

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH AT NEW DELHI**

ORIGINAL APPLICATION NO. 481 / 2024

**In the matter of:**

News item titled "Major fire erupts at Delhi's Ghazipur landfill site smoke engulfs region" appearing in the Hindustan Times dated 21.04.2024

**NDOH:- 18.11.2024**

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Filed by:

Dated : 13<sup>th</sup> .11.2024

Delhi

Delhi Pollution Control Committee

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH AT NEW DELHI**

ORIGINAL APPLICATION NO. 481 / 2024

**In the matter of:**

News item titled "Major fire erupts at Delhi's Ghazipur landfill site smoke engulfs region" appearing in the Hindustan Times dated 21.04.2024

**RESPONSE ON BEHALF OF DELHI POLLUTION CONTROL COMMITTEE (DPCC).**

I, D. K. Singh, Additional Director, Delhi Pollution Control Committee, 3rd Floor, Block -B , Delhi IT Park, Shastri Park, Delhi - 110053, do hereby solemnly affirm and state as under:

1. That, I am working as Additional Director, Delhi Pollution Control Committee and am conversant with the facts of the present case on the basis of record maintained by Delhi Pollution Control Committee in its ordinary course.
2. That, this Hon'ble Tribunal has taken up the matter on 29.04.2024, suo motu on the basis of the news item titled "Major fire erupts at Delhi's Ghazipur landfill site, smoke engulfs region" appearing in the 'Hindustan Times' dated 21.04.2024.
3. That, the present news item is related to the eruption of a massive fire at Ghazipur landfill site in East Delhi. This Hon'ble Tribunal on 24.04.2024 pleased to issue notice to DPCC, MCD and DM (East Delhi).
4. That, inspection of the site was carried out by DPCC officials on 21.04.2024 & 22.04.2024 w.r.t. Fire Incident at Ghazipur Dumpsite in the evening of 21.04.2024.

Copy of the Report of DPCC on Inspection w.r.t fire incident at Ghazipur Dumpsite on 21.04.2024 is enclosed herewith as **Annexure-1**.



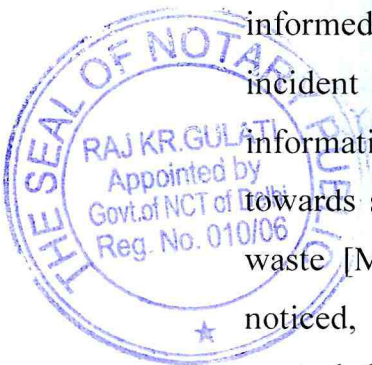
5. That letter dated 23.04.2024 was issued by DPCC to Municipal Corporation of Delhi (MCD), Urban Development Department, Govt. of NCT of Delhi, District Disaster Management Authority (East, North, South East), Delhi Fire Service seeking Information/ Compliance Report on following:

- i. Cause of the fire at Ghazipur Dumpsite and immediate steps taken by concerned departments to douse the fire.
- ii. Directions u/s 5 of the Environment (Protection) Act, 1986, read along with Solid Waste Management Rules, 2016, regarding prevention and control of fire incidents at the MSW Dumpsites in Delhi, issued by DPCC to MCD, UD Deptt. and DDMA on 10.06.2022.

Copy of the letter dated 23.04.2024 of DPCC is enclosed herewith as **Annexure- 2.**

Copy of the Directions u/s 5 of the Environment (Protection) Act, 1986, dated 10.06.2022 issued by DPCC is enclosed herewith as **Annexure- 3.**

6. That in response to the letter dated 23.04.2024 of DPCC, DDMA (East) submitted its reply, vide letter dated 24.04.2024, informing that "Emergency Operation Centre (EOC) DDMA (E) had received information on 21 April, 2024 at 07:25 PM from 1077 (State Emergency Operation Centre) that a Fire had occurred at about 04:30 pm. On receiving call from DDMA EOC 1077 at about 07:25 PM, concerned SDM Mayur Vihar Sh. Sanjay Kr. Ambasta & DPO ( E ) , Ms. Anjali Diwakar reached the incident site and facilitated search and rescue operation instantly; simultaneously all concerned ESFs were informed about the incident by DDMA East Control Room. They reached the incident site well in time and started search and rescue operation. As per information received by MCD, A fire was seen at left side [east] of dump site towards slaughter house side and Fish market at around 4:30 p.m. The fresh waste [MSW] was being dumped at this portion. As soon as the fire was noticed, Sufficient machinery, man power and resources are deployed to control the Fire. The fire was contained within 24 hours and the situation is



now in control... Chief Engineer Sh. Dinesh Yadav, Executive Engineer Sh. Mula Singh & Staffs from MCD were present at site along with equipments 12 excavator, 2 Bulldozer, 4 dumpers were working at fire site. There is no casualty in this fire incident. Sh. Nirmal Kr, Jha SHO, (P.S. Gazipur), with his team was present at the incident site. Delhi Fire Service reported the incident site with 12 fire tenders from different fire Station headed by Sh. Deepak Hudda, Additional Divisional Officer. Delhi Fire Service started the Search & Rescue Operation immediately. As per latest update .....the fire is reported to be under control except smoke coming out from the site. The agencies are working continuously to get complete control over it”.

Copy of the Fire Mock Drill at Ghazipur Landfill on 18.05.2022 & SOP for Ghazipur Landfill prepared in 2022 also submitted by DDMA (East) vide said letter dated 24.04.2024.

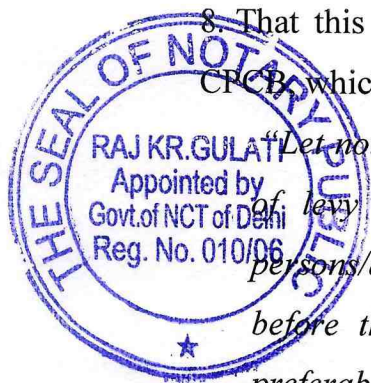
Copy of the letter dated 24.04.2024 of DDMA (East) is enclosed herewith as **Annexure- 4.**

7. That in response to letter dated 23.04.2024 of DPCC, MCD vide letter dated 25.04.2024 submitted its Report on the Fire Incident at Ghazipur Dumpsite on 21.04.2024, informing about the measures taken / being taken by MCD to prevent fire incidents at the Ghazipur dumpsite.

Copy of the letter dated 25.04.2024 of MCD is enclosed herewith as **Annexure- 5.**

8. That this Hon'ble Tribunal vide order dated 29.04.2024 pleased to direct the CPCB which is as under:

*Let notice be issued to CPCB-Respondent No. 4 for examining the issue of levy environmental compensation on continuous violation on the persons/authority responsible for the same and also to submit the report before the Tribunal within five weeks by email at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/OCR support PDF and not in the form of image PDF”.*



9. That in compliance to the above-mentioned order dated 29.04.2024 of Hon'ble Tribunal, CPCB and DPCC conducted a joint inspection of the Ghazipur dumpsite on 24.06.2024. The Report has already been submitted by CPCB before this Hon'ble Tribunal on 05.08.2024.

10. That present affidavit may kindly be taken on record.

*Supell Singh*  
DEPONENT

VERIFICATION:

I, the above-named deponent, declare the contents of the present affidavit are true and correct to the best of my knowledge based upon the documents and records available in the office and nothing material has been concealed therefrom.

Verified at New Delhi on this 13<sup>th</sup> day of November, 2024.

*Supell Singh*  
DEPONENT



ATTESTED  
*[Signature]*  
NOTARY PUBLIC  
GOVT. OF NCT OF DELHI

11.3 NOV 2024

ENTRY No. 3658/21  
DATED: .....

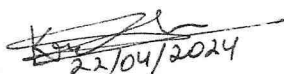
11 3 NOV 2024

**Report on Inspection w.r.t to Fire Incident at Ghazipur Dumpsite on 21.04.2024**

After receiving a message at about 08:30 PM on 21.04.2024 (Sunday) regarding ANI Report on fire incident at Ghazipur Dumpsite in the evening of 21.04.2024, DPCC official reached the Ghazipur Dumpsite at about 09:30 PM on 21.04.2024. MCD officials, including Chief Engineer, Sh. Dinesh Yadav was also present at the site during the inspection..

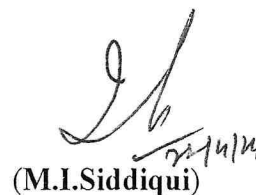
Followings are the observations and information gathered from the officials of MCD present during the visit:

1. Ghazipur Dumpsite is not an Engineered Sanitary Landfill. The area of the dumpsite is about 75 acres. This Dumpsite is used for dumping of Municipal Solid Waste (MSW) mainly from the Trans Yamuna Area and in use since 1984.
- i. Presently about 1500 TPD of Fresh MSW is being dumped and cause of the fire is methane generated from the dumped MSW and high temperature.
2. As informed by MCD officials, the fire took place between 04:00 PM to 04:30 PM on 21.04.2024 towards the Left / Slaughter House side where fresh MSW is being dumped.
3. The fire spread in an area of Appx 2100 sq. meter (70 meter X 30 meter). Flames and smoke observed at the site.
4. It was difficult to douse the fire due to late night hours. However efforts were being made by the MCD Staff to douse the fire.
5. Ghazipur Dumpsite was again visited on 22.04.2024 to check the progress of dousing the fire. During visit it was observed that fire was still there and smoke was seen emanating from the Dumpsite.
6. As informed by MCD officials, Total 25.33 Lakh Ton out of 140 Lakh MT of Legacy was Bio-mined till 21.04.2024. There was about 2000 Tons of Inert, 5000 Tons of RDF & 600 Tons of C & D Waste Bio-mined from the Legacy Waste at the Dumpsite.
7. For dousing the Fire, 12 Excavators, 2 Bull-Dozers, 4 Dumpers and 12 Fire Tenders were deployed.
8. Inerts and C & D Material was used for covering the area affected with the fire to douse / prevent spreading of the fire by cutting the oxygen supply.
9. As informed by MCD officials, Six Junior Engineers (Two in each shift) along with supporting staff Beldars etc have been deputed round the clock at the Dumpsite. There are total 30 CCTV Cameras installed at the Dumpsite. There is a Control Room for monitoring of CCTV Cameras and other activities at the Dumpsite. Trucks of Concessionaire dumping MSW have Spark Arrestors. Perforated HDPE Pipes were reportedly installed at the Dumpsite for release of Methane however buried in the dump due to fresh dumping of MSW. CO Monitors not installed. For measurement of Temperature Thermometers are used.
10. It was informed that 400 to 500 TPD RDF is being sent to Chittorgarh in Rajasthan for use in Cement Industries and also Muzaffar Nagar in Uttar Pradesh for use in Paper Mills..
11. There are two Water Tankers of 2000 litres capacity each fitted with sprinklers for sprinkling of water for dust suppression at the Dumpsite. Treated STP Water is used for sprinkling.
12. Photographs taken during the visit are enclosed.

  
22/04/2024

(Krishan Kaushik)

Jr. Env. Engineer (WMC II)

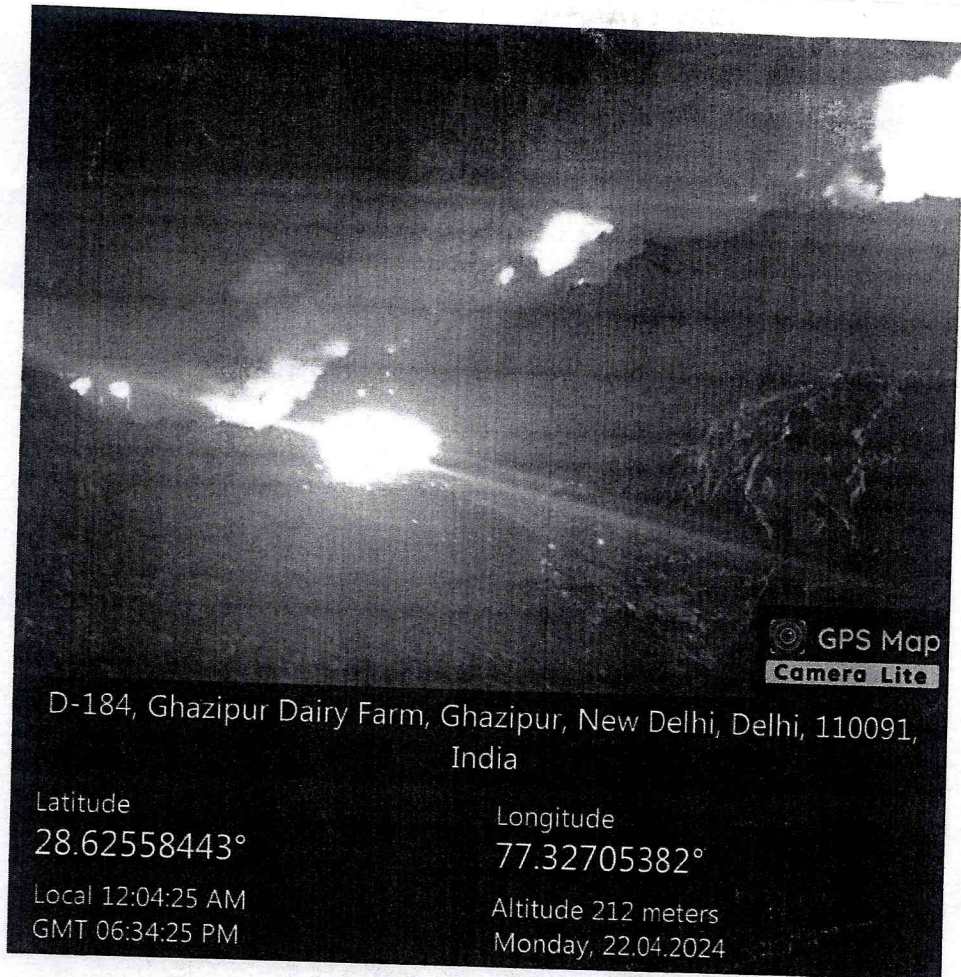
  
22/04/24

(M.I. Siddiqui)

Asstt. Env. Engineer (WMC II)

239

520



GPS Map  
Camera Lite

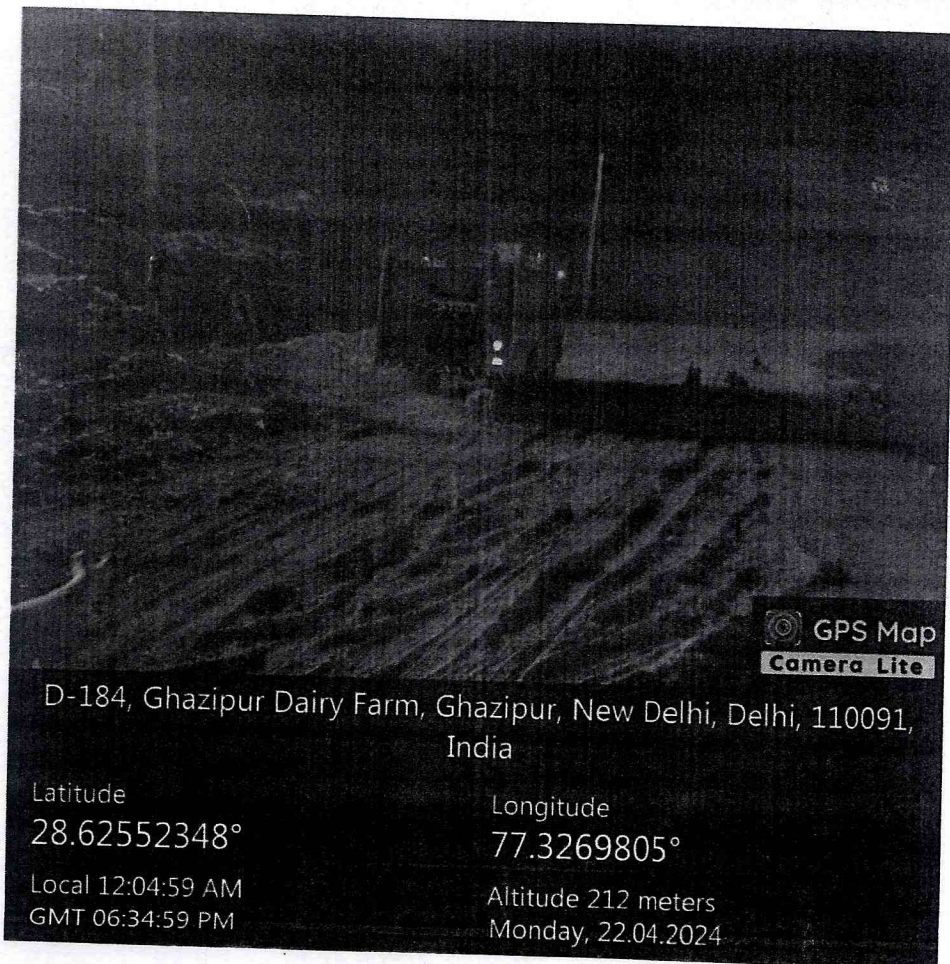
D-184, Ghazipur Dairy Farm, Ghazipur, New Delhi, Delhi, 110091,  
India

