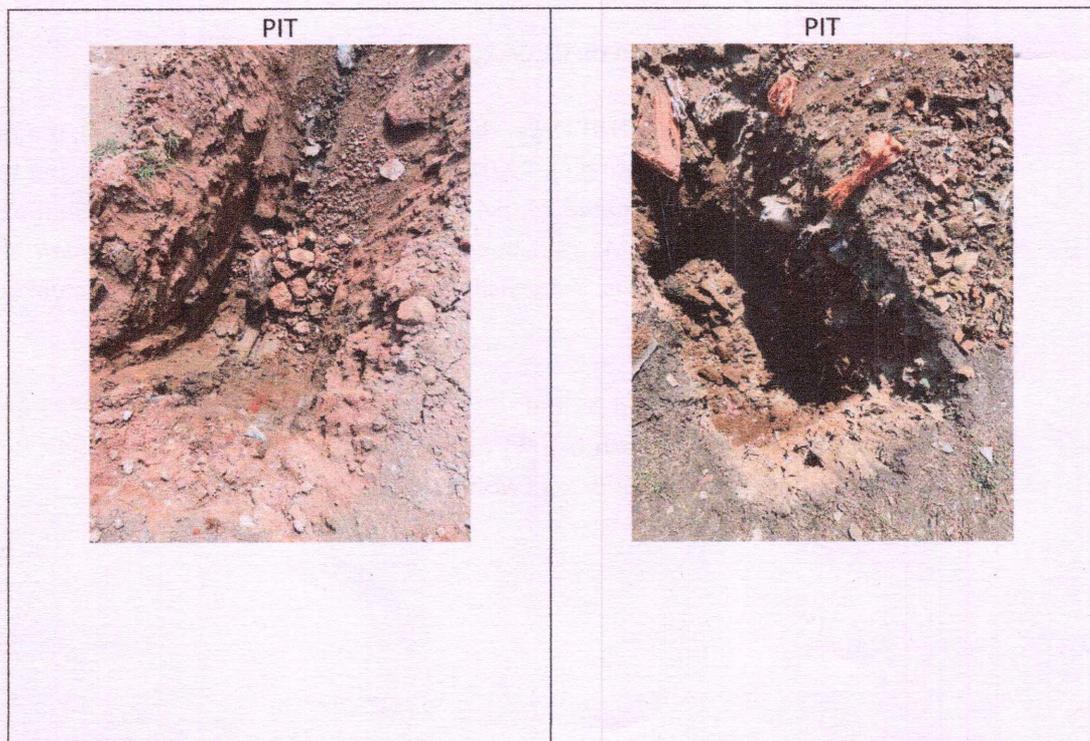
4. Site Investigation

(i) 1st site investigation on 03.05.2023

As decided in the first meeting of the Technical Committee held on 26.04.2023, a site visit was done by all the members on 03.05.2023. The purpose of the site visit was to understand the site conditions and assess the C&D waste spread across the site. The main objective of the visit is to assess the extent of the debris filled on the periphery of the site (bunds) and ascertain the methodology of its estimation.

During the site visit, few pits were made to observe the actual depth of the filled up debris by using JCB from MCGM. A total of 6 such pits were taken (Photographs attached) to find out the levels of the filled up C&D waste across the entire length of the bund/Road within the salt pan premises. This is done to estimate the exact depth of the filled up C&D waste, which will help in estimation of the quantity of the C&D waste dumped on site. It was also observed that a fresh debris was also dumped, photograph of the same is attached here.

It was also decided by the members that the survey with respect to ground level be carried out so that the exact volume of the waste be estimated based on the observations of the pit and the depth of filled up C&D waste. The said survey was done in 2 days i.e.; from 4-5th May 2023.





The factual details were recorded and observed by carrying out pits at different locations at certain intervals of the entire stretch where the filling was observed. This was done to identify and distinguish between the original strata and the filled up material and their depths were measured. This was followed by the detailed survey of the stretch to measure the levels with respect to the datum so that the exact nature of the filling can be estimated. As per the permission the survey team carried out the detailed survey about a total of 75 % of the extent of the filling. The occupier didn't allow the team to carry out the remaining part of the survey. Therefore we have estimated the quantum based on the details available with us.