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Longitude  
77.32705382°

Local 12:04:25 AM  
GMT 06:34:25 PM

Altitude 212 meters  
Monday, 22.04.2024



GPS Map  
Camera Lite

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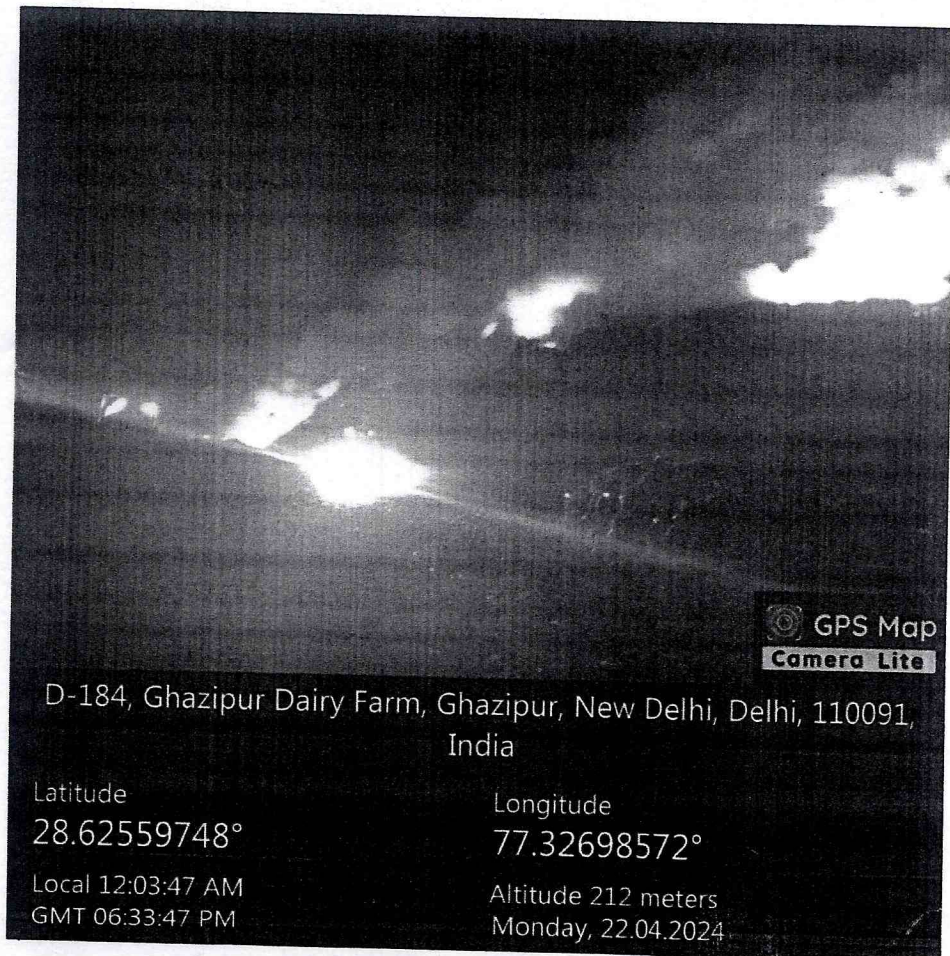
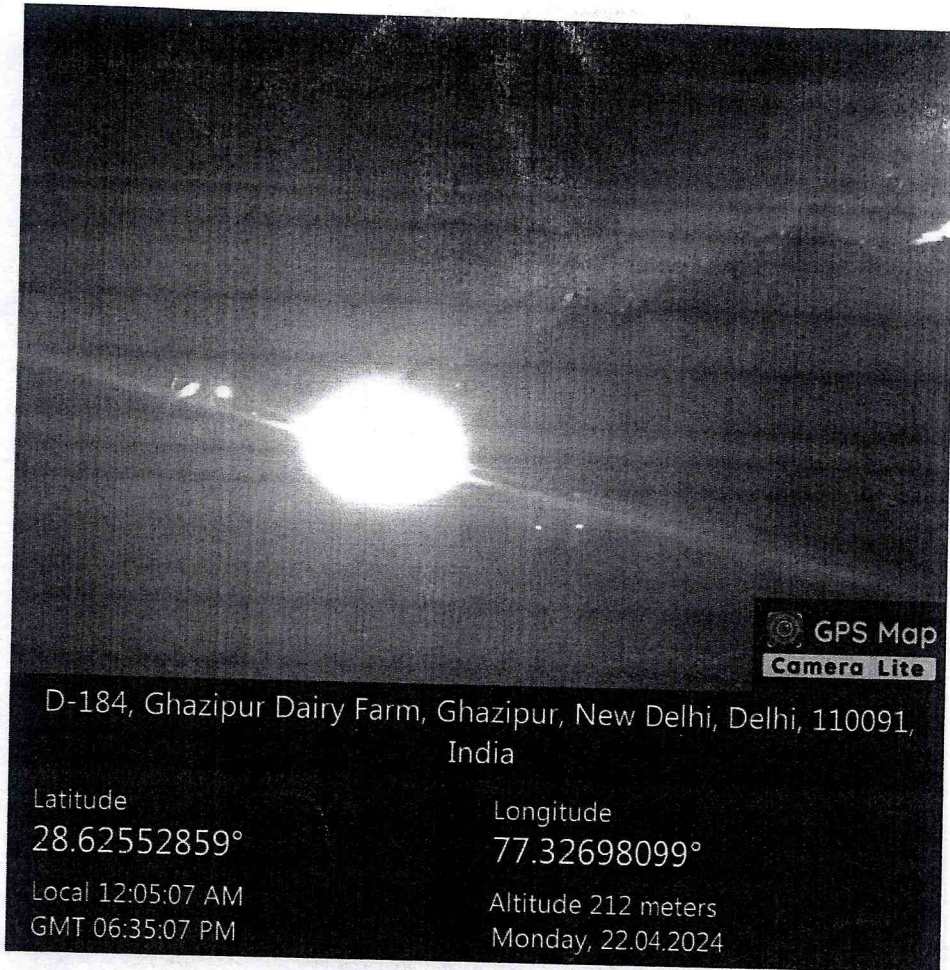
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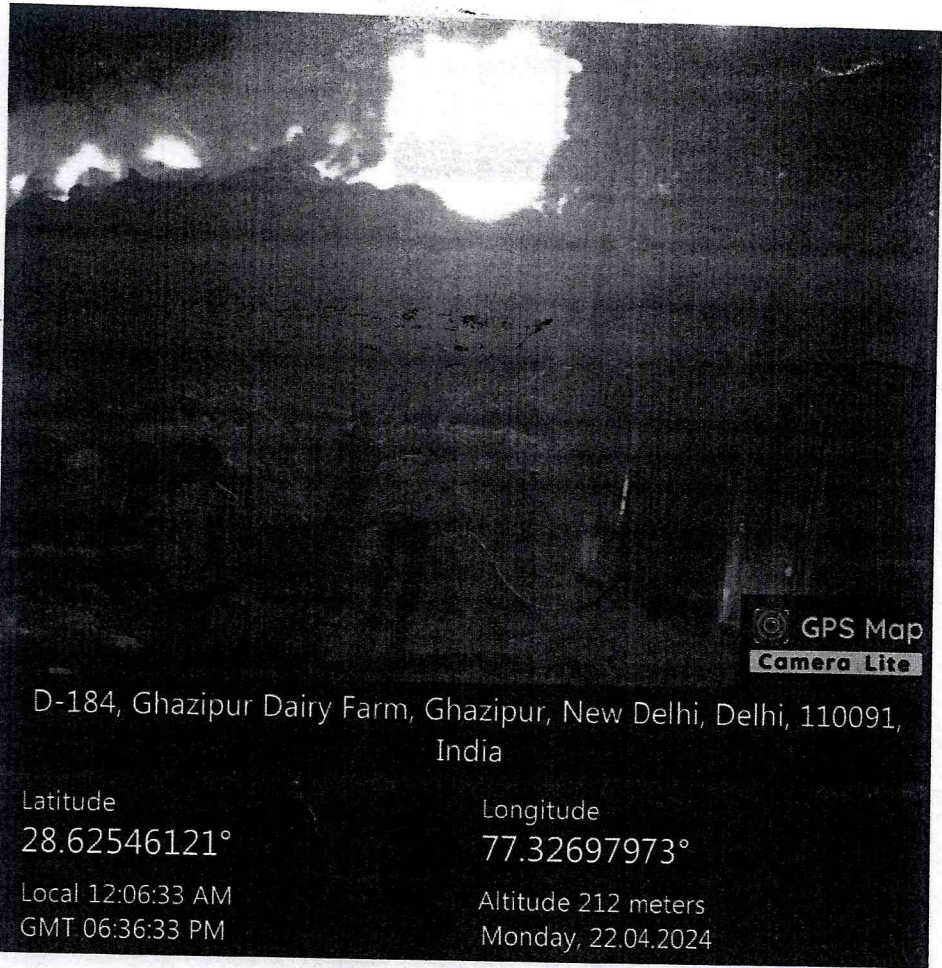
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Monday, 22.04.2024

240

7

519





GPS Map  
Camera Lite

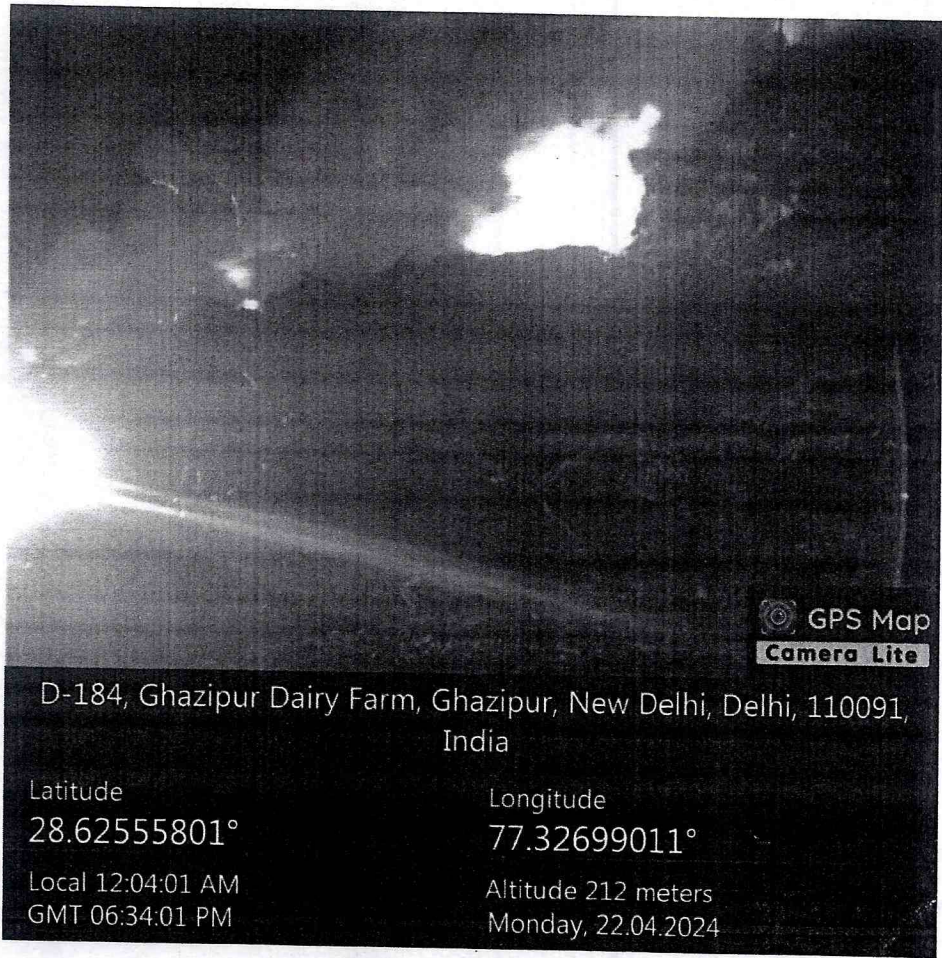
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Monday, 22.04.2024



GPS Map  
Camera Lite

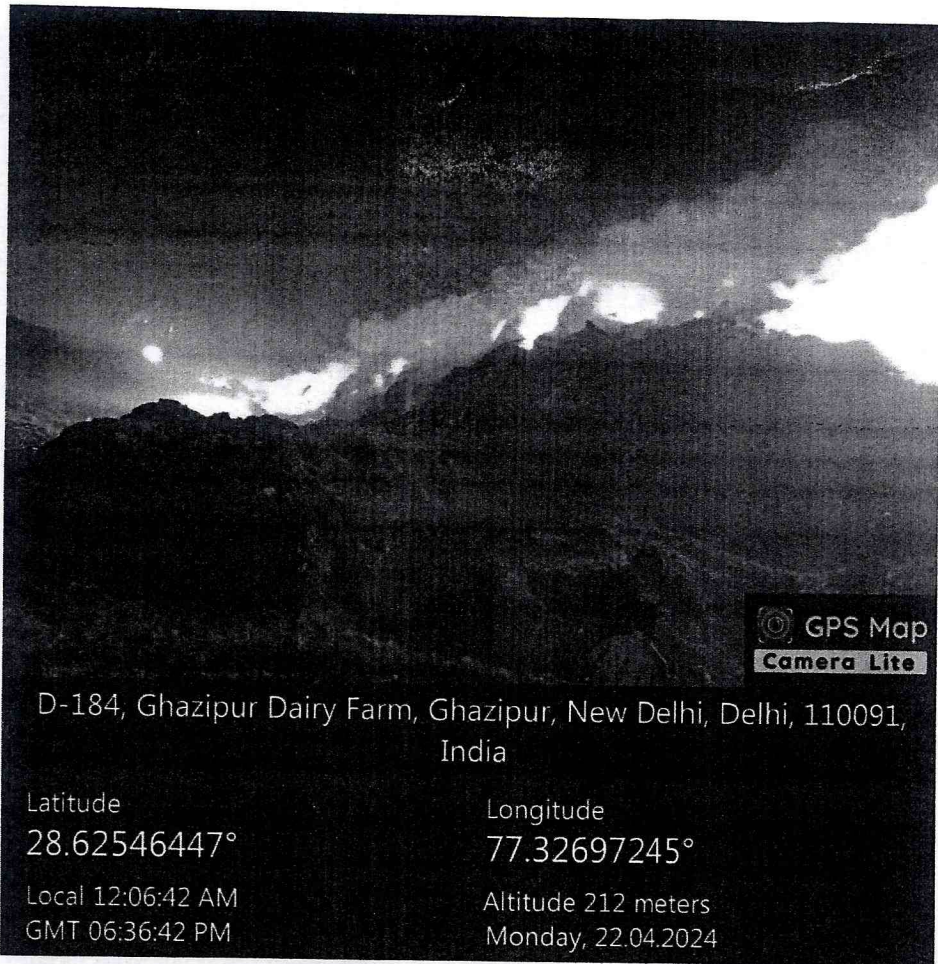
D-184, Ghazipur Dairy Farm, Ghazipur, New Delhi, Delhi, 110091, India

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GMT 06:34:01 PM

Altitude 212 meters  
Monday, 22.04.2024



GPS Map  
Camera Lite

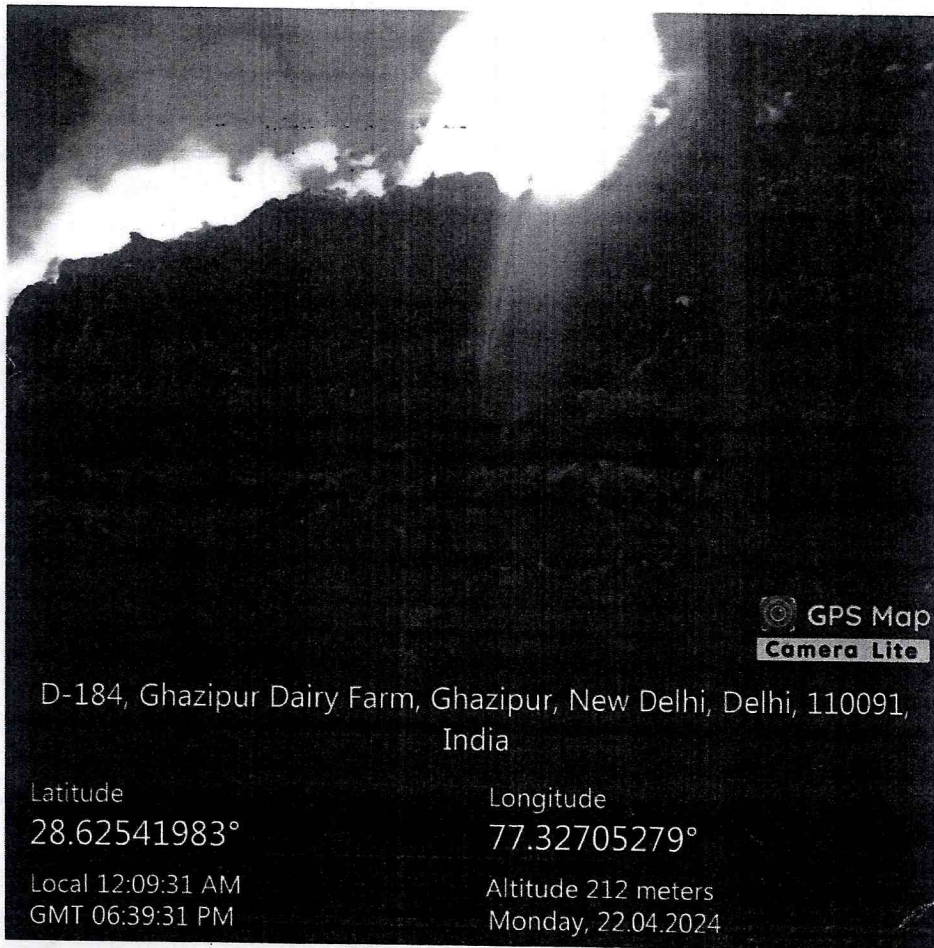
D-184, Ghazipur Dairy Farm, Ghazipur, New Delhi, Delhi, 110091,  
India

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Longitude  
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Local 12:06:42 AM  
GMT 06:36:42 PM

Altitude 212 meters  
Monday, 22.04.2024



GPS Map  
Camera Lite

D-184, Ghazipur Dairy Farm, Ghazipur, New Delhi, Delhi, 110091,  
India

Latitude  
28.62541983°

Longitude  
77.32705279°

Local 12:09:31 AM  
GMT 06:39:31 PM

Altitude 212 meters  
Monday, 22.04.2024

243

10

516



GPS Map  
Camera Lite

D-184, Ghazipur Dairy Farm, Ghazipur, New Delhi, Delhi, 110091, India

Latitude  
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Longitude  
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Altitude 212 meters  
Monday, 22.04.2024



GPS Map  
Camera Lite

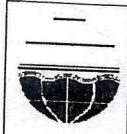
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Longitude  
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GMT 06:44:01 PM

Altitude 205 meters  
Monday, 22.04.2024

**URGENT****By Email / Speed Post**

**DELHI POLLUTION CONTROL COMMITTEE**  
**DEPARTMENT OF ENVIRONMENT, GOVT. OF NCT OF DELHI**  
**5<sup>th</sup>FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI-110006**  
 visit us at : <https://dpcc.delhigovt.nic.in>



**F. No. DPCC / WMC II/ Ghazipur Dumpsite / 2020 /566 - 575**

**Dated: 23.04.2024**

To,

1. Addl. Chief Secretary, Urban Development Department , Govt. of NCT of Delhi, 9th Floor, Delhi Secretariat, I.P. Estate, New Delhi -02.
2. Commissioner, Municipal Corporation of Delhi (MCD), Dr. S.P.M Civic Center, JLN Marg, New Delhi-02.
3. Chief Executive Officer, District Disaster Management Authority (East District), District Magistrate Office (East), L.M. Bund, Shastri Nagar, Delhi-31.
4. Chief Executive Officer, District Disaster Management Authority (North District), District Magistrate Office (North), Alipur, Delhi -36.
5. Chief Executive Officer, District Disaster Management Authority (South East District), District Magistrate Office (South East), Old Gargi College Building, Lajpat Nagar -IV, Delhi- 24.
6. Director General, Delhi Fire Service, New Barakhamba Road, Connaught Lane, New Delhi-01.

**Subject: Fire Incident at Ghazipur Dumpsite on 21.04.2024.**

Sir/ Madam,

A fire incident occurred in the evening of 21.04.2024 (Sunday) at Ghazipur Dumpsite. Hon'ble Minister for Environment, Govt. of NCT of Delhi, has sought a detailed report on the said fire incident within 48 hours. Therefore, you are requested to **provide following Information/Compliance Report to this office urgently by 12:00 Noon on 24.04.2024 at following Email:wmc2dpcc2023@gmail.com:**

- (i) Cause of the fire at Ghazipur Dumpsite and immediate steps taken by your department to douse the fire.
- (ii) During the previous years, fire incidents were also reported and Hon'ble Minister for Environment had visited the site and Directions u/s 5 of the Environment (Protection) Act, 1986, read along with Solid Waste Management Rules, 2016, regarding prevention and control of fire incidents at the MSW Dumpsites in Delhi, were issued by DPCC to MCD, UD Deptt. and DDMA's on 10.06.2022 (Copy enclosed). It is requested to send the Compliance Report w.r.t. said directions issued by DPCC on 10.06.2022.

As directed by the Hon'ble Minister for Environment, Govt. of NCT of Delhi, All Round Efforts are to be taken by the concerned Departments (MCD, DDMA's, UD Deptt. & DFS) to control and douse the fire to prevent further deterioration of air quality in the nearby vicinity to safeguard people's health and inform this office about the action taken in this regard.

Yours Sincerely,

(Dr. K.S. Jayachandran)

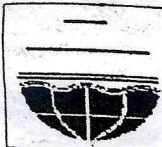
Spl. Secy. (Env.) -Cum-  
Member Secretary, DPCC

Copy to:

1. Pr. Secretary (Environment & Forest), Environment Department, Govt. of NCT of Delhi.
2. Chairman, Delhi Pollution Control Committee.
3. Secretary to Hon'ble Environment Minister, GNCTD, 7<sup>th</sup> Level, Delhi Secretariat, Delhi - 110002.

(Dr. K.S. Jayachandran)

Spl. Secy. (Env.) -Cum-  
Member Secretary, DPCC



**245** By Speed Post/Email  
**DELHI POLLUTION CONTROL COMMITTEE**  
**DEPARTMENT OF ENVIRONMENT, GOVT. OF NCT OF DELHI**  
**5<sup>th</sup> FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI-110006**  
visit us at : <http://dpcc.delhigovt.nic.in>

12

F. No. DPCC / WMC-II / Bhalaswa / 2020/9956-9963

Dated: 10.06.2022

**Subject: Directions u/s 5 of the Environment (Protection) Act, 1986 read along with Solid Waste Management Rules, 2016 regarding prevention and control of fire incidents at the MSW Dumpsites in Delhi.**

Whereas, the Central Government has notified the standards for discharge of environmental pollutants from various categories of industries under the Environment (Protection) Act, 1986 and the rules framed there under.

And whereas, the Ministry of Environment, Forest & Climate Change has notified Solid Waste Management Rules, 2016 (SWM Rules, 2016) which inter-alia state procedures for Solid Waste Management.

And whereas, Local Authorities / Municipal Corporation in Delhi are responsible for proper management of Solid Waste in their area of jurisdiction as per the SWM Rules, 2016 and duties & responsibilities of Local Authorities are mentioned under Rule 15 of said SWM Rules, 2016.

And whereas, under Rule 15(zj) of SWM Rules, 2016 local authorities and village and Panchayats shall investigate and analyse all old open dumpsites and existing operational dumpsites for their potential of bio-mining and bio-remediation and whosoever feasible, take necessary actions to bio-mine or bio-remediate the sites.

And whereas, under Rule 16(a) of Solid Waste Management Rules, 2016, the State Pollution Control Board or Pollution Control Committee [Delhi Pollution Control Committee (DPCC) in case of Delhi] shall enforce these rules in their State through local bodies in their respective jurisdiction and review implementation of these rules at least twice a year in close coordination with concerned Directorate of Municipal Administration or Secretary-in-charge of State Urban Development Department.

And whereas, remediation of all dumpsites was to be completed by April 7, 2021 as per Rule 22 of SWM Rules, 2016.

And whereas, in compliance of Hon'ble National Green Tribunal Order dated 16.01.2019 in the matter of OA No. 606/2018, CPCB published Guidelines for Disposal of Legacy waste.

And whereas, Hon'ble NGT has issued several Directives on the matter including the following:

- (i) In OA No. 519/2019, all Chief Secretaries, States/UTs to ensure completion of remediation of dumpsites by October, 2020.
- (ii) In OA No. 53/2020, CPCB to complete inventorization of dumpsites in the Country.
- (iii) In OA No. 593/2017, CPCB to compile information related to Legacy Waste Management and identify gaps thereof.

And whereas, with respect to the directions u/s 5 of the Environment (Protection) Act, 1986 issued by Central Pollution Control Board (CPCB) vide letter dated 27.01.2021, DPCC issued following directions u/s 5 of Environment (Protection) Act, 1986, to then three Municipal Corporations [East Delhi Municipal Corporation (EDMC), North Delhi Municipal Corporation (North DMC) & South Delhi Municipal Corporation (SDMC)] on 23.03.2021 :

- (i) That EDMC, North DMC & SDMC shall provide complete list of Legacy Waste Dumpsites in their area of jurisdiction as per format enclosed by 31.03.2021.
- (ii) That EDMC, North DMC & SDMC shall ensure necessary action for bio-mining/bio-remediation of the Dump sites in compliance with the Provisions of SWM Rules, 2016. They will submit Action Plan by 31.03.2021.

- (iii) That EDMC, North DMC & SDMC engaged in the bio-mining of Legacy Waste at Ghazipur, Bhalaswa and Okhla respectively shall ensure to follow the procedures as per CPCB Guidelines for Disposal of Legacy Waste with specific compliance to following points:
- Analysis of various screened fraction materials, i.e., RDF, fine earth/bio earth etc., prior to its disposal/utilization.
  - Preparation of plan for utilization/disposal of screened fractions.
  - Adequate provisions for leachate treatment.
  - Maintenance of records/documents for disposal/utilization of the RDFs or fine earth and other materials.
- (iv) That EDMC, North DMC & SDMC shall prepare time targeted Action Plan for bio-mining/bio-remediation of abovementioned dumpsites in compliance with the points listed above. The timelines as specified in SWM Rules, 2016 and Hon'ble NGT Directions on the matter are to be adhered to for remediation of these sites.
- (v) That EDMC, North DMC & SDMC shall ensure that no fresh waste is disposed at abovementioned dumpsites and make proper arrangement for management of fresh solid waste.
- (vi) That North DMC shall bio-remediate the Bhalaswa Dump site which can be considered as model for compliance for other Legacy Waste Dumpsites at Ghazipur & Okhla in Delhi.

And whereas, DPCC vide letter dated 31.08.2021 issued following directions u/s 5 of Environment (Protection) Act, 1986 to North Delhi Municipal Corporation in respect of Bhalaswa Dumpsite :

- Bio-mining of Legacy Waste at Bhalaswa Dumpsite shall be carried out as per the directions of Hon'ble National Green Tribunal in OA No. 519/2019 in the matter of News item published in "The Times of India" authored by Jasjeev Gandhiok & Paras Singh Titled "Below mountains of trash lie poison lakes" and OA No. 386/2019 in the matter of "Centre for Wildlife and Environment Litigation" Vs Union of India & Ors." and Guidelines of CPCB for disposal of Legacy Waste (Old Municipal Solid Waste).
- Directions u/s 5 of Environment (Protection) Act, 1986 issued by DPCC vide letter dated 23.03.2021 shall be complied & Compliance Report shall be submitted to DPCC within 15 days.
- Ensure structural slope stability of Bhalaswa Dumpsite by taking adequate safety measures so as to avoid any incident of sliding of waste dumped at Bhalaswa Dumpsite and submit report in this regard to DPCC within 15 days.
- Ensure prevention of fire at Bhalaswa Dumpsite and inform about the measures taken to prevent fire incidents.
- Ensure that there is no unauthorized access/entry into the Bhalaswa Dumpsite by providing Boundary Wall of appropriate height with proper fencing particularly towards residential areas/ JJ Colony & make provision for strict vigilance by installing CCTV Cameras/inspection mechanism for checking unauthorised entry.

And whereas, major fire incidents have occurred at Ghazipur Dumpsite on 28.03.2022 & Bhalaswa Dumpsite on 26.04.2022. Fire incidents also occurred on 09.04.2022 & 20.04.2022 at Ghazipur Dumpsite & on 03.06.2022 at Bhalaswa Dumpsite.

And whereas, in view of the fire incidents occurred at Ghazipur Dumpsite, Hon'ble Nation Green Tribunal vide Order Dated 22.04.2022 in OA No. 288/2022 in the matter of News item published in The Times of India dated 22nd April, 2022, titled "Delhi: Another long-drawn effort to douse fire at Ghazipur landfill" constituted Joint Committee headed by Hon'ble Justice (Retd.) Sh. S.P. Garg, Former Judge, Delhi High Court to ascertain the factual situation and suggest further course of action after interaction with the concerned stakeholders. It may consider the landfill dump as isolated and vulnerable site which requires On-site and Off-site fire and other disaster management plans.

And whereas, in view of the fire incident occurred at Bhalaswa Dumpsite, Hon'ble Nation Green Tribunal vide Order Dated 27.04.2022 in OA No. 300/2022 in the matter of News item published in News 18 dated 26.04.2022 titled "Delhi: Massive Fire at Bhalaswa Dump Yard, Fourth This Year; 13 Fire Tenders on Spot" constituted Joint Committee headed by Hon'ble Justice (Retd.) Sh. S.P. Garg, Former Judge, Delhi High Court to ascertain factual situation in respect of present incident and suggest further course of action after interaction with the concerned stakeholders. The Committee may consider the landfill dump as isolated and vulnerable site which requires On-site and Off-site fire and other disaster management plans.

And whereas, CPCB vide letter dated 26.05.2022 has issued directions u/s 5 of the Environment (Protection) Act, 1986 for implementation of the Solid Waste Management Rules, 2016 regarding fire incidents at MSW Dumpsites to all State Pollution Control Boards (SPCBs) / Pollution Control Committees (PCCs) including DPCC (Copy of the directions of CPCB enclosed).

And whereas, a Briefing was given by the officers of Municipal Corporation of Delhi (MCD) & DPCC regarding various issues related to prevention & control of fire incidents at the Dumpsites before the Hon'ble Environment Minister, Govt. of NCT of Delhi on 02.06.2022 at Bhalaswa Dumpsite. Report of the visit to Gorai and Deonar Dumpsites in Mumbai on 05.05.2022 & 06.05.2022 was also briefed by the Joint Team of DPCC, EDMC and North DMC (Copy of the Report enclosed). Minutes of the Briefing given and Decision taken on 02.06.2022 at Bhalaswa Dumpsite by the Hon'ble Environment Minister, Govt. of NCT of Delhi are enclosed.

Now therefore, in view of the above and in exercise of the powers conferred upon Delhi Pollution Control Committee, following directions u/s 5 of Environment (Protection) Act, 1986, as amended to date, read along with Solid Waste Management Rules, 2016 are issued to Municipal Corporation of Delhi (MCD), Department of Urban Development, Govt. of NCT of Delhi & District Disaster Management Authorities (East District, North District & South-East District):

1. Construct approach road at periphery around the Dumpsite in order to facilitate movement of vehicles, Patrolling teams and Fire Tenders.
2. Construct RCC Boundary Wall of at least 4 meter height with proper barbed wire fencing at the periphery of the dumpsite to prevent unauthorized entry in the dumpsite.
3. Authorize some Agency (ies) at the Dumpsite for segregation of fresh MSW being dumped at the site to prevent unauthorized entry of any ragpickers.
4. For release of methane generated from the Dumpsite, perforated HDPE pipes or of any other suitable material may be provided at the Dumpsite at suitable locations with proper spacing as per the site requirement. Pipes should be of at least 6 meter height (4 meter below the dump and 2 meter above the dump).
5. Constitute dedicated Surveillance Squad with adequate man power and vehicle to have strict vigil over the activities going on at the Dumpsite. Such Surveillance Squad may be constituted comprising of Municipal Corporation, Civil Defense & Delhi Police Staff and should frequently take rounds of the Dumpsite (at least every two hours). MCD to pursue with Delhi Police for providing Police Pickets at the Dumpsite for prevention of unauthorized entry.
6. Upgrade the existing Water Tankers with sufficient capacity and Pumps to have adequate required pressure for extinguishing/ dousing the fire. Increase the No of Water Tankers with Pumps at the Dumpsite. Existing Suction cum Jetting machine should also be used for extinguishing fire.
7. Provide adequate water storage capacity at the dumpsite for control of fugitive dust & fire (underground reservoir of at least 50 KL capacity).
8. Ensure installation of Spark Arrester with the Exhaust System of the Vehicles / Trucks entering / Other Machinery at the Dumpsite premises to prevent fire incidents due to spark from vehicles.
9. Prepare on-site Emergency Plan for controlling fire in consultation with DDMA. Prepare detailed site specific separate SOPs for prevention of fire incident and control of fire in case of fire incident. Besides Delhi Fire Service, DDMA to be called in case of any emergency including fire incidents & waste sliding at the dumpsite.

10. Municipal Corporation of Delhi shall strictly implement above directions to prevent fire at dumpsites and report the progress on abovementioned directions (works/measures taken) every fortnightly to the Office of Environment Minister, GNCTD and DPCC.

11. **Following Directions w.r.t Directions issued by CPCB to DPCC :**

- i. Provide updated information w.r.t Directions dated 23.03.2021 issued by DPCC regarding Biomining of Legacy Waste at three Dumpsites at Ghazipur, Bhalaswa & Okhla in Delhi
- ii. Department of Urban Development, Govt. of NCT of Delhi shall conduct comprehensive risk assessment studies and accordingly prepare detailed On-site Emergency Plan for each dumpsite in Delhi addressing the following issues:
  - a. The onsite emergency plan to cover potential risks / emergencies due to fire, obnoxious / flammable emissions, odour, vector borne diseases, rodents, bird nuisance, seasonal affects i.e. summer/ winter / monsoon (rainy season) and all other potential risks at the dumpsites.
  - b. The onsite emergency plans to address the worst possible case scenarios preferably using appropriate risk assessment software covering any or all of the potential emergency issues / scenarios cited above.
  - c. The on-site emergency management plan to cover likely affected geographical area including population, flora & fauna in and around the dumpsites.
  - d. The on-site emergency plan to contain detailed remedial measures both hardware and software based for mitigating various emergency situations, which should finally be available with respective control rooms and on-site emergency notice boards.
- iii. District Disaster Management Authorities (East District, North District & South-East District) shall integrate such (dumpsites) On-site Emergency Plans with the existing Off-site District Disaster Management Plans in their respective Districts, prepared by the MCD in compliance with Rule 14 of The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989.
- iv. Department of Urban Development, Govt. of NCT of Delhi shall prepare the on-site & off-site (or update off-site) emergency management plans preferably through an expert agency on the subject.
- v. The following interim measures shall be implemented on priority till the time Onsite/Off-site Emergency Plans are prepared and implemented.
  - a. **Disposal of Waste:** Fresh waste not to be disposed at the dumpsite where bio-remediation is being undertaken. Organic waste from slaughter house, fish market etc., industrial waste not to be disposed at the dumpsite. It is to be further ensured that industrial waste / E-waste/ lithium battery is not dumped at the site. Waste that is being unloaded at the site should be examined visually for potential fire sources when located, should be neutralized with cover material immediately. Emergency tipping area to be provided to set aside from the immediate working area where incoming loads of material known to be on fire or suspected of being so can be deposited, inspected and dealt with. Adequate compacting of waste to be done to minimize formation of air or methane pockets which can lead to subsurface fire at site.
  - b. **Monitoring at dumpsites:** Methane Gas Detectors (on downwind side) to be installed at site so that area with high methane concentration can be identified and preventive actions be undertaken. Further temperature at windrows to be monitored with non-contact infrared thermometer (as used for monitoring human body temperature under COVID circumstances) and records be maintained for any major deviations. The temperature is to be in the range of 35°C to 59°C. Treated leachate/ water to be sprayed on the waste when rise in temperature is observed at the bioremediation site. Suitable mechanism to be in place. Installation of CCTV cameras at the site and provision of fencing & frequent patrolling to be done for checking unauthorized entry at dumpsite.

- c. **Arrangements for Fire Extinguishing:** Arrangements for adequate Storage of sand / chemical fire extinguishing medias such as foam or powder at site to be made to douse fire in case a fire incident is reported. Usage of water for dousing fire to be avoided. Isolation and allowing rapid natural burnout or smothering with soil to be done for dousing dumpsite fires. Dedicated fire tenders (preferably chemical extinguishing media) and adequate fire safety measures are to be deputed, specifically during Summer season when dumpsites fire is more likely to take place. All mobile equipment or vehicles should be fitted with fire extinguisher and spark arrester.
- d. **Health & Safety of Workers:** Fire protection measures and safety equipment to be provided to all workers at the site and checked before entry to the dumpsite. Workers to be trained for detection of fire and necessary action to be taken in case of fire. Periodic training of workers be conducted in Safe handling of Waste, PPEs, Health & Safety issues etc.
- e. **Mock Drills & Safety Audits:** Periodic mock drills to be conducted to prevent fire accidents at dumpsites. Quarterly, Fire Safety and Hazardous Emissions Audits to be conducted.

Abovementioned Departments/ Organisations are hereby directed to strictly comply with the said directions and submit the Action Taken Report to DPCC within 15 days.

(Dr. K. S. Jayachandran)  
Member Secretary, DPCC

**Enclosures: As above**

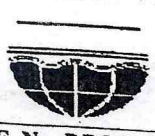
To,

1. The Commissioner, Municipal Corporation of Delhi (MCD), Dr. S.P.M Civic Center, JLN Marg, New Delhi - 110002.
2. The Secretary, Urban Development Department, Govt. of NCT of Delhi, 9th Floor, Delhi Secretariat, I.P. Estate, New Delhi -110002.
3. The Chief Executive Officer, District Disaster Management Authority (North District), District Magistrate Office (North), Alipur, Delhi - 110036.
4. The Chief Executive Officer, District Disaster Management Authority (East District), District Magistrate Office (East), L.M. Bund, Shastri Nagar, Delhi-110031.
5. The Chief Executive Officer, District Disaster Management Authority (South East District), District Magistrate Office (South East), Old Gargi College Building, Lajpat Nagar -IV New Delhi -110024.

**Copy to:**

1. The Chairman, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032.
2. Staff Officer to Chief Secretary, Govt. of NCT of Delhi, 5th Level, Delhi Secretariat, I.P. Estate, Delhi - 110002.
3. Secretary to Hon'ble Environment Minister, Govt. of NCT of Delhi, 7<sup>th</sup> Level, Delhi Secretariat, I.P. Estate, Delhi - 110002.