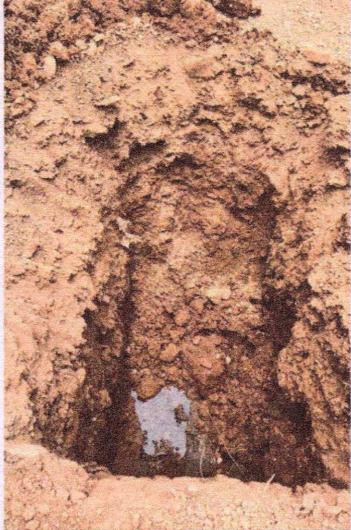
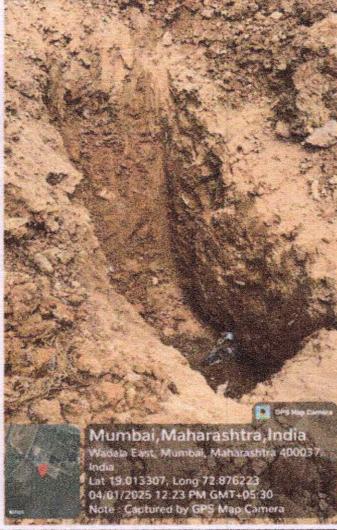
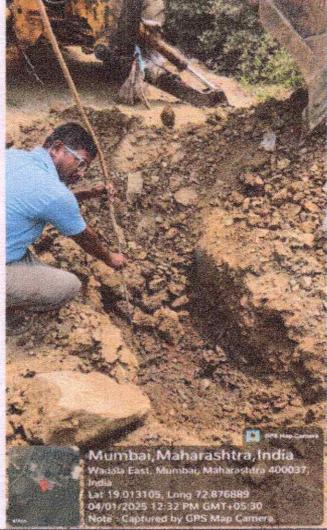
Based on the above studies and analysis a total volume of the waste estimated is 10,493 m³. Considering the bulk density of the C&D waste as 2200 kg/m³, the total quantum is estimated comes out to 23,084 MT.

(i) 2nd site investigation on 01.04.2025

In compliance with the Hon'ble NGT Order dated 06.03.2025 (OA No. 33/2024), the technical committee held its second meeting on 22.01.2025 at the MPCB Office. As per the technical report, the committee had estimated 23,084 MT of C&D waste at the site, while the salt pan operator reported that 6,000 MT had been dumped and 1,775 MT had been lifted for scientific disposal. To address this, a site visit was scheduled to re-verify the actual quantum of C&D waste present on-site.

A total of 9 pits were excavated by the JCB of MCGM on site dated 01.04.2025 up to the original strata (photographs given below) to determine the levels of the filled C&D waste along the entire length of the bund/road within the salt pan premises.

TAJ
JE V. I
SR MUM.
: 125/193
LH

<p>Pit 01</p>  <p>Mumbai, Maharashtra, India Wadala East, Mumbai, Maharashtra 400037, India Lat: 19.013307, Long 72.876223 04/01/2025 12:23 PM GMT+05:30 Note - Captured by GPS Map Camera</p>	<p>Pit 02</p>  <p>Mumbai, Maharashtra, India Wadala East, Mumbai, Maharashtra 400037, India Lat: 19.013105, Long 72.876889 04/01/2025 12:32 PM GMT+05:30 Note - Captured by GPS Map Camera</p>	<p>Pit 03</p>  <p>Mumbai, Maharashtra, India Wadala East, Mumbai, Maharashtra 400037, India Lat: 19.013105, Long 72.876889 04/01/2025 12:32 PM GMT+05:30 Note - Captured by GPS Map Camera</p>
<p>Pit 04</p>  <p>Mumbai, Maharashtra, India Wadala East, Mumbai, Maharashtra 400037, India Lat: 19.013119, Long 72.877870 04/01/2025 12:40 PM GMT+05:30 Note - Captured by GPS Map Camera</p>	<p>Pit 05</p>  <p>Mumbai, Maharashtra, India Wadala East, Mumbai, Maharashtra 400037, India Lat: 19.013275, Long 72.878403 04/01/2025 12:49 PM GMT+05:30 Note - Captured by GPS Map Camera</p>	<p>Pit 06</p>  <p>Mumbai, Maharashtra, India Wadala East, Mumbai, Maharashtra 400037, India Lat: 19.012951, Long 72.879421 04/01/2025 12:55 PM GMT+05:30 Note - Captured by GPS Map Camera</p>



Also, the Google coordinates of each pit, along with the corresponding depth and width of the bund/road were taken and are provided in the following table.

Pit No.	Latitude and Longitude	Depth (m)	Width of bund/Road (m)
1	19° 0'49.57"N and 72°52'32.26"E	1.1	5.0
2	19° 0'48.01"N and 72°52'34.30"E	1.4	5.0
3	19° 0'47.40"N and 72°52'36.80"E	0.75	5.0
4	19° 0'47.46"N and 72°52'40.49"E	1.1	5.0
5	19° 0'47.82"N and 72°52'42.54"E	1.1	5.0
6	19° 0'46.77"N and 72°52'45.86"E	0.9	5.0
7	19° 0'49.96"N and 72°52'48.52"E	1.0	5.0
8	19° 0'52.76"N and 72°52'52.13"E	1.0	6.0
9	19° 1'9.62"N and 72°52'37.14"E	0.7	5.5
Total (Avg.)		1.005	5.12

The Committee observed that the pit nos 1 to 7 shows (Stretch Distance 0.9 km) no signs of the C&D waste as it is filled up with the fresh soil. The stretch between the pit no. 8 and 9 (Stretch distance 0.9 km) observed with the mix C&D waste as is evident from the photographs.

The locations of the pits were marked on the latest Google image (2025) shown below to determine the extent of the dumping area within the premises. The Google image, shown below, shows a clear view of the site, helping to assess the spread and boundaries of the filling along with the locations of the pits.



From the Google image, it was evident that an area of 12,100 m² was filled with mix C&D waste up to an average depth of 1.005 m along the entire bund/road within the premises. It was estimated that the volume of mix C&D on site is in the stretch between pit 8 and 9 is 5,185 m³ out of the total of 12,160 m³. The composition of the C&D waste was primarily of concrete, soil, broken tiles, paver blocks and brick indicating a mix of C&D waste. The remaining stretch between Pit 1 to 7 having the volume of 6,975 m³ is observed with the fresh soil devoid of C&D waste with occasional presence of broken bricks.

Based on the relevant Indian Standards (IS) for construction materials, the density values for concrete, soil, and brick have been considered to estimate quantum of the C&D waste on-site. Below is a table summarizing the density of each material as per the respective IS standards, along with the average density used for the overall waste estimation:

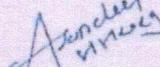
Material	IS Standard	Density (kg/m ³)
Concrete	IS 456:2000	2,400
Soil	IS 2720-1:1983	1,500
Brick	IS 1077:1992	1,800
Average		1,900

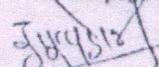


Heap of C&D waste dumped on the left side of the entrance

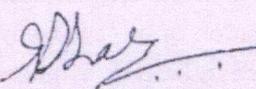
5. Conclusion:

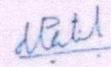
1. Based on the above studies and analysis, the total volume of the waste estimated is 12,160 m³. Out of this 5,185 m³ comprise of mix C&D waste along with the heap of C&D waste dumped on the left side of the entrance. The remaining quantum of 6,975 m³ is a freshly filled up soil.
2. Considering the bulk density of the C&D waste as 1900 kg/m³, the total quantum of mix C&D waste used on the site in the stretch from Pit 8 and 9 is estimated to be 9,852 MT.
3. From the Google Image before 2016, It's observed that said mix C & D waste dumped before 2016.
4. The quantum of the soil used for the bund in the stretch between Pit 1 to 7 is estimated to be 10,463 MT mostly of soil having bulk density of 1500 kg/m³
5. Apart from this a huge heap of C&D waste is dumped on the left side entrance of the Salt pan (refer figure attached on page no. 11).