(Dr. K. S. Jayachandran)  
Member Secretary, DPCC

	<b>By Speed Post/Email</b>
	<b>DELHI POLLUTION CONTROL COMMITTEE</b> <b>DEPARTMENT OF ENVIRONMENT, GOVT. OF NCT OF DELHI</b> <b>5<sup>th</sup> FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI-110006</b> visit us at : <a href="http://dpcc.delhigovt.nic.in">http://dpcc.delhigovt.nic.in</a>

F. No. DPCC / WMC-II / Bhalaswa / 2020 / 9956 - 9963

Dated: 10.06.2022

**Subject: Directions u/s 5 of the Environment (Protection) Act, 1986 read along with Solid Waste Management Rules, 2016 regarding prevention and control of fire incidents at the MSW Dumpsites in Delhi.**

Whereas, the Central Government has notified the standards for discharge of environmental pollutants from various categories of industries under the Environment (Protection) Act, 1986 and the rules framed there under.

And whereas, the Ministry of Environment, Forest & Climate Change has notified Solid Waste Management Rules, 2016 (SWM Rules, 2016) which inter-alia state procedures for Solid Waste Management.

And whereas, Local Authorities / Municipal Corporation in Delhi are responsible for proper management of Solid Waste in their area of jurisdiction as per the SWM Rules, 2016 and duties & responsibilities of Local Authorities are mentioned under Rule 15 of said SWM Rules, 2016.

And whereas, under Rule 15(zj) of SWM Rules, 2016 local authorities and village and Panchayats shall investigate and analyse all old open dumpsites and existing operational dumpsites for their potential of bio-mining and bio-remediation and whosoever feasible, take necessary actions to bio-mine or bio-remediate the sites.

And whereas, under Rule 16(a) of Solid Waste Management Rules, 2016, the State Pollution Control Board or Pollution Control Committee [Delhi Pollution Control Committee (DPCC) in case of Delhi] shall enforce these rules in their State through local bodies in their respective jurisdiction and review implementation of these rules at least twice a year in close coordination with concerned Directorate of Municipal Administration or Secretary-in-charge of State Urban Development Department.

And whereas, remediation of all dumpsites was to be completed by April 7, 2021 as per Rule 22 of SWM Rules, 2016.

And whereas, in compliance of Hon'ble National Green Tribunal Order dated 16.01.2019 in the matter of OA No. 606/2018, CPCB published Guidelines for Disposal of Legacy waste.

And whereas, Hon'ble NGT has issued several Directives on the matter including the following:

- (i) In OA No. 519/2019, all Chief Secretaries, States/UTs to ensure completion of remediation of dumpsites by October, 2020.
- (ii) In OA No. 53/2020, CPCB to complete inventorization of dumpsites in the Country.
- (iii) In OA No. 593/2017, CPCB to compile information related to Legacy Waste Management and identify gaps thereof.

And whereas, with respect to the directions u/s 5 of the Environment (Protection) Act, 1986 issued by Central Pollution Control Board (CPCB) vide letter dated 27.01.2021, DPCC issued following directions u/s 5 of Environment (Protection) Act, 1986, to then three Municipal Corporations [East Delhi Municipal Corporation (EDMC), North Delhi Municipal Corporation (North DMC) & South Delhi Municipal Corporation (SDMC)] on 23.03.2021 :

- (i) That EDMC, North DMC & SDMC shall provide complete list of Legacy Waste Dumpsites in their area of jurisdiction as per format enclosed by 31.03.2021.
- (ii) That EDMC, North DMC & SDMC shall ensure necessary action for bio-mining/bio-remediation of the Dump sites in compliance with the Provisions of SWM Rules, 2016. They will submit Action Plan by 31.03.2021.

- (iii) That EDMC, North DMC & SDMC engaged in the bio-mining of Legacy Waste at Ghazipur, Bhalaswa and Okhla respectively shall ensure to follow the procedures as per CPCB Guidelines for Disposal of Legacy Waste with specific compliance to following points:
- Analysis of various screened fraction materials, i.e., RDF, fine earth/bio earth etc., prior to its disposal/utilization.
  - Preparation of plan for utilization/disposal of screened fractions.
  - Adequate provisions for leachate treatment.
  - Maintenance of records/documents for disposal/utilization of the RDFs or fine earth and other materials.
- (iv) That EDMC, North DMC & SDMC shall prepare time targeted Action Plan for bio-mining/bio-remediation of abovementioned dumpsites in compliance with the points listed above. The timelines as specified in SWM Rules, 2016 and Hon'ble NGT Directions on the matter are to be adhered to for remediation of these sites.
- (v) That EDMC, North DMC & SDMC shall ensure that no fresh waste is disposed at abovementioned dumpsites and make proper arrangement for management of fresh solid waste.
- (vi) That North DMC shall bio-remediate the Bhalaswa Dump site which can be considered as model for compliance for other Legacy Waste Dumpsites at Ghazipur & Okhla in Delhi.

And whereas, DPCC vide letter dated 31.08.2021 issued following directions u/s 5 of Environment (Protection) Act, 1986 to North Delhi Municipal Corporation in respect of Bhalaswa Dumpsite :

- Bio-mining of Legacy Waste at Bhalaswa Dumpsite shall be carried out as per the directions of Hon'ble National Green Tribunal in OA No. 519/2019 in the matter of News item published in "The Times of India" authored by Jasjeev Gandhiok & Paras Singh Titled "Below mountains of trash lie poison lakes" and OA No. 386/2019 in the matter of "Centre for Wildlife and Environment Litigation" Vs Union of India & Ors." and Guidelines of CPCB for disposal of Legacy Waste (Old Municipal Solid Waste).
- Directions u/s 5 of Environment (Protection) Act, 1986 issued by DPCC vide letter dated 23.03.2021 shall be complied & Compliance Report shall be submitted to DPCC within 15 days.
- Ensure structural slope stability of Bhalaswa Dumpsite by taking adequate safety measures so as to avoid any incident of sliding of waste dumped at Bhalaswa Dumpsite and submit report in this regard to DPCC within 15 days.
- Ensure prevention of fire at Bhalaswa Dumpsite and inform about the measures taken to prevent fire incidents.
- Ensure that there is no unauthorized access/entry into the Bhalaswa Dumpsite by providing Boundary Wall of appropriate height with proper fencing particularly towards residential areas/ JJ Colony & make provision for strict vigilance by installing CCTV Cameras/inspection mechanism for checking unauthorised entry.

And whereas, major fire incidents have occurred at Ghazipur Dumpsite on 28.03.2022 & Bhalaswa Dumpsite on 26.04.2022. Fire incidents also occurred on 09.04.2022 & 20.04.2022 at Ghazipur Dumpsite & on 03.06.2022 at Bhalaswa Dumpsite.

And whereas, in view of the fire incidents occurred at Ghazipur Dumpsite, Hon'ble Nation Green Tribunal vide Order Dated 22.04.2022 in OA No. 288/2022 in the matter of News item published in The Times of India dated 22nd April, 2022, titled "Delhi: Another long-drawn effort to douse fire at Ghazipur landfill" constituted Joint Committee headed by Hon'ble Justice (Retd.) Sh. S.P. Garg, Former Judge, Delhi High Court to ascertain the factual situation and suggest further course of action after interaction with the concerned stakeholders. It may consider the landfill dump as isolated and vulnerable site which requires On-site and Off-site fire and other disaster management plans.

And whereas, in view of the fire incident occurred at Bhalaswa Dumpsite, Hon'ble Nation Green Tribunal vide Order Dated 27.04.2022 in OA No. 300/2022 in the matter of News item published in News 18 dated 26.04.2022 titled "Delhi: Massive Fire at Bhalswa Dump Yard, Fourth This Year; 13 Fire Tenders on Spot" constituted Joint Committee headed by Hon'ble Justice (Retd.) Sh. S.P. Garg, Former Judge, Delhi High Court to ascertain factual situation in respect of present incident and suggest further course of action after interaction with the concerned stakeholders. The Committee may consider the landfill dump as isolated and vulnerable site which requires On-site and Off-site fire and other disaster management plans.

And whereas, CPCB vide letter dated 26.05.2022 has issued directions u/s 5 of the Environment (Protection) Act, 1986 for implementation of the Solid Waste Management Rules, 2016 regarding fire incidents at MSW Dumpsites to all State Pollution Control Boards (SPCBs) / Pollution Control Committees (PCCs) including DPCC (Copy of the directions of CPCB enclosed).

And whereas, a Briefing was given by the officers of Municipal Corporation of Delhi (MCD) & DPCC regarding various issues related to prevention & control of fire incidents at the Dumpsites before the Hon'ble Environment Minister, Govt. of NCT of Delhi on 02.06.2022 at Bhalaswa Dumpsite. Report of the visit to Gorai and Deonar Dumpsites in Mumbai on 05.05.2022 & 06.05.2022 was also briefed by the Joint Team of DPCC, EDMC and North DMC (Copy of the Report enclosed). Minutes of the Briefing given and Decision taken on 02.06.2022 at Bhalaswa Dumpsite by the Hon'ble Environment Minister, Govt. of NCT of Delhi are enclosed.

Now therefore, in view of the above and in exercise of the powers conferred upon Delhi Pollution Control Committee, following directions u/s 5 of Environment (Protection) Act, 1986, as amended to date, read along with Solid Waste Management Rules, 2016 are issued to Municipal Corporation of Delhi (MCD), Department of Urban Development, Govt. of NCT of Delhi & District Disaster Management Authorities (East District, North District & South-East District):

1. Construct approach road at periphery around the Dumpsite in order to facilitate movement of vehicles, Patrolling teams and Fire Tenders.
2. Construct RCC Boundary Wall of at least 4 meter height with proper barbed wire fencing at the periphery of the dumpsite to prevent unauthorized entry in the dumpsite.
3. Authorize some Agency (ies) at the Dumpsite for segregation of fresh MSW being dumped at the site to prevent unauthorized entry of any ragpickers.
4. For release of methane generated from the Dumpsite, perforated HDPE pipes or of any other suitable material may be provided at the Dumpsite at suitable locations with proper spacing as per the site requirement. Pipes should be of at least 6 meter height (4 meter below the dump and 2 meter above the dump).
5. Constitute dedicated Surveillance Squad with adequate man power and vehicle to have strict vigil over the activities going on at the Dumpsite. Such Surveillance Squad may be constituted comprising of Municipal Corporation, Civil Defense & Delhi Police Staff and should frequently take rounds of the Dumpsite (at least every two hours). MCD to pursue with Delhi Police for providing Police Pickets at the Dumpsite for prevention of unauthorized entry.
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7. Provide adequate water storage capacity at the dumpsite for control of fugitive dust & fire (underground reservoir of at least 50 KL capacity).
8. Ensure installation of Spark Arrester with the Exhaust System of the Vehicles / Trucks entering / Other Machinery at the Dumpsite premises to prevent fire incidents due to spark from vehicles.
9. Prepare on-site Emergency Plan for controlling fire in consultation with DDMA. Prepare detailed site specific separate SOPs for prevention of fire incident and control of fire in case of fire incident. Besides Delhi Fire Service, DDMA to be called in case of any emergency including fire incidents & waste sliding at the dumpsite.


10. Municipal Corporation of Delhi shall strictly implement above directions to prevent fire at dumpsites and report the progress on abovementioned directions (works/measures taken) every fortnightly to the Office of Environment Minister, GNCTD and DPCC.

11. Following Directions w.r.t Directions issued by CPCB to DPCC :

- i. Provide updated information w.r.t Directions dated 23.03.2021 issued by DPCC regarding Biomining of Legacy Waste at three Dumpsites at Ghazipur, Bhalaswa & Okhla in Delhi
- ii. Department of Urban Development, Govt. of NCT of Delhi shall conduct comprehensive risk assessment studies and accordingly prepare detailed On-site Emergency Plan for each dumpsite in Delhi addressing the following issues:
  - a. The onsite emergency plan to cover potential risks / emergencies due to fire, obnoxious / flammable emissions, odour, vector borne diseases, rodents, bird nuisance, seasonal affects i.e. summer/ winter / monsoon (rainy season) and all other potential risks at the dumpsites.
  - b. The onsite emergency plans to address the worst possible case scenarios preferably using appropriate risk assessment software covering any or all of the potential emergency issues / scenarios cited above.
  - c. The on-site emergency management plan to cover likely affected geographical area including population, flora & fauna in and around the dumpsites.
  - d. The on-site emergency plan to contain detailed remedial measures both hardware and software based for mitigating various emergency situations, which should finally be available with respective control rooms and on-site emergency notice boards.
- iii. District Disaster Management Authorities (East District, North District & South-East District) shall integrate such (dumpsites) On-site Emergency Plans with the existing Off-site District Disaster Management Plans in their respective Districts, prepared by the MCD in compliance with Rule 14 of The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989.
- iv. Department of Urban Development, Govt. of NCT of Delhi shall prepare the on-site & off-site (or update off-site) emergency management plans preferably through an expert agency on the subject.
- v. The following interim measures shall be implemented on priority till the time Onsite/Off-site Emergency Plans are prepared and implemented.
  - a. **Disposal of Waste:** Fresh waste not to be disposed at the dumpsite where bio-remediation is being undertaken. Organic waste from slaughter house, fish market etc., industrial waste not to be disposed at the dumpsite. It is to be further ensured that industrial waste / E-waste/ lithium battery is not dumped at the site. Waste that is being unloaded at the site should be examined visually for potential fire sources when located, should be neutralized with cover material immediately. Emergency tipping area to be provided to set aside from the immediate working area where incoming loads of material known to be on fire or suspected of being so can be deposited, inspected and dealt with. Adequate compacting of waste to be done to minimize formation of air or methane pockets which can lead to subsurface fire at site.
  - b. **Monitoring at dumpsites:** Methane Gas Detectors (on downwind side) to be installed at site so that area with high methane concentration can be identified and preventive actions be undertaken. Further temperature at windrows to be monitored with non-contact infrared thermometer (as used for monitoring human body temperature under COVID circumstances) and records be maintained for any major deviations. The temperature is to be in the range of 35°C to 59°C. Treated leachate/ water to be sprayed on the waste when rise in temperature is observed at the bioremediation site. Suitable mechanism to be in place. Installation of CCTV cameras at the site and provision of fencing & frequent patrolling to be done for checking unauthorized entry at dumpsite.

- c. **Arrangements for Fire Extinguishing:** Arrangements for adequate Storage of sand / chemical fire extinguishing medias such as foam or powder at site to be made to douse fire in case a fire incident is reported. Usage of water for dousing fire to be avoided. Isolation and allowing rapid natural burnout or smothering with soil to be done for dousing dumpsite fires. Dedicated fire tenders (preferably chemical extinguishing media) and adequate fire safety measures are to be deputed, specifically during Summer season when dumpsites fire is more likely to take place. All mobile equipment or vehicles should be fitted with fire extinguisher and spark arrester.
- d. **Health & Safety of Workers:** Fire protection measures and safety equipment to be provided to all workers at the site and checked before entry to the dumpsite. Workers to be trained for detection of fire and necessary action to be taken in case of fire. Periodic training of workers be conducted in Safe handling of Waste, PPEs, Health & Safety issues etc.
- e. **Mock Drills & Safety Audits:** Periodic mock drills to be conducted to prevent fire accidents at dumpsites. Quarterly, Fire Safety and Hazardous Emissions Audits to be conducted.

Abovementioned Departments/ Organisations are hereby directed to strictly comply with the said directions and submit the Action Taken Report to DPCC within 15 days.

  
(Dr. K. S. Jayachandran)  
Member Secretary, DPCC


**Enclosures: As above**

To,

1. The Commissioner, Municipal Corporation of Delhi (MCD), Dr. S.P.M Civic Center, JLN Marg, New Delhi - 110002.
2. The Secretary, Urban Development Department, Govt. of NCT of Delhi, 9th Floor, Delhi Secretariat, I.P. Estate, New Delhi -110002.
3. The Chief Executive Officer, District Disaster Management Authority (North District), District Magistrate Office (North), Alipur, Delhi - 110036.
4. The Chief Executive Officer, District Disaster Management Authority (East District), District Magistrate Office (East), L.M. Bund, Shastri Nagar, Delhi-110031.
5. The Chief Executive Officer, District Disaster Management Authority (South East District), District Magistrate Office (South East), Old Gargi College Building, Lajpat Nagar -IV New Delhi -110024.

Copy to:

1. The Chairman, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032.
2. Staff Officer to Chief Secretary, Govt. of NCT of Delhi, 5th Level, Delhi Secretariat, I.P. Estate, Delhi - 110002.
3. Secretary to Hon'ble Environment Minister, Govt. of NCT of Delhi, 7<sup>th</sup> Level, Delhi Secretariat, I.P. Estate, Delhi - 110002.

  
(Dr. K. S. Jayachandran)  
Member Secretary, DPCC



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केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
CENTRAL POLLUTION CONTROL BOARD  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार  
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE GOVT. OF INDIA

CP-99/143/2021-UPC-II-HO-CPCB-HO

May 26, 2022

To,

The Chairman  
All SPCBs/ PCCs

**Sub: Directions under Section 5 of Environment (Protection) Act, 1986 for implementation of the Solid Waste Management Rules, 2016-regarding Fire Incidents at MSW Dumpsites.**

WHEREAS, the Ministry of Environment, Forest & Climate Change has notified Solid Waste Management Rules on April 08, 2016 which inter-alia state procedures for Solid Waste Management;

WHEREAS, in accordance with Rule 11(d) of the Rules, it is the duty of the State/UT Urban Development Department to ensure implementation of provisions of these Rules by all local authorities;

WHEREAS, in accordance with Rule 15(a) of the Solid Waste Management (SWM) Rules, 2016, the local authorities and Panchayats should prepare a solid waste management plan as per state policy and strategy on solid waste management within six months from the date of notification;

WHEREAS, in accordance with provision of Rule 15(zd) of the SWM Rules, 2016, the local authorities and Panchayats shall ensure that the operator of a facility provides personal protection equipment including uniform, fluorescent jacket, hand gloves, raincoats, appropriate foot wear and masks to all workers handling solid waste and the same are used by the workforce;

WHEREAS, in accordance with provision of Rule 16 (1a) of SWM Rules, 2016, the State Pollution Control Board or Pollution Control Committee shall enforce these rules in their State through local bodies and review implementation of these rules at least twice a year in close coordination with concerned Directorate of Municipal Administration or Secretary-in-charge of State Urban Development Department;

WHEREAS, MSW is being disposed of unscientifically in most cases which is one of the major causes for public nuisance due to frequent fire incidents, foul odour, generation of leachate and other adverse environmental impacts;

WHEREAS, waste disposed at dumpsites is prone to catching fire in view of inadequate waste management practices adopted at these sites;

WHEREAS, several fire incidents have been reported recently at Ghazipur & Bhalsawa dumpsites in Delhi, Manesar in Haryana and Ludhiana in Punjab;

'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली-110032  
Parivesh Bhawan, East Arjun Nagar, Delhi-110032  
दूरभाष/Tel : 43102030, 22305792, वेबसाईट/Website : www.cpcb.nic.in

**WHEREAS**, fire incidents at dumpsites may lead to severe adverse impact on environment and related health hazards. People living in and around the dumpsites are likely to be affected due to the frequent outbreaks of fire

**WHEREAS**, Hon'ble NGT in OA No. 286 of 2022, in reference to News item published in The Indian Express dated 20<sup>th</sup> April, 2022, titled "7 Charred to death in fire near Ludhiana dumpsite" issued the following Directions:

*"CPCB to collect information about garbage dumpsites from all States/ UTs in respect of at least Metro cities and issue statutory directions / guidelines for preventing such fires and handling them effectively if they take place, specifying serious consequences of delay in dealing with the issue, in violation of binding rules."*

**WHEREAS**, as per the information provided by SPCBs/PCCs there are 3,184 dumpsites in the country, of which XXX are located in your State/UT;

**WHEREAS**, CPCB had issued Directions dated October 20, 2018 regarding fire at Bhalsawa site to North Delhi Municipal Corporation in which specific measures to be taken for prevention of fire at the dumpsites had been identified which amongst others included using Construction & Demolition waste material to immediately check fire, stopping dumping of fresh waste, installation of CCTV cameras, setting up of decentralized facilities for biodegradable waste:

**WHEREAS**, as per Guidelines for Disposal of Legacy Waste (Old Municipal Solid Waste) issued by CPCB, it is important to carry out comprehensive risk assessment and develop onsite emergency plan which should be kept handy prior to commencement of dumpsite bio-remediation & bio-mining;

**WHEREAS**, CPCB had issued following Directions dated January 27, 2021 to SPCBs/PCCs regarding biomining of legacy waste

- i. SPCBs/PCCs to provide complete list of legacy waste dumpsite in their States /UTs as per format enclosed
- ii. SPCBs/PCCs to ensure that necessary action for biomining and bio-remediation of these dumpsites is done by the concerned Local authorities in compliance with provisions of SWM Rules 2016
- iii. SPCBs/PCCs shall ensure that concerned Local authorities engaged in the biomining process of legacy waste follow procedures as per CPCB Guidelines for disposal of legacy waste with specific compliance to the following points:
  - a. Analysis of various screened fractions i.e. RDF, fine earth / bio earth etc. prior to its disposal / utilization
  - b. Preparation of action plan for utilization / disposal of screened fractions
  - c. Adequate provisions for leachate treatment
  - d. Maintenance of records / documents for disposal / utilization of the RDFs or fine earth and other material

- iv. SPCBS shall ensure that the local bodies prepare time targeted Action Plan for biomining / bio-remediation of these dumpsites in compliance with points listed above. The timeline as specified in SWM Rules and Hon'ble NGT Directions on the matter are to be adhered to for remediation of these sites
- v. SPCBs/PCCs to ensure that no fresh waste is disposed at these dumpsites and local authorities make proper arrangement for management of fresh solid waste
- vi. SPCBs/PCSS to ensure that at least one legacy waste dumpsite is remediated in their jurisdiction which can be considered as model for compliance for other legacy waste dumpsites in Non-Attainment Cities

**WHEREAS** Hon'ble NGT in its Order dated April 22, 2022 in O.A No. 288/ 2022 regarding News item published in the Times of India dated April 22, titled "Delhi: Another long-drawn effort to douse fire at Ghazipur landfill" has stated that dumpsite may be considered as isolated and vulnerable site which require On-site and Off-site Fire and other disaster management plans; **AND**

**WHEREAS**, CPCB made the following observations based on inspected various dumpsites, where bioremediation of legacy waste is being carried out:

- i. Fresh solid waste continued to be dumped at these dumpsites.
- ii. Fire incidents have been reported at locations where fresh waste is being dumped
- iii. Inaccessible slopes of garbage were observed
- iv. No standard operating plan in place for prevention and management of dumpsite fires
- v. Cause of fire incident reported is excess release of Methane (CH<sub>4</sub>) gas due to anaerobic decomposition of the bio-degradable organic waste, high temperature and dry atmospheric conditions.
- vi. Partial fencing with barbed wire provided at the boundary observed.
- vii. Police patrolling the site not observed.
- viii. No fire tender observed at site.
- ix. Anti-Smog Gun have been installed which were not found in use; **AND**

**NOW THEREFORE**, in view of above and in exercise of powers vested under section 5 of Environment (protection) Act, 1986 to the Chairman, Central Pollution Control Board (CPCB) the following directions are issued for compliance;

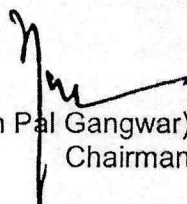
- i. Provide updated information w.r.t Directions dated 27.1.21 regarding biomining issued to SPCBs/PCCs. It is to be ensured that updated information w.r.t at least all Metro cities is provided in accordance with NGT Directions
- ii. Direct State UDDs to conduct comprehensive risk assessment studies and accordingly prepare detailed On-site Emergency Plan for each dumpsite located in their jurisdiction addressing the following issues:
  - a. The onsite emergency plan to cover potential risks / emergencies due to fire, obnoxious / flammable emissions, odour, vector borne diseases,

- rodents, bird nuisance, seasonal affects i.e. summer / winter / monsoon (rainy season) and all other potential risks at the dumpsites.
- b. The onsite emergency plans to address the worst possible case scenarios preferably using appropriate risk assessment softwares covering any or all of the potential emergency issues / scenarios cited above.
  - c. The on-site emergency management plan to cover likely affected geographical area including population, flora & fauna in and around the dumpsites
  - d. The on-site emergency plan to contain detailed remedial measures both hardware and software based for mitigating various emergency situations, which should finally be available with respective control rooms and on-site emergency notice boards.
- iii. To direct District Collector or District Emergency Authority designated by the State Government for integrating such (dumpsites) On-site Emergency Plans with the existing Off-site District Disaster Management Plans in their respective Districts, prepared by the Local Authorities in compliance with Rule 14 of The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989
  - iv. The State / UT Authorities to prepare the on-site & off-site (or update off-site) emergency management plans preferably through an expert agency on the subject.
  - v. The following interim measures to be implemented on priority till the time On-site/Off-site Emergency Plans are prepared and implemented.
    - a. **Disposal of Waste:** Fresh waste not to be disposed at the dumpsite where bio-remediation is being undertaken. Organic waste from slaughter house, fish market etc., industrial waste not to be disposed at the dumpsite. It is to be further ensured that industrial waste / E-waste / lithium battery is not dumped at the site. Waste that is being unloaded at the site should be examined visually for potential fire sources fire sources when located, should be neutralized with cover material immediately. Emergency tipping area to be provided to set aside from the immediate working area where incoming loads of material known to be on fire or suspected of being so can be deposited, inspected and dealt with. Adequate compacting of waste to be done to minimize formation of air or methane pockets which can lead to subsurface fire at site
    - b. **Monitoring at dumpsites:** Methane Gas Detectors (on downwind side) to be installed at site so that area with high methane concentration can be identified and preventive actions be undertaken. Further temperature at windrows to be monitored with non-contact infrared thermometer (as used for monitoring human body temperature under COVID circumstances) and records be maintained for any major deviations. The temperature is to be in the range of 35°C to 59°C. Treated leachate / water to be sprayed on the waste when rise in temperature is observed

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- at the bioremediation site. Suitable mechanism to be in place. Installation of CCTV cameras at the site and provision of fencing & frequent patrolling to be done for checking unauthorized entry at dumpsite
- c. **Arrangements for Fire Extinguishing:** Arrangements for adequate storage of sand / chemical fire extinguishing medias such as foam or powder at site to be made to douse fire in case a fire incident is reported. Usage of water for dousing fire to be avoided. Isolation and allowing rapid natural burnout or smothering with soil to be done for dousing dumpsite fires. Dedicated fire tenders (preferably chemical extinguishing media) and adequate fire safety measures are to be deputed, specifically during summer season when dumpsites fire is more likely to take place. All mobile equipment or vehicles should be fitted with fire extinguisher and spark arrester
- d. **Health & Safety of Workers:** Fire protection measures and safety equipment to be provided to all workers at the site and checked before entry to the dumpsite. Workers to be trained for detection of fire and necessary action to be taken in case of fire. Periodic training of workers be conducted in Safe handling of Waste, PPE's, Health & Safety issues etc
- e. **Mock Drills & safety audits:** Periodic mock drills to be conducted to prevent fire accidents at dumpsites. Quarterly, Fire Safety and Hazardous Emissions Audits to be conducted.

SPCBs/PCCs are hereby directed to submit action taken report within 15 days for Action Point listed at (v) above. Action taken report for Points (i-iv) to be provided within thirty days of receipt of these Directions

  
(Naresh Pal Gangwar)  
Chairman

Copy to:

1. **Additional Secretary (CP Division)**  
**Ministry of Environment, Forests & Climate**  
**Change,**  
Indira Paryavaran Bhawan, Jor Bagh Road,  
New Delhi - 110003

: for information please

2. **DH-IT Division, CPCB**

: for uploading on website please

  
(Prashant Gargava)  
Member Secretary

o/c

**Report of the Joint Team of DPCC, EDMC and North DMC Officials on the Visit to  
Gorai and Deonar Dumpsites in Mumbai on 05.05.2022 & 06.05.2022.**

**1. Background**

Ghazipur & Bhalaswa Dumpsites in Delhi are not an Engineered Sanitary Landfill and used for dumping of Municipal Solid Waste (MSW) since 1984 & 1994 respectively. Fire incidents have occurred at Ghazipur dumpsite on 28.03.2022, 09.04.2022, 20.04.2022 & at Bhalaswa Dumpsite on 26.04.2022. The Hon'ble Environment Minister, Govt. of NCT of Delhi took a meeting with Experts from IIT Delhi, Centre for Science & Environment, GAIL, IGL, TERI, ICAR- IARI etc. on 21.04.2022 regarding measures to control fires at MSW Dumpsites in Delhi. Officials from EDMC, North DMC, DPCC and Environment Department, Govt. of NCT of Delhi were also present during the meeting.

In the said meeting, Professor Manoj Dutta from IIT Delhi pointed out that Methane Gas is being emitted from all the 3 Dumpsites in Delhi (Ghazipur, Bhalaswa & Okhla) and suggested to establish Gas Wells at the Dumpsites with gas flaring system along with covering of dumping site with fine soil for controlling sudden fires. The slope of the dumpsite specifically at Ghazipur needs to be flattened. He further emphasized that even the short term solution will take at least one year to implement. Dr. Bhupinder Singh, Head of Environment Division, IARI, emphasized on the need of waste segregation at source in order to resolve the issue of fire incidents at dumpsites in Delhi on a long term basis. Reclaiming the dumpsites will take about 1-2 years at least and segregation of material is the prime need to ensure no waste decomposition takes place at the dumpsite.

After detailed discussions and deliberations on the various issues, Hon'ble Environment Minister, GNCTD, directed that a team of officers from Environment Department, DPCC and Municipal Corporations (EDMC & North DMC) to visit Mumbai to explore adoption of techniques on controlling fires, as opted at dumpsite of Mumbai.

Hon'ble Environment Minister, GNCTD, after the fire incident at Bhalaswa Dumpsite on 26.04.2022 again called a meeting on 28.04.2022 and directed for the visit of Gorai Dumpsite in Greater Mumbai to know about the existing Methane Capturing System and other details related to management of Dumpsite.

In view of the above, a team comprising of following officers visited the Gorai & Deonar Dumpsites in Mumbai on 05.05.2022 & 06.05.2022 respectively :

1. Sh. D. K. Singh, Sr. Env. Engr., DPCC
2. Sh. Rajeev Kumar Sharma, Env. Engr., DPCC
3. Sh. Roop Chand, SE (E&M), North DMC
4. Sh. Tarun Shankar Arya, AE, EDMC

**2. Gorai Dumpsite**

The team visited the Gorai Dumpsite in Mumbai on 05.05.2022. Concerned officials from Municipal Corporation of Greater Mumbai (MCGM) [Sh. Minesh Pimple, Chief Engineer, (SWM Project), Ms. Varsha Athalye, Executive Engineer (Gorai), Sh. Kamble, Asst. Engineer (Deonar Dumpsite)],

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Maharashtra Pollution Control Board (MPCB) [Dr. J.B. Sangewar, RO (Head Quarters), Sh. S.R. Bhosale, RO (Mumbai), Sh. S.S. Dholam, SRO, Sh. A.S. Nandvate, SRO, Ms. Smita Vanave, Field-Officer] and UPL Limited (United Phosphorus Limited) [Sh. Kamlesh Parikh and Sh. Debarish. Mukharjee) were present during the visit.

The team interacted with aforementioned officials and a presentation was also given by MCGM on the Scientific Closure of Gorai Dumping Ground & its Subsequent Maintenance. Various issues related to Dumpsites including Fire Incidents, Management of MSW, Methane Generation & Preventive Measures were also discussed with the officials of MCGM, MPCB & UPL Ltd.

It was informed that about 6800 TPD of MSW is generated in Mumbai, out of which 84% is processed and rest is dumped. There are four sites for Disposal of MSW in Mumbai out of which two are closed, i.e., Gorai and Mulund Dumpsites and MSW is being disposed at operational sites at Kanjur (Processing Facility) and Deonar (Dumpsite). It was informed that Bio-mining is being carried out at Mulund Dumpsite. Maximum Temperature in Mumbai is about 42°C this year however Maximum Temperature usually is 37 - 38°C.

**The team visited the Gorai Dumpsite along with the officials of MCGM, MPCB & UPL Ltd. and following information was gathered from the officials and observation made during the visit:-**

The Gorai site is located at Borival in the Western Suburbs of Mumbai. It spreads over an area of 19.6 hectare (ha) & was operational since 1972. The dumpsite is very close to Gorai Creek & habitation. 1200 TPD of MSW from Western Suburbs of Mumbai was received at the dumpsite till 31 December, 2007 after which MCGM had stopped dumping fresh waste at Gorai. About 2.34 Million of MSW was lying at the dumpsite. Average height of the Dumpsite was 26 meters. Before closure, Gorai Dumpsite was operated in an open manner causing emission of Green House gases. There were agitations by the local public against the Dumpsite due to its adverse effects on the health of nearby residents and surrounding environment. As the Gorai dumpsite was located close to Gorai Creek, the growth of the mangroves in the Creek was affected due to continuous flow of leachate generated from the Dumpsite. Gorai Dumpsite had frequent fire incidents, odour nuisance complaints etc.

To avoid further detrimental effects on the environment due to the waste dumped at the Gorai Dumpsite and as per the orders of the Hon'ble Supreme Court, MCGM decided to close the Gorai Dumpsite scientifically as per the then applicable MSW Rules, 2000. During closure no major challenges were faced except some small incidences of road accidents as the site involved constructional activities.

The Scientific Closure Plan of the Gorai Dumpsite envisaged scientific closure and converting about 19.6 ha of land into green landscaped space. The contract for scientific closure was awarded to M/s. United Phosphorus Limited along with Joint Venture partners M/s. Van Der Weil Strotgas B.V. of Netherlands in 2007. The work of closure of Dumpsite started in March, 2008 and completed in July, 2009 (16 Months). Operation and Maintenance of the closed Dumpsite started in July, 2009 for a period of 15 years. The cost of the project was Rs.62 Crores including post closure maintenance for 15 years..

**The Scientific Closure Plan included the following components:-**

- Relocation & Reformation of existing waste - Haphazardly dumped waste was shifted within the footprint area and it was compacted & reformed creating waste profiles as per design.
- Covering of reformed slopes & plain area with liner system & then with the soil cover.
- Liner system was comprised of the following layers.

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- i. Layer of Geo-Textile liner on the crushed earth material i.e., C & D material for providing cushioning layer. Geo-Textile liner prevented damage or puncturing caused due to the crushed earth material to the next layer of Geo-membrane i.e., HDPE (High Density Poly Ethylene) liner.
  - ii. Layer of Geo-membrane i.e., HDPE (High-Density Poly Ethylene) liner to prevent air, water and gases to enter or escape from the MSW.
  - iii. Layer of Geo-Composite liner which is a sandwich material of Geo-Textile liners with Geo-Net in between the two Geo-Textile liners. Geo- Composite liner is used as a drainage layer which allows the water to percolate and slide down through its surface without further interference.
- Landscaping - Greenery was developed over the capped area.
  - Surface water drainage for channeling the storm water.
  - Construction of compound wall, Sheet piling on the creek side to prevent leachate from entering the creek water.
  - Installation of Landfill Gas (LFG) collection & leachate collection system Installation of flaring system.
- ❖ Station for Landfill Gas (LFG) capture & flaring has been installed so that methane content in the LFG is not directly emitted to the environment. This is a reliable and environmentally safe process to incinerate the LFG. The flare system consists of flare burner along with chimney of around 12 meter height.
- ❖ **Provided 19 leachates wells and 30 gas collection wells.** Leachates collected through leachate manifold system to leachate collection tanks provided capacity of 5000 liters and sent to Versova WWTP for further treatment and disposal. The treated waste water is disposed on land for gardening on Gorai dump site soil cover.
- ❖ Provided 30 gas collection wells. The gas collection system consists of manifold system with a common header of loop-1 and loop-2. Methane comes to gas flaring station via blower, moisture trapping, fume arrestor and through flow meter along with partial gas analyzer system connected after blower for measuring methane percentage. Depend upon availability of gas the flair system will running continuously with monitoring of sanction and discharge, temperature and pressure and flow as well. Capacity of flaring system is 1500 nm<sup>3</sup>/ hrs.). They have planted indigenous species and grasses in land scraping area for maintaining the site.

Methane collection system at the Gorai Dumpsite comprises of network of perforated Pipes (HDPE) laid down horizontally and vertically for collection of methane generated from the dumpsite. Gas Wells at various locations were provided for collection of methane and leachate from the wells. HDPE Pipes were provided from the wells to the Gas Flaring Station constructed near the Dumpsite for flaring methane gas. Leachate generated from the Dumpsite was being recirculated within the dumpsite using the pumps.

For flaring of methane gas, a stack of 12 meter height above ground has been provided. It was informed that the flaring system was commissioned in July, 2009 and approx. 1.6 Crore m<sup>3</sup> of methane has already been flared (burnt). It was informed that faring of methane is done with automatic system having pumps and methane flow meter. It was informed that in the beginning the methane concentration was 35-40%, now it is 20-25% and the H<sub>2</sub>S concentration is less than 1%.