 (Sandeep Arekar)
 Maintenance Surveyor,
 City Survey and Land
 Record Officer, Collector
 Office, Mumbai.


 (Rahul Koli)
 Sub Engineer,
 SWM, F/N ward,
 MCGM, Matunga,
 Mumbai.


 (Anil Sharma)
 Metro Waste
 Handling Pvt. Ltd


 (Shridhar Pandya)
 Consultant


 (D. A. Patil)
 Consultant


 (Pratap Jagtap)
 Sub Regional Officer, MPC
 Board, Mumbai-I



1. Annexure – I: Technical Committee Constitution



GOVERNMENT OF MAHARASHTRA

Phone No.- 022-22029388
E-mail – dir1.mev-mh@nic.in

No. MCZMA 2022/ CR 3/ TC 4
Department of Environment and Climate Change, 15th
Floor, New Administrative Building, Madam Cama
Road, Hutatma Rajguru Chowk, Mantralaya,
Mumbai-52

Date: 18/04/2023

OFFICE ORDER

Subject: Constitution of Technical Committee for the compliance of Hon'ble NGT order dated 28/9/2022 and 15/3/2023 in the OA No. 343/2021.

Hon'ble NGT in its order dated 15/3/2022 in the OA No. 343/2021 has directed Principal Secretary, Environment &CC to ensure remedial measures are taken within three months by removing encroachments, lifting all C & D Waste for its appropriate processing and revival of all damaged mangrove plantation at the subject site of Wadala Salt Pan area & around and file the report to Hon'ble NGT before 30/6/2023.

In view of the above, a Technical Committee is hereby constituted as below to estimate the quantity of C & D waste dumps in and around the salt pan area as mentioned in the Hon'ble NGT order.

01	Mr. Anil Sharma, Metro Waste Handling Pvt. Ltd.	Member
02	Executive Engineer, MCGM	Member
03	Mr. Shridhar Pandya, Consultant	Member
04	City Survey and Land Record Officer, Collector Office	Member
05	Mr. D. A. Patil, Consultant	Member
06	Regional Officer, MPCB, Mumbai	Member Convenor

RO, MPCB, Mumbai shall make necessary logistic arrangement for site visit / arrangement for meeting etc.


(Pravin C. Darade)
Principal Secretary, Env&CC Dept

Copy for information and necessary action to:

- 1) Member Secretary, MPCB
- 2) Regional Officer (BMW), MPCB Mumbai
- 3) Regional Officer, MPCB, Mumbai

Annexure – II: Minutes of the 1st Meeting of Technical Committee

MINUTES OF FIRST MEETING OF TECHNICAL COMMITTEE

The State Department of Environment & CC vide office order dated 18th April 2023 has constituted the Technical Committee in Order to estimate the quantity of C & D waste dumps in and around the salt pan area the status of compliance of Hon'ble NGT order dated 28/09/2022 and 15/03/2023 in OA No. 343/2021.

First meeting of the committee was held on 26. Following officers were present for the meeting.

- 1) Mr. Anil Sharma, Metro Waste Handling Pvt. Ltd.,
- 2) Mr. Kurhade, Executive Engineer, MCGM
- 3) Mr. Shridhar Pandya, Consultant
- 4) Mr. D. A. Patil, Consultant
- 5) Mr. Sanjay Bhosale, Regional Officer, MPCB, Mumbai

First meeting of Technical Committee is hold on 26.04.2023 at 11.00 AM in the chamber of Regional Officer, Mumbai at Kalpataru Point, 1st Floor, Sion Circle (E), Mumbai point of discussion is samarised below.

Sr. No.	Issue	Status
1	Demarcation of Boundary of Collector land and land of salt pan.	We may call demarcation record / map from concern Authorizes. MCGM communicate to office of Salt Commissioner for postal address of land owner/ operator as well as for demarcation record / map.
2	Core Test Examination for Examination of depth of C & D waste and quantification	Permission form Land owner and Collector office is required so MCZMA shall communicated to the authorities.
4	Tentative date for survey and core collection.	03.05.2023 MCGM will provide necessary machinery & consultant will carry out examination & allied activities.
5	Postal address of Salt Pan operator / owner.	MCGM to communicate the same to office of Salt commissioner for Postal address of Salt Pan operator / owner. MPCB also write letter for postal address of Salt pan operator to office of Salt commissioner.