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A study has been awarded by MCGM to IIT Mumbai to assess the quality of compost in the closed Gorai Dumpsite for its proposed Bio-mining in future.

- ❖ The operation and maintenance of the closed Dumpsite is being carried out by M/s. United Phosphorous Ltd & Vanderwell JVS (UPL), Madhuvan Park, Khar (W), Mumbai-52.

❖ **Benefits of Gorai Dump Site Closure:**

- Quality of life of people of Gorai improved.
- Quality of marine life improved.
- Market value of property in the area increased resulting in increases in property tax collection to MCGM.
- Fishermen's income increased because of better marine environment.
- Mangroves got rejuvenated resulting in healthy biodiversity.
- 19 Hectare of green lung added to the City of Mumbai.
- Green House Gases (GHG) emission stopped resulting in reducing carbon footprints in the city.
- Prevention in occurrence of problem like foul odour, fire, health hazards & breeding of flies & rodents.

**Awards**

- For Gorai Project, Maharashtra State won 1st prize for "All India Winner of 9<sup>th</sup> CONSTRU Excellence Award 2010" in Urban Infrastructure Development sector for case study received from several State Govt. from all over India on "Successful Registration of CDM project for Earning Carbon Credits-Gorai Closure Project.
- Gorai Scientific Landfill Closure Project was nominated as one of the top 10 Public Private Partnership (PPP) Projects in the East Asia, Pacific and South Asia region by the International Finance Corporation (IFC) in 2013.
- Gorai Project was awarded City to City Barcelona FAD Award 2014.

**3. Deonar Dumpsite**

It was informed by the officers of MCGM & MPCB that Deonar Dumpsite is active Dumpsite where 500-700 TPD MSW is being dumped. Area of the Dumpsite is about 300 Acre (120 Hectare) and the Dumpsite is in use since 1927. About 90 Million Tons of legacy waste is dumped at the Dumpsite. Height of the Dumpsite is about 30 meter above the ground and average height is about 18 meter. The team took a round of the dumpsite alongwith officials of MCGM & MPCB and observed that fresh waste was being dumped.

**Following are the other salient information provided to the team during the visit :**

- Construction of RCC Boundary wall of about 4 meter height at the periphery of the Dumpsite.
- 11 Nos. of Watch Towers for surveillance of the dumpsite.
- 40 Nos of CCTV Cameras at periphery.
- 15 Nos. of CCTV Cameras at weighbridges and other locations.
- No. of Perforated HDPE Vent Pipes of 6 meter length, (4 meter below dump & 2 meter above dump) at distance of 50-60 meter between the two pipes , provided at the old dumpsite area.
- Gas Wells of 4ft x 4ft size with height of 6-7 ft. provided at various locations in the dumpsite
- 12 Nos. of FRP Cabin at various locations inside Dumpsite.

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- 04 Nos of operational Bore wells.
- 310 Nos. of Vent Pipes erected at various locations in the Dumpsites.
- 05 Nos. of FIREX Water tankers (Fire Engine cum Water Tanker) of 10000 Liters Capacity each along with Sprinkler System
- 106 Nos. of Maharashtra State Security Corporation Staff deployed at the Dumpsite for regular surveillance of the Dumpsite.
- 3 No. of 4x4 Patrolling vehicles for surveillance and other works.
- 40 Nos. of Rechargeable LED Flashlight
- 12 Nos. Mobile High Mast
- Solar operated Peripheral Lighting Arrangement at the dumpsite.
- The Database Management System Software is operational for online data entries of daily surveillance and fire observation report.
- Following machinery has been deployed at the dumpsite :
  - Bulldozer - 7
  - Excavator - 2
  - Backhoe Loader - 2
  - Poclain - 7
  - Hyva / Truck - 3
  - Sheep Foot Roller - 1 (for compaction of Waste)
  - Tractor - 2
  - Sprayer - 2

MPCB Representative informed that Ambient Air Quality in respect of PM, SO<sub>2</sub> & NO<sub>x</sub> is being monitored at the dumpsite on quarterly basis. Herbal Deodorant is sprayed for odour control at the dumpsite.

106 Security Personnel have been deployed along with patrolling vehicle in 3 shifts to prevent unauthorized entry into the premises of Dumpsite. The surveillance team takes round of the dumpsite every 2 hours for checking the unauthorized entry/ activities.

There are separate Standard Operating Procedures (SOPs) for dousing of Fire/ Smoke and also for security workforce at Deonar Dumpsite.

Parishar Bhagini Vikas Sangh an NGO has been authorized by the MCGM for Segregation / Recycling of the MSW at the dumpsite. It was informed that the said Agency has deployed about 50 Ragpickers for the purpose of segregation & recycling at the dumpsite. These Ragpickers have been authorized and provided Identity Cards. It was also informed that security personnel were deployed by Maharashtra State Security Council which is under the control of Mumbai Police.

It was informed that reforming of the dumpsite towards Thane creek has been done and average slope maintained is 1:3. NEERI has been appointed for Bio-remediation of Legacy Waste and other Environmental issues like leachate treatment, methane control etc.

A Monitoring Committee has been constituted by Maharashtra High Court w.r.t. major Fire Incidents at the Deonar Dumpsite in February, 2016. The Monitoring Committee is headed by Retd. IAS officer and having members (Retd. IPS officer, Prof IIT Mumbai, NEERI, Retd. Env. Expert, Petitioner (Raj Kumar Sharma) & Deputy Commissioner (MCGM).

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#### 4. Causes for Fire Incidents at Dumpsites

- Dumping of Unsegregated / Mixed Municipal Solid Waste containing organic Bio-degradable MSW.
- Landfilling of MSW in Unscientific manner at the Dumpsites.
- Generation of Methane Gas due to decomposition of the Bio-degradable organic waste in anaerobic condition releasing heat. Methane is explosive when its concentration varies from 5.3 to 13.9 % in the air. Heat gets accumulated in the voids created due to shrinkage caused by loss of moisture resulting into smouldering. Reduced moisture content is related to high thermal conductivity leading to spread of fire.
- Presence of combustible material in the dumped waste like Paper, Plastic, Cotton Rags, Rubber, Tyres, Dry Leaves, E-waste, etc.
- Hot Weather, Dry Atmospheric Conditions and high wind speed cause fire incidents and its spread over large area.
- Absence of Vent Pipes & Gas Collection Systems for safe release of Methane Generated from the Dumpsite.
- Sparks from Machinery, Equipment or Vehicles deployed at the Dump site.
- Failure to prevent Unauthorised entry of Persons & Ragnickers at the Dumpsite.

#### 5. Comparative Table : Salient information about Deonar Dumpsite in Mumbai and Ghazipur & Bhalaswa Dumpsites in Delhi:

S. No.	Particular	Deonar Dumpsite	Ghazipur Dumpsite	Bhalawa Dumpsite
1.	Area of Dumpsite	300 Acres	70 Acres	70 Acres
2.	Year of start of use of the Dumpsite	1927	1984	1994
3.	Legacy Waste Dumped	191 Lakh Tons	140 Lakh Tons (As in July,2019)	80 Lakh Tons (As in July,2019)
4.	Height	30 meters (Appx.)	65 meters (Appx.) (July, 2019)	65 meters (Appx.) (July, 2019)
5.	Municipal Solid Waste Generation	6800 TPD (Mumbai)	2600 TPD (EDMC)	4800 TPD (North DMC)
6.	Fresh MSW being dumped at the Dumpsite	500-700TPD	2300 TPD	2500 TPD
7.	Legacy Waste Bio-mined / Processed	Proposed (Study given to NEERI)	About 10 Lakh Ton (As on 30.04.2022)	About 25 Lakh Ton (As on 30.04.2022)
8.	CCTV Cameras installed	55	21	31
9.	Water Tankers	5 Nos (10000 Liters each)	4 Nos (9000 Litres each)	4 (2 No - 9000 Litres each 2 No - 3000 Litres each)
10.	Boundary Wall with Fencing	Constructed	Yet to be constructed	Yet to be constructed

#### 6. Recommendations

Based on the visit of closed Gorai Dumpsite & Active Deonar Dumpsite in Mumbai and Discussions held with the officers of MCGM, MPCB & UPL Ltd and also considering the present situation of Ghazipur and Bhalaswa Dumpsite following are the Short Term and Long Term measures recommended by the team :

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Short Term Measures

- i. Site specific detailed separate SOP should be prepared for prevention of fire incident and also for control of fire in case of fire incident.
- ii. On-site Emergency Plan should be prepared for controlling fire in consultation with DDMA.
- iii. Authorize some Agency (ies) at the Dumpsite for segregation of fresh MSW being dumped at the site to prevent unauthorized entry of ragpickers.
- iv. For release of methane generated from the Dumpsite, perforated HDPE pipes or of any other suitable material may be provided at the Dumpsite at suitable locations with proper spacing (say 30m) as per the site requirement. Pipes should be of at least 6 meter height (4 meter below the dump and 2 meter above the dump).
- v. Declaring and maintaining the entire Dumpsite areas as "No Smoking Zone" & "Match Box Free Zone".
- vi. Covering of fresh MSW with inert / soil of at least 10 cm as per the SWM Rules, 2016. Top surface of the open dumpsite should be properly covered with soil/ inert to cut off the oxygen supply, prevent foul odour, stop the escape of methane from pores, enhance the decomposition of waste & control bird menace.
- vii. Dedicated Police Pickets at the Dumpsite for prevention of unauthorized entry.
- viii. Provide dedicated Surveillance Squad with adequate man power and vehicle to have strict vigil over the activities going on at the Dumpsite. Such Surveillance Squad may be constituted comprising of Municipal Staff, Civil Defense & Delhi Police Staff and should frequently take round of the Dumpsite (at least every two hours).
- ix. Frequent patrolling of the team of security Personnel, Delhi Police & MCD Staff to prevent unauthorized entry / activities.
- x. Increase the number of tankers for sprinkling of water for control of dust & fire.
- xi. Deployment of adequate heavy machinery for dousing of fire (Bulldozer, Excavator, Back Hoe Loaders etc.).
- xii. Adequate water storage capacity at the dumpsite for control of fugitive dust & fire (at least 50 KL capacity).
- xiii. Upgrade the existing Water Tankers with sufficient capacity and Pumps to have adequate required pressure for extinguishing/ dousing the fire. More No of Water Tankers with Pumps are required at the Dumpsites.
- xiv. Construction of roads at periphery around the Dumpsite in order to facilitate movement of vehicles, Patrolling teams and Fire Tenders.
- xv. Stepping & cutting of slope of garbage mound at regular intervals to avoid any slippage of garbage & formation of methane gas.
- xvi. MSW Dumped at the site should be properly and regularly compacted by using Sheep Foot Roller etc.
- xvii. Adequate no. of CCTV cameras should be installed in consultation with Delhi Police and DDMA at suitable locations particularly covering vulnerable spots for fire and entire area of the Dumpsite should be covered.
- xviii. Proper Control Room with screens & adequate staff should be provided to monitor the activities through CCTV Cameras.
- xix. Trained Operators should be deployed for handling and management of MSW and operation of related plant & machinery.

*Subpal Singh*

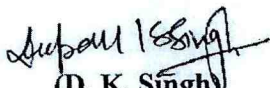
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- xx. Proper training on regular intervals should be given to all the staff deployed at the Dumpsite for management of MSW and adherence to the SOPs for prevention and control of fire incidents.
- xxi. Odour suppressing agents (e.g. herbal deodorant) should be sprayed for control of odour at the Dumpsite.
- xxii. Spark Arrester should be installed with the Exhaust System of the Vehicles / Trucks entering / Other Machinery at the Dumpsite premises to prevent fire incidents due to spark from vehicles.
- xxiii. Security Watch Towers should be installed around the dumpsite at the suitable locations to have proper watch and ward of the Dumpsite for prevention of unauthorized entry.
- xxiv. Strengthening of Staff at the Dumpsite.


### Long Term Measures

- i. RCC Boundary Wall of at least 4 meter height with proper barbed wire fencing should be provided at the periphery of the dumpsite to prevent unauthorized entry in the dumpsite.
- ii. Ensure complete (100%) bio-mining of the legacy waste dumped at the Dumpsite within the time frame submitted by Local Bodies.
- iii. Proper Segregation of MSW at the source and composting / bio-methanation/ vermi composting etc. of the biodegradable organic / wet waste to avoid dumping of biodegradable organic matter at the Dumpsite.
- iv. Recyclable materials should be segregated at Material Recovery Facilities (MRFs) and sent to Authorized Recyclers.
- v. MSW Processing Facilities with adequate capacity should be provided for managing the MSW as per the SWM Rules, 2016 and there should not be any gap in processing capacity and waste generation in Delhi.
- vi. Engineered Sanitary Landfill of adequate capacity should be provided particularly in EDMC area for disposal of rejects generated from the Waste Processing Facilities.
- vii. Stoppage of dumping of fresh waste at the Dumpsite.
- viii. Inert generated from the Bio-mining of Legacy Waste at the Dumpsite should be properly managed at the Dumpsite and disposed through the Construction Agencies (NHAI, PWD etc).
- ix. RDF generated from the Bio-mining of Legacy Waste at the Dumpsite should be properly managed at the Dumpsite and disposed through the RDF Manufacturing Plants / Waste to Energy Plants , Cement Kilns etc..
- x. Installation of CO Monitors, Methane Detectors, Temperature Sensors, Fire Alarm may be explored by Local Bodies in consultation with Expert Agencies like IIT Delhi, NEERI etc.

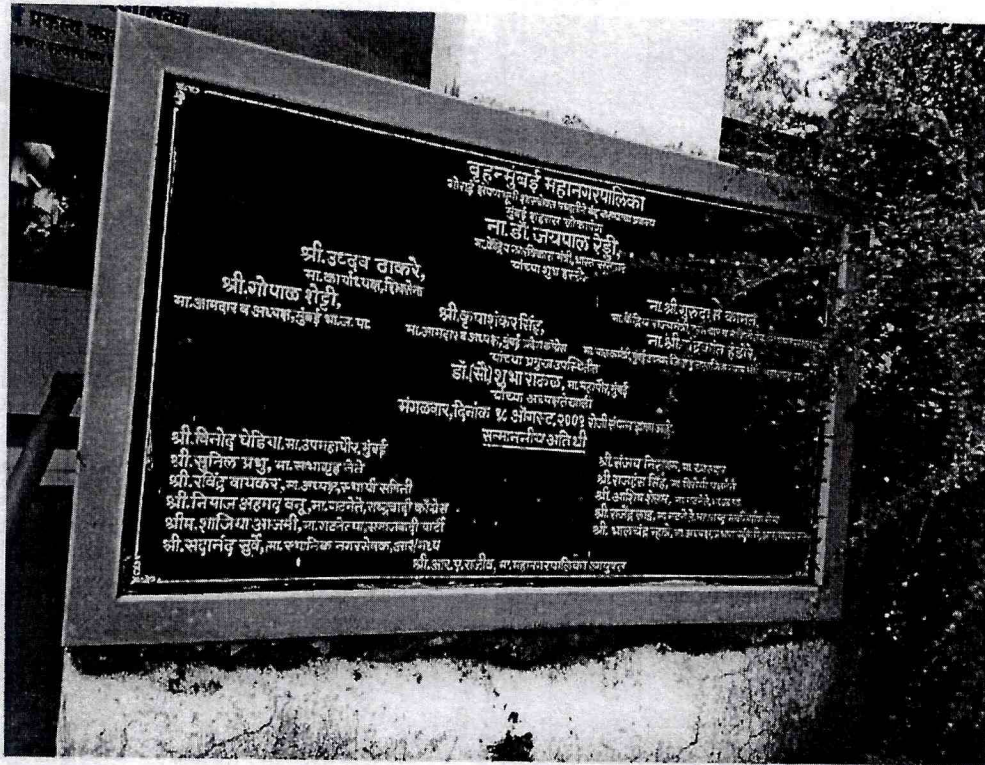
Photographs taken during the visit of Gorai and Deonar Dumpsites are enclosed.

  
(D. K. Singh)  
Sr. Env. Engr., DPCC

  
(Rajeev Kumar Sharma)  
Env. Engr., DPCC

  
(Roop Chand)  
SE (E&M) North DMC

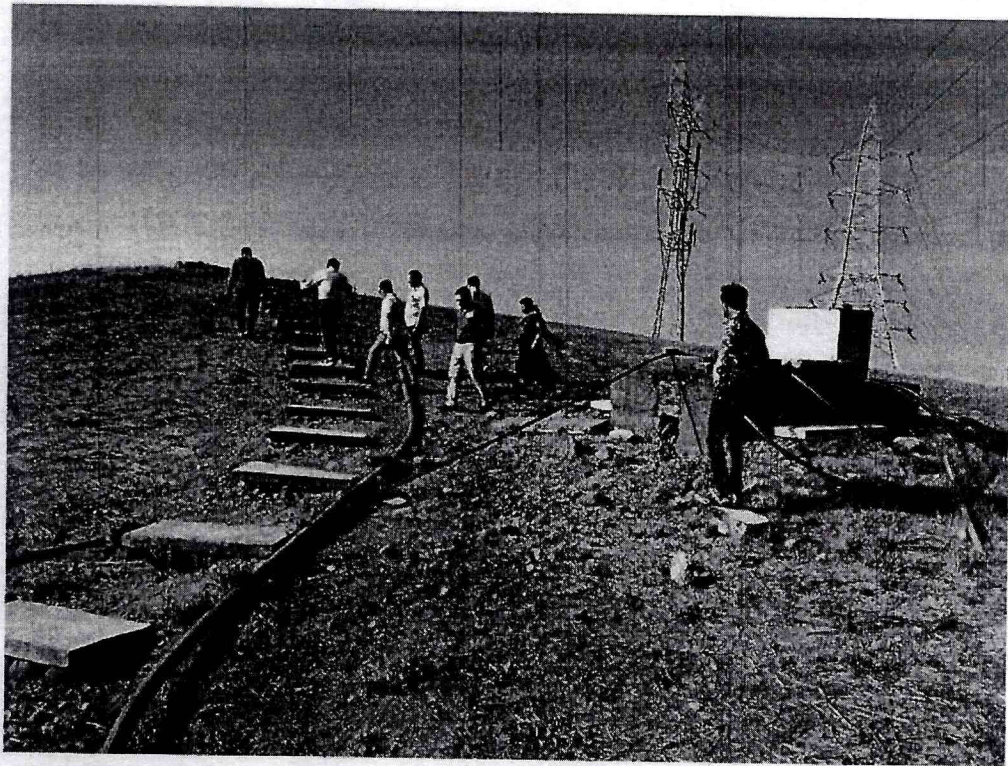
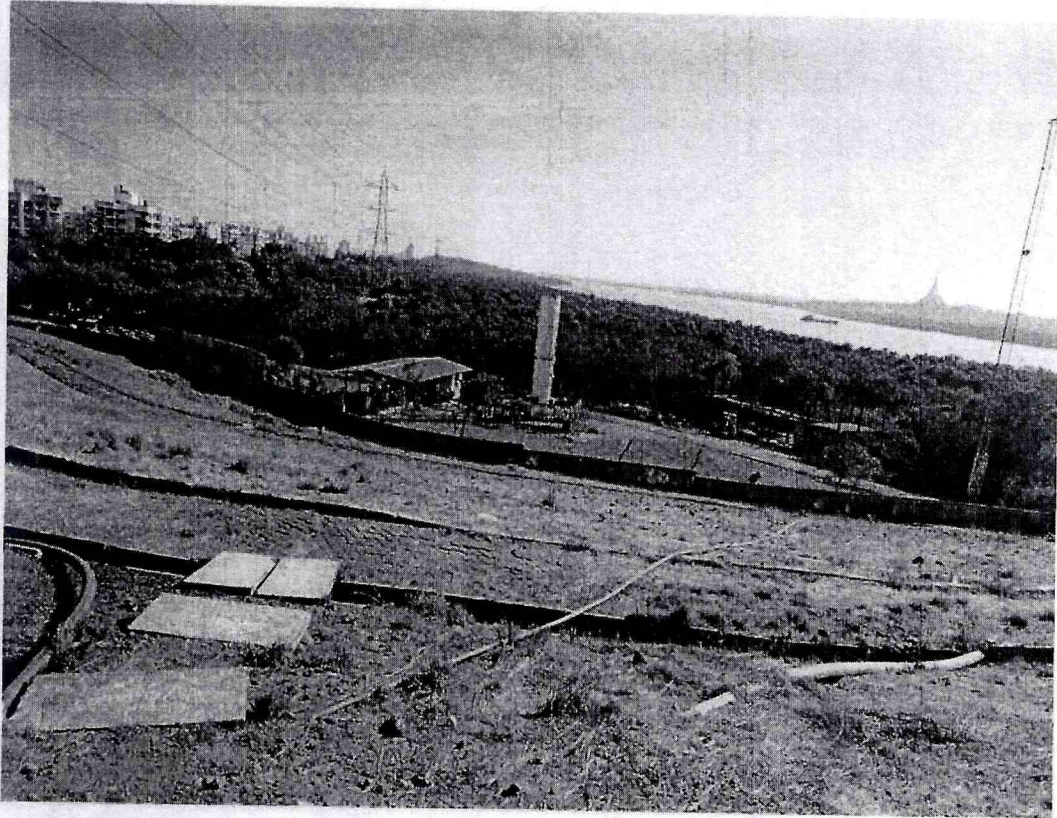
  
(Tarun Shankar Arya)  
AE, EDMC



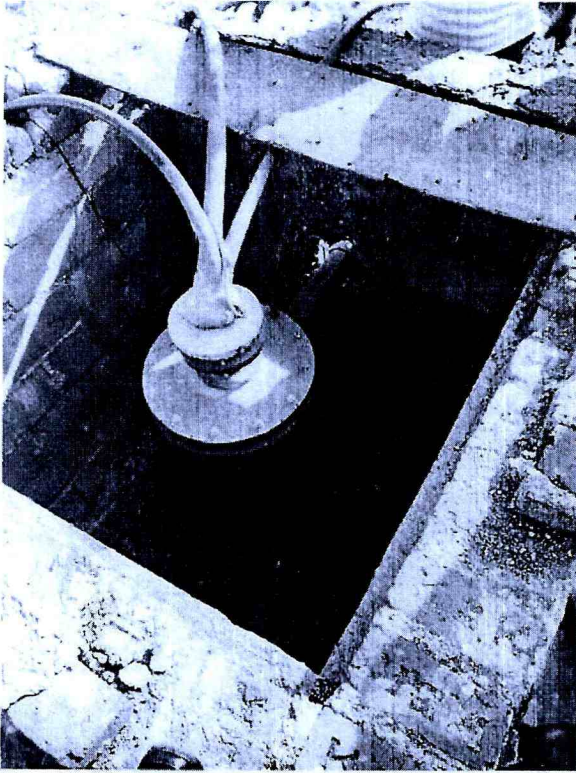
Top of the Closed Gorai Dumpsite



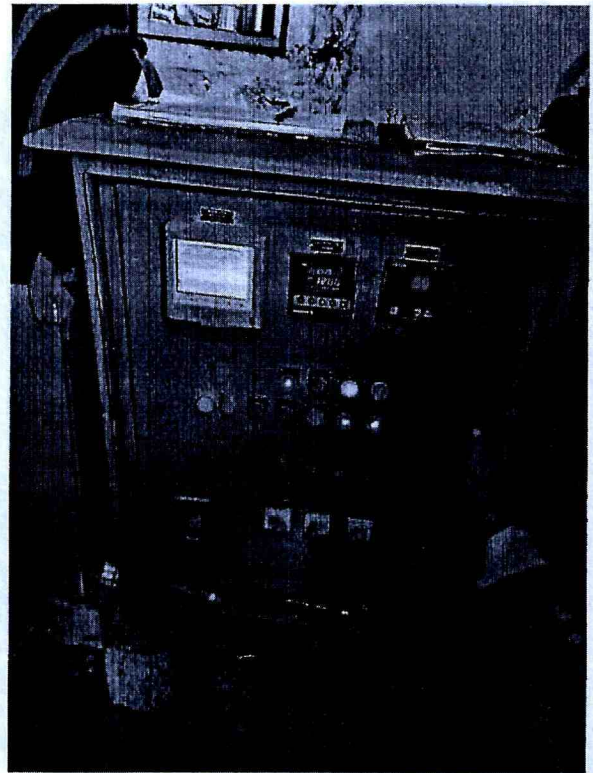
Discussions with the officers of MCGM, MPCB & M/s UPL Ltd. at Gorai Dumpsite



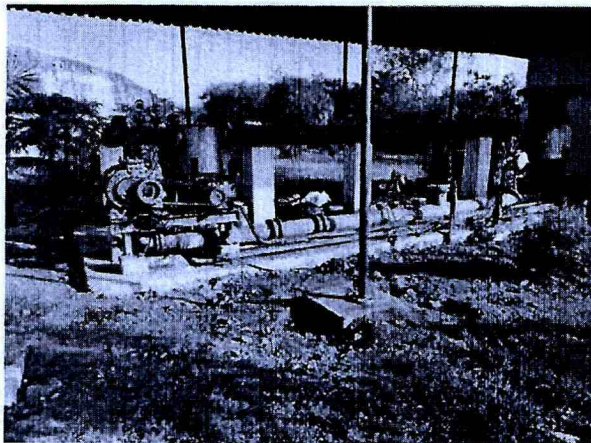
**Methane Flaring Station at Gorai Dumpsite**



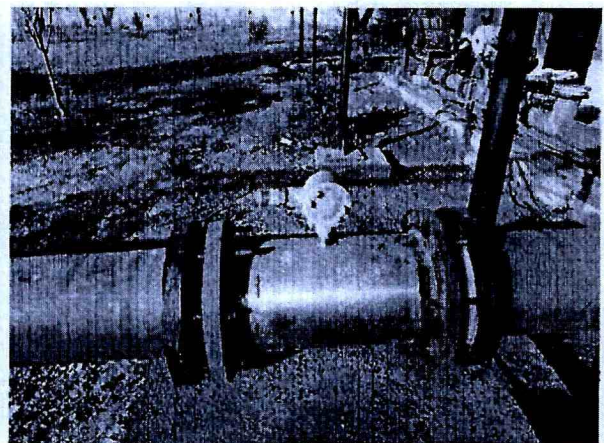
**Gas Well for Methane and Leachate Collection**



**Control Panel for Methane Flaring**



**Methane Pumping System at Flaring Station**



**Methane Flow measurement**

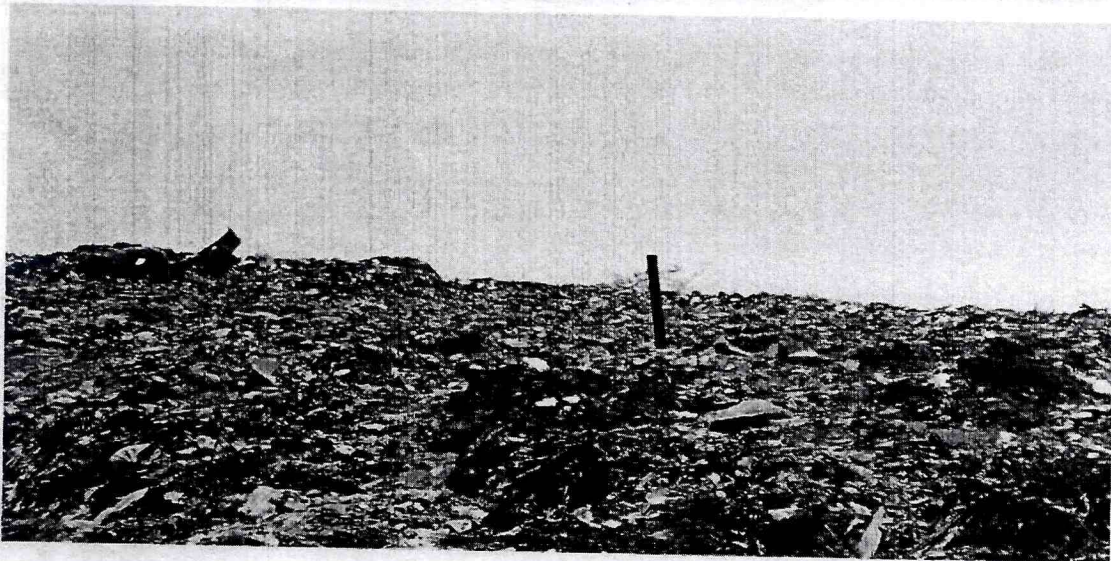
**Methane Collection and Flaring System at Gorai Dumpsite**



**Team with officials of MCGM at the Dumping area at Deonar Dumpsite**



**Workers of Authorized Agency M/s Parishar Bhagini Vikas Sangh and Security personnel at Dumping area of Deonar Dumpsite**

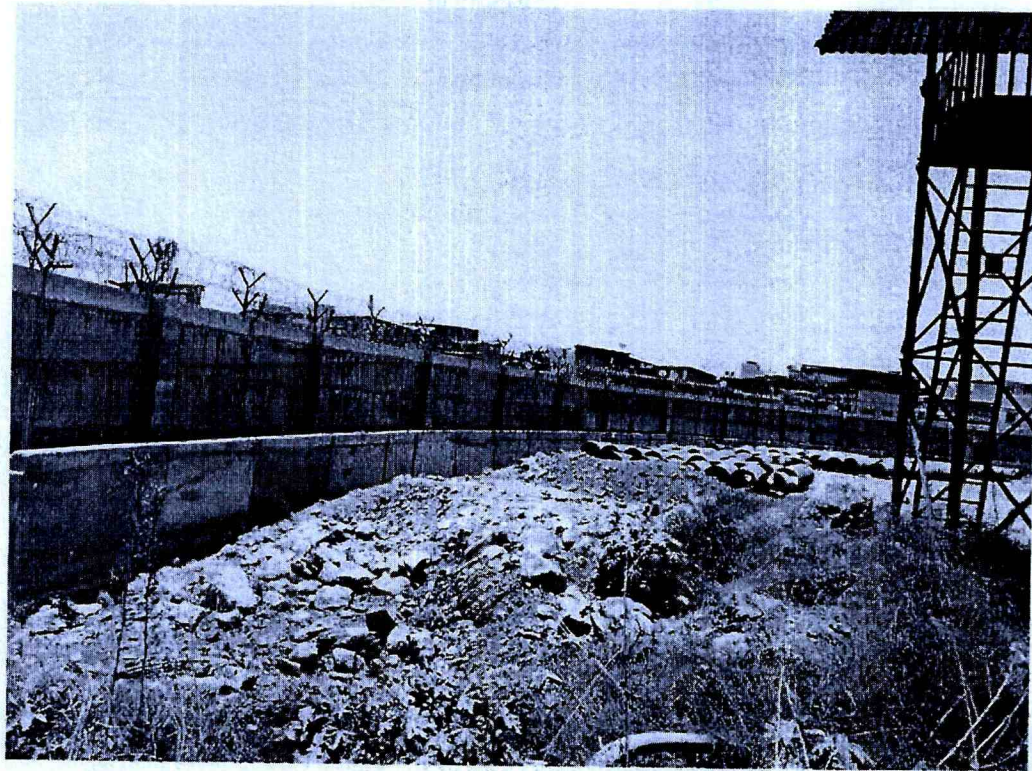


**Perforated HDPE Pipes of 6 meter length inserted at Deonar Dumpsite**

42



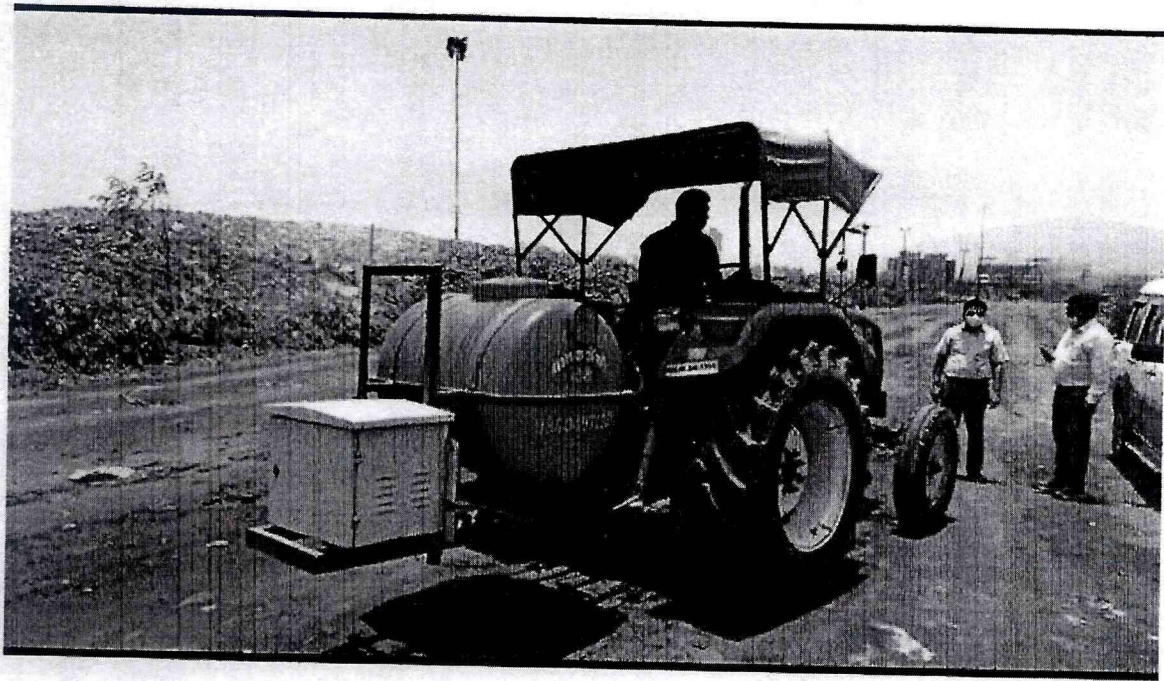
**Watch tower at Deonar Dumpsite**



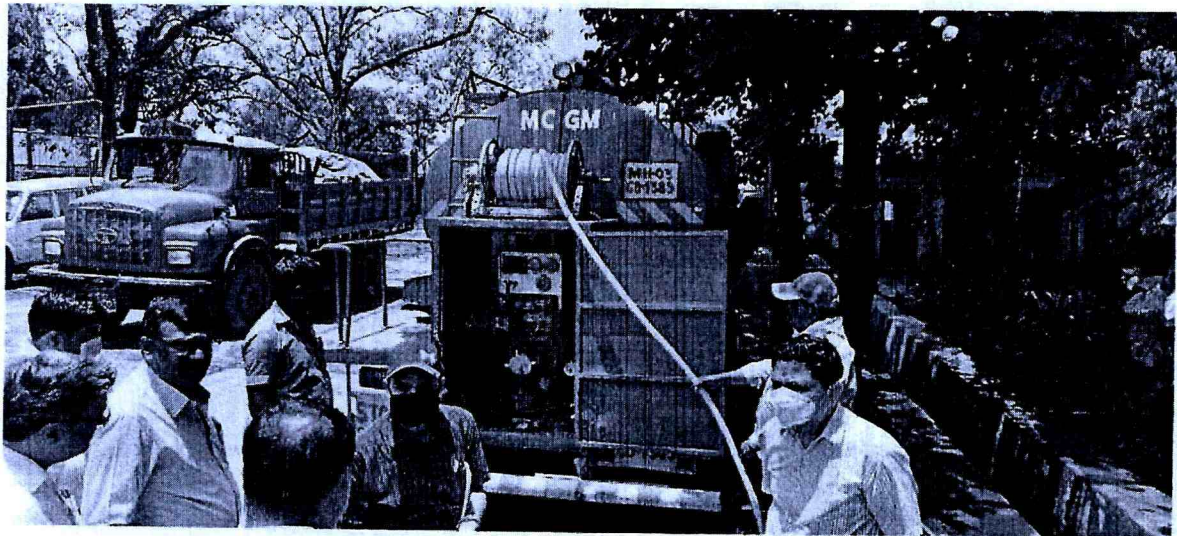
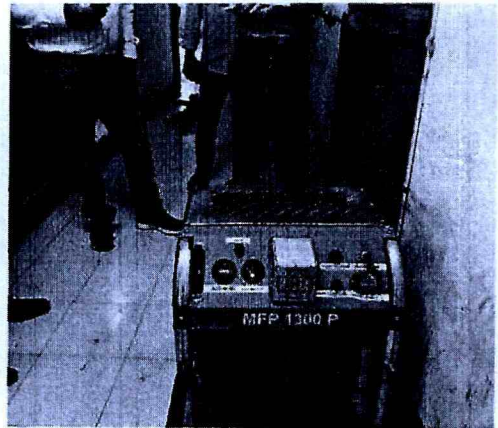
**RCC Boundary Wall with Barbed Wire Fencing towards residential area at Deonar Dumpsite**