After due deliberation it was decided that it as decide tentative date of survey and core collection on 03/05/2023.


Regional Officer,
MPCB, Mumbai &
Member Convenor

Executive Engineer (SWM)
MCGM, F/North Ward

Annexure – III: Minutes of the 2nd Meeting of Technical Committee

Minutes Second meeting of Technical Committee for the compliance of Hon'ble NGT order dated 28/09/2022 and 15/03/2023 in the OA No. 343/2021(Madhura Tawade vs GoM).

- Ref :-
1. Constitution of Task Force Committee for monitoring status of compliance of Hon'ble NGT order dated 28/09/2022 and 15/03/2023 in OA No. 343/2021 vide letter dated 18/04/2023.
 2. Constitution of Technical Committee vide letter no. MCZMM 2022/CR3/TC4 dated 18/04/2023 by department of Environment & Climate Change, GOM.
 3. Report of Technical Committee on waste estimation of salt pan site at Wadala, Mumbai of June 2023.
 4. Second meeting of Technical Committee scheduled on 22/01/2025.

Following members are present for the said meeting in the chamber of Regional Officer, MPC Board, Mumbai, Kalpataru Corner, Sion Circle, Sion (E) M-22 on 22/01/2025 at 12.30 PM.

1. Ravindra Andhale, Regional Officer, MPC Board, Mumbai.
2. Anil Sharma, Metro Waste Handling Pvt. Ltd.
3. Banger DD, Executive Engineer, SWM, Zone-II, BMC.
4. Shreedhar Pandya, Consultant,
5. Pratap Jagtap, Sub Regional Officer, MPC Board, Mumbai-I.
6. Mr. D. A. Patil, Consultant through VC.

As per request of committee, Ranjeet Kumar, Dy. Salt Commissioner from Salt Department, GOI, was present for said meeting.

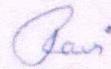
Discussion started with the letter from Deputy Salt Commissioner dated 21/11/2024 regarding assessment of C & D waste dumped at Wadala Site. Member convenor informed that Technical Committee has estimated 23084 MT C & D waste at site, however salt pan operator M/s. Hormoz salt works claimed only 6000 metric ton of C&D waste dumped at the site and lifted 1775 metric ton of C&D waste from the site for scientific disposal. Mr. D. A Patil Consultant, Member informed that to estimate the quantity of C & D waste dumped at Wadala Salt Pan site, Technical Committee visited the site on 03/05/2023, 6 pits were digged with the help of JCB to find out the actual depth of the filled C & D Waste / debris on 4 & 5th May of 2023 and factual details are recorded. Also referred the time series images of the Google Earth

and Satellite images to observe any notable changes in and around the salt pan works. As the owner of salt pan doesn't allow the team to carry out surveys in all areas, committee carried out survey about a total 75 % of the extent of the filling. The committee carried out the estimation with scientific basis based on the pits, its depth and width of the road and arrived at an estimated waste quantity as 23084 Tons. Technical committee members also confirmed that Salt Pan Department / salt operator has not submitted any technical /scientific report about the claimed quantity of 6000 MT and the committee insisted that the waste cannot be possible to such a meagre quantity of 6000 MT from the estimated 23084 MT that too without offering any basis of its computation. The Committee unanimously agreed that such a low quantity is not correct with the site situation and facts as present on the site during the earlier visit of the committee. Committee members pointed out that remaining C & D waste shall be lifted on priority by salt operator.

Shreedhar Pandya, Consultant, Anil Sharma from Metro Waste Handling Pvt Ltd, informed that the Construction & Demolition (C&D) waste processing facility of MCGM has now been commissioned. Moving forward, the salt operator will be required to dispose of C & D waste at the facility provided by MCGM in accordance with the C & D Waste Management Rules 2016.

It was jointly decided that the committee members will visit the site and verify the present status.

Meeting ended with vote of Thanks.



(Ravindar Andhale)

Regional Officer & Member Convenor of
Technical Committee, MPCB, Mumbai.