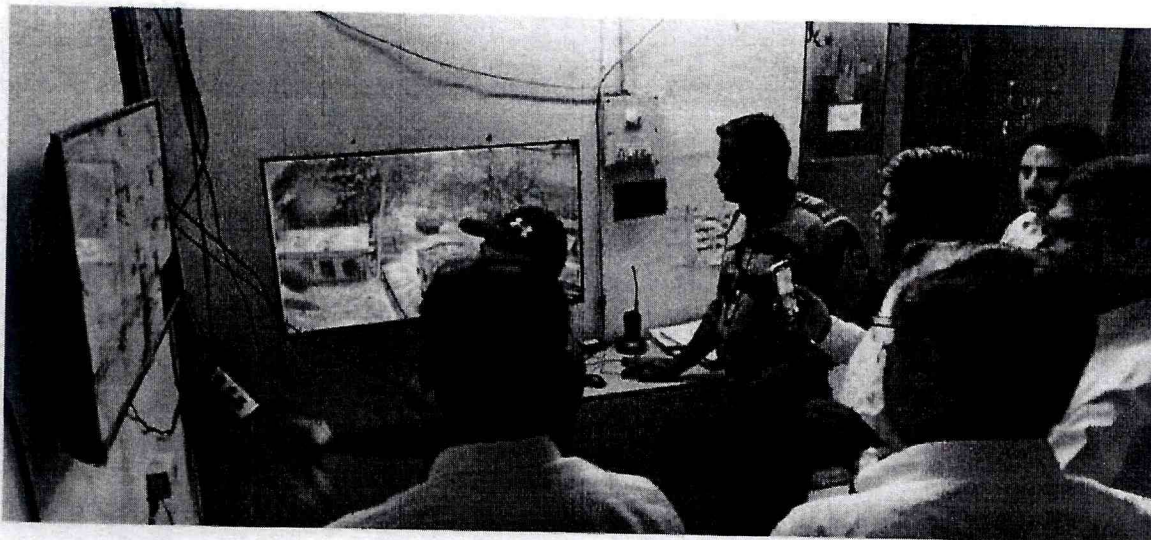
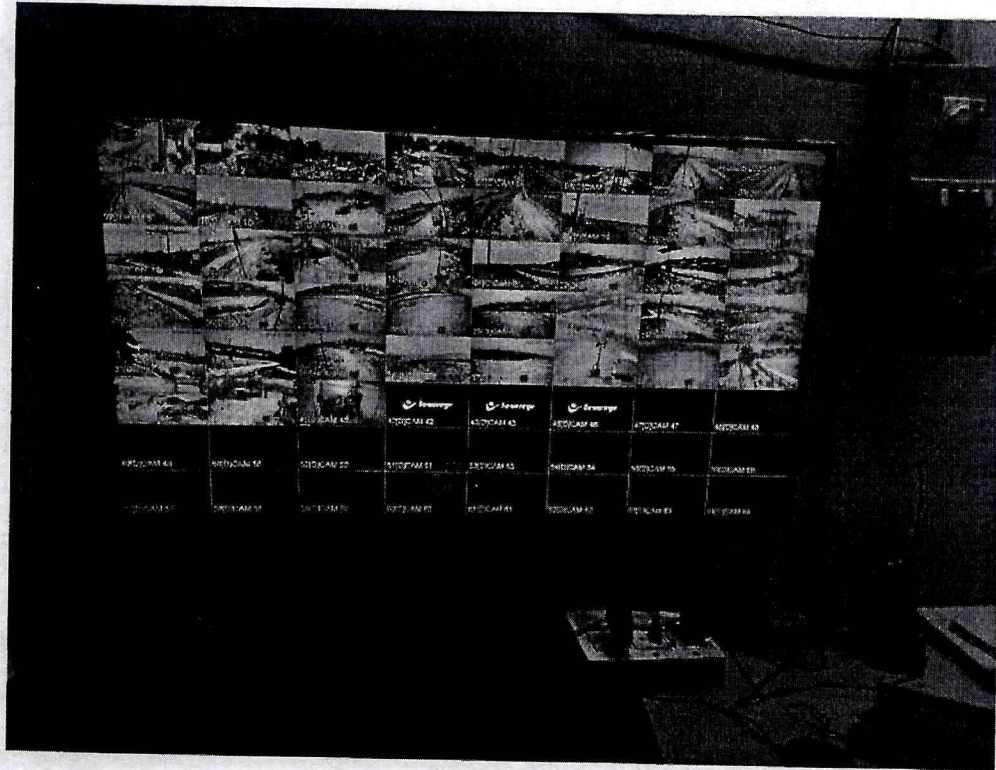
Mobile Lighting System at Deonar Dumpsite



Tractor mounted with spraying system for Spray of Herbal Deodorant at the Deonar Dumpsite



**FIREX Water tankers (Fire Engine cum Water Tanker) of 10000 Liters Capacity each along with Sprinkler System**



**Control Room with Screens for CCTV Cameras at Deonar Dumpsite**



Security Personnel at entry gate of the Deonar Dumpsite

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Annexure - 4

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URGENT



**DISTRICT DISASTER MANAGEMENT AUTHORITY (EAST)**  
**OFFICE OF THE DISTRICT MAGISTRATE, EAST DISTRICT**  
**L.M. BANDH, SHASTRI NAGAR, DELHI-31**  
**Ph: 011- 22051234, Email: ddmaeast@gmail.com**



F. No. DM (E)/DRM/DM/PLAN/GAZIPUR/LANDFILL/329/2022/2524-29

Date: 24/04/24

To,  
 The Spl. Secy.(Env)-Cum- Member Secretary,  
 Delhi Pollution Control Committee,  
 Department Of Environment, Govt. Of NCT Of Delhi  
 5<sup>th</sup> Floor, ISBT Building, Kashmere Gate,  
 Delhi-110006.

**Subject:** Fire Incident at Ghazipur Dumpsite on 21.04.2024.

Sir,  
 With reference to the letter no. F. No. DPCC/WMC II/ Ghazipur Dumpsite/2020/566-575 dated 23/04/2024 regarding Fire Incident at Ghazipur Dumpsite on 21.04.2024 following points issued by your department are as under: -

S.no	Points	Report
1.	Cause of the fire at Ghazipur Dumpsite and immediate steps taken by your department to douse the fire.	Pertains to EDMC & Fire department
2.	During the previous years, fire incidents were also reported and Hon'ble Minister for Environment had visited the site and Directions u/s 5 of the Environment (Protection) Act, 1986, read along with Solid Waste Management Rules, 2016, regarding prevention and control of fire incidents at the MSW Dumpsites in Delhi. were issued by DPCC to MCD, UD Deptt. and DDMA's on 10.06.2022 (Copy enclosed). It is requested to send the Compliance Report w.r.t. said directions issued by DPCC on 10.06.2022.	<ul style="list-style-type: none"> <li>• DDMA East Conducted Mockdrill at Gazipur Landfill Site on 18<sup>th</sup> May 2022. (Report of Mockdrill was submitted to the committee.)</li> <li>• DDMA East had prepaid SOP of Fire for Land fill Site and it was vet by Delhi Fire Service (No.F6 /DFS /HQ /2022 /Misc /2133, dated 24/08/2022) copy enclosed. The same SOP was followed in this Incident too.</li> <li>• Further letter was issued by DDMA East (F. No. DM(E) /DRM /DM /PLAN /GAZIPUR/LANDFILL/329/2022/1732-1749 ,dated 06/09/22.) to all DDMA's &amp; Agencies</li> </ul>

**(Puneet Kr. Patel)**  
**ADM (E)/CEO, DDMA (East)**

**Copy for Information**

1. Pr. Secretary (Environment & Forest), Environment Department, Govt. of NCT of Delhi.
2. Chairman, Delhi Pollution Control Committee.
3. Secretary to Hon'ble Environment Minister, GNCTD, 7<sup>th</sup> Level, Delhi Secretariat, Delhi-110002
4. Spl. CEO (Disaster Management), GNCTD, 5 Sham Nath Marg, Civil Lines, Delhi.
5. PA To DM (East), GNCTD, L.M. BANDH, SHASTRI NAGAR, DELHI-31.

DDMA East

## REPORT ON FIRE AT GHAZIPUR, LANDFILL

ON 21<sup>st</sup> APRIL, 2024

<b>District</b>	<b>East</b>
<b>Type of Incident</b>	Fire
<b>Date of Occurrence</b>	21 <sup>st</sup> April, 2024
<b>Time of Occurrence</b>	4:30 PM
<b>Address</b>	Ghazipur Landfill
<b>Sub-Division</b>	Mayur Vihar
<b>Cause of Incident</b>	Unknown
<b>Caller</b>	MHA Control Room
<b>Source &amp; Time of Receiving information in District EOC</b>	1077
<b>Details of Casualty (including name/age/residence of victims &amp; hospitals admitted to)</b>	<b>Major Injured</b> No
	<b>Minor Injured</b> No
<b>Details of Animal</b>	<b>Casualty</b> No

## DETAILED REPORT AS ON 24/04/24 AT 1:00 PM

Emergency Operation Centre (EOC) DDMA (E) had received information on 21<sup>st</sup> April, 2024 at 07:25 PM from 1077 (**State Emergency Operation Centre**) that a Fire had occurred at about 04:30 pm.

On receiving call from DDMA EOC 1077 at about 07:25 PM, concerned **SDM Mayur Vihar Sh. Sanjay Kr. Ambasta & DPO (E), Ms. Anjali Diwakar** reached the incident site and facilitated search and rescue operation instantly; simultaneously all concerned ESFs were informed about the incident by DDMA East Control Room. They reached the incident site well in time and started search and rescue operation.

As per information received by MCD, A fire was seen at left side [east] of dump site towards slaughter house side and Fish market at around 4:30 p.m. The fresh waste [MSW] was being dumped at this portion. As soon as the fire was noticed, Sufficient machinery, man power and resources are deployed to control the Fire. The fire was contained within 24 hours and the situation is now in control.. Chief Engineer Sh. Dinesh Yadav , Executive Engineer Sh. Mula Singh & Staffs from MCD were present at site along with equipments 12 excavator, 2 Bulldozer, 4 dumpers were working at fire site. **There is no casualty in this fire incident**

Sh. Nirmal Kr, Jha SHO, (P.S. Gazipur), with his team was present at the incident site.

Delhi Fire Service reported the incident site with 12 fire tenders from different fire Station headed by Sh. Deepak Hudda, Additional Divisional Officer. Delhi Fire Service started the Search & Rescue Operation immediately.

As per latest update as on 24<sup>th</sup> March,2024 at 1:00 PM, the fire is reported to be under controlled except smoke is coming out from the site. The agencies are working continuously to get complete control over it.



RAMESH KUMAR PATEL

**MOCK EXERCISE REPORT LEARNING**

**Mock Exercise Site:-** Gazipur Landfill (Dumping Site)

**Date of Incident: -** 18/05/2022

**Sub division: -** Mayur Vihar

**Successes**

- The DDMA coordination was very effective.
- ESFs participated in this mock drill with full enthusiasm.
- The fire brigade came on time.
- The CATS ambulances operated fast and carried the victims in swift manner.
- All ESFs were very swift at reporting, DDMA QRT(E), Delhi Police, DFS, EDMC, CATS, & Civil Defence reached the spot in time.
- All staff was very swift at reporting along with CDVs performed the search and rescue operations effectively
- Ambulance services reached the site swiftly.
- The crowd management was effectively done by DDMA staff and CDVs along with Delhi Police.
- CDVs reported in large numbers beyond expectations and participated whole heartedly in the mock drill. They also helped in traffic management along with traffic policy.
- Disaster management centre, MCD was prompt in sending equipments with their staff along with Labour.
- DJB also had sent water tanker for use in relief centre operation.
- The rescue operation was carried out almost as planned. All the ESFs carried out their responsibilities well.
- The documentation of events was done properly.
- It was a great learning experience for all ESFs as to how to work in the case of disaster.

**Shortcomings**

- No presence of siren at the Gazipur dumping site.
- There was no display of Emergency numbers anywhere at the site.
- No presence of evacuation plan or map at the site.
- No Disaster Management plan was present at the site.

**MOCK EXERCISE REPORT LEARNING**

- There was no Standard Operating Procedure (SOPs) present at the site on how to deal with any kind of disaster.
- The trucks were moving in and out of the dumping site during the drill, as stopping them around have caused traffic jam as there was only one gate for entry and exit.
- The staff was not aware of the workers and vehicles working at the dumping site at any point of time. There is no formal record keeping to the people going to the dumping site. The staff is not even aware of the details of vehicle like, which area they belong to.
- Lack of trained staff for dealing with any kind of disaster
- ESF's like MCD PWD Fire department PCR must have to access the latest equipment and state-of-art machinery.
- All the departments did not have tetra sets which could make it difficult to communicate in case of shutting of telecommunication due to disaster.

However, despite the shortcomings, the team successfully carried out the rescue operation and it was a great learning experience.

**Recommendations**

- Sensitized all the departments to play the active role in any disaster.
- Strengthening the Co-ordination among ESFs.
- An Emergency control room needs to be set up at the Gazipur Landfill side which shall be operation on 24X7 basis.
- Standard SOPs, Disaster Management Plan and Evacuation plan needs to be prepared and kept at the site.
- The Height of the waste/debris shall not be allowed to reach the standard prescribed height of 25 mtr.
- The area where the fire is re-occurring needs to be indentified and observed in order to avoid any disaster.
- Entry & Exit gates should be separate and proper record keeping of the entry exit should be done. Also it two gates are there, the movement of ESFs can be better during any disaster.
- Regular awareness and training needs to be given to the staff at the dumping site
- Regular internal mock drills should be conducted on regular basis.

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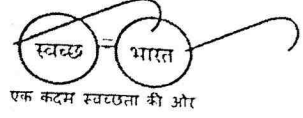
(51)

Annexure-5

(570)



**Municipal Corporation of Delhi**  
Office of the Executive Engineer (SLF) Ghazipur  
Adjacent to MC Primary School, Lalita Park  
Near Metro Station Laxmi Nagar, Delhi-110092




No. EE(SLF)/G/MCD/2024-25/D- 37

Dated: 25.04.2024

**Subject: Fire Incident at Ghazipur Landfill Site on 21.04.2024.**

In reference to refer to letter no. F.No. DPCC/ WMC II /Ghazipur Dumpsite/ 2020/566-575 dated 23.04.2024 and F.No. DPCC/WMC-II/Ghazipur Dumpsite/2020/576 Dated 24.04.2024, wherein a detailed report was sought on above said subject, please find attached the report.

The same has been approved by the competent authority in MCD

  
Executive Engineer (SLF)G

Enclosure: - As above

Dr. K.S. Jayachandran  
Spl. Secretary (Env.)-Cum  
Member Secretary, DPCC

**Subject: Report on the Fire Incident at Ghazipur Landfill Site on 21.04.2024.**

Please refer to letter no. F.No. DPCC/ WMC II/Ghazipur Dumpsite/ 2020/566-575 dated 23.04.2024. In this regard the report is attached herewith.

If approved, we may send the above report to DPCC & CAQM for their perusal. Ghazipur landfill site is located in east Delhi, under the jurisdiction of the Municipal Corporation of Delhi. The site is accessed from National Highway 24 and is in close proximity to Ghazipur Dairy and Khichripur. It has been operational since 1984 and is categorized as a dumpsite with a total area of 70 acres (28.32 hectares). This dumpsite is under operation before the notification of first Solid Waste Management rules 2000.

Currently, a significant portion of the landfill is being used to dump fresh Municipal Solid Waste (MSW), while the remaining area is being utilized for bio-mining and other operations. On a daily basis, approximately 2300 MT MSW, 100 MT Construction and Demolition (C&D) waste, and other materials are being received at this site. The landfill serves the garbage disposal needs of the Shahdara South and Shahdara North Zones.

Despite the bio-mining of legacy waste, the total waste at the site has reached around 85 Lacs MT, and the height of MSW has reached around 65 meters in some areas. Due to the limited available space and regular dumping of MSW, the side slopes have become very steep. Presently, the slopes range from  $60^{\circ}$  to  $80^{\circ}$ , much steeper than the recommended angle of  $30^{\circ}$ . It is important to note that the Ghazipur landfill site is located very close to habitation, making it a cause for concern. There is a significant amount of methane gas that is generated and released from landfill sites due to the decomposition of bio-degradable waste. As the methane gas gets trapped in the garbage, it becomes highly flammable and can catch fire, especially during high temperature and humidity, when it comes in contact with air and reaches its combustion temperature.

On April 21st, 2024, at around 5:00 PM, a fire was reported towards the left side (east) of the dumpsite near the slaughterhouse and fish market. The fire department was also informed about the incident, and fire tenders were sent to the location. Fresh waste was being dumped in that area, and the weather conditions were hot and dry, with high wind velocity. This resulted in the excess emission of trapped methane, which caused the fire and high wind velocity resulted in its fast spreading. When the fire was noticed, site staff immediately deployed sufficient machinery, manpower, and resources to control the fire. Excavators, bulldozers, water tankers, and C&D material were used to contain the fire. Sixteen excavators, two bulldozers, and other machinery were deployed to isolate the fire pockets, and inert/C&D material (around 2000 MT) was used to contain the fire.

The situation was brought under control by 5:00 PM on April 22nd, 2024 and substantial fire was extinguished by this time. The fire was completely extinguished by 10:00 AM on April 23rd, 2024. There were no casualties in this incident.

**The following measures are already in place to prevent fire incidents at dumpsite:**

- 1) Daily Covering of garbage by providing the layer of malba / earth.

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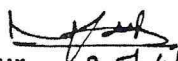

568

- 2) Providing a terrace-type approach to different areas by stepping.
- 3) Written instructions to the field staff of all levels managing the SLF site not to allow fire or burning of garbage at SLF site.
- 4) Calling fire tenders in case of incidents of huge fire if detected.
- 5) To reduce the menace of fire/smoldering, perforated pipes are inserted at certain places in the top layer of dumped MSW to allow Landfill Gases to escape.
- 6) Restriction of Entry of unauthorized persons.
- 7) SLF site declared matchbox free, lighter free and no smoking zone
- 8) Dedicated fire tender by DFS from their nearest Fire station at Mandawali.
- 9) Bio-remediation of legacy waste.
- 10) Reduction of waste quantity at SLF by diverting around 1000 TPD to WTE plant Okhla.
- 11) CCTV surveillance.
- 12) Deployment of 6 excavators, 2 bulldozers, 1 backhoe loader and allied machinery. In addition to it, concessionaire's machinery consisting of 10 excavators. Is also available.
- 13) Deployment of manpower resource of 60 including supervisory staff.
- 14) Designated area for dumping of fresh MSW.

**Following measures are also proposed to completely avoid such type of fire incidents in near future:**

- 1) Fencing/ Enclosure of SLF site for which a proposal of Rs 25 Crore has been submitted to GNCTD. This fund is required urgently to take up this project.
- 2) Fire department to devise a methodology/ equipments as well as some chemical to douse such type of fires, as it has been seen that these fires cannot be controlled / doused through conventional fire tenders carrying water.
- 3) A new WtE plant has been proposed at Ghazipur dumpsite by reclaiming 15 acres of land through bio-mining process. The approval of RFP and DCA is pending in DERC since June 2023.

EE(SLF) Ghazipur

  
25/4/24  
25.4.24  
AE-I (SLF)G