NGT MATTER
By Special Messenger / Email

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

F. No. DPCC/WMC-II/MPR/OA 673/2020/ 4650-4653 **Dated:** 27/11/2020

To,

The Secretary,
Ministry of Jal Shakti, Govt. of India,
Shram Shakti Bhawan,
New Delhi- 110001

Subject – Monthly Progress Report of Govt. of NCT of Delhi for the Month of October, 2020 w.r.t Orders Dated 06.12.2019, 29.06.2020 & 21.09.2020 in OA No. 673 / 2018 in the matter of News item published in 'The Hindu' Authored by Shri Jacob Khoshy Titled "More river stretches are now critically polluted: CPCB"

Sir,

Please find enclosed herewith Monthly Progress Report of Govt. of NCT of Delhi in the revised format of NMCG for the Month of October, 2020 for Rejuvenation of River Yamuna (Priority -I Stretch) w.r.t Orders Dated 06.12.2019, 29.06.2020 & 21.09.2020 in OA No. 673 / 2018 in the matter of News item published in 'The Hindu' Authored by Shri Jacob Khoshy Titled "More river stretches are now critically polluted: CPCB"

1st Monthly Progress Report of Govt. of NCT of Delhi was submitted vide letter dated 14.02.2020 & last Monthly Progress Report (for the month of September, 2020) was submitted vide letter dated 28.10.2020.

Yours Sincerely,

(Dr. K. S. Jayachandran)
Spl. Secy (Env & Forest) cum
Member Secretary, DPCC

Enclosure : As Above

Copy to:

1. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032.
2. The Staff Officer to Chief Secretary, 5th Floor, Delhi Secretariat, I. P. Estate, Delhi-110002
3. PS to Secy. (Env) cum Chairman, DPCC.

(Dr. K. S. Jayachandran)
Spl. Secy (Env & Forest) cum
Member Secretary, DPCC

National Mission for Clean Ganga
Format for submission of Monthly Progress Report in the NGT Matter OA No. 673 of 2018 (in compliance to NGT order dated 24.09.2020)

For the State of NCT of Delhi

Monthly Progress Report of Govt. of NCT of Delhi for the Month of October, 2020

Overall Status of the State:

I. Total Population : Urban Population & Rural Population separately

	Population as per Census in 2011 (in Lakh)	Population in 2020 (Appx. Estimated) (in Lakh)
Urban Population	163.68899	200
Rural Population	4.19042	
Total	167.87941	200

II. Estimated Sewage Generation (MLD) : 3273 MLD (720 MGD)

III. Details of Sewage Treatment Plant :

- Existing No. of STPs and Treatment Capacity (in MLD) : 35 STPs (at 20 Locations) Capacity – 2715.14 MLD (597.26 MGD)
- Capacity Utilization of existing STPs : 2432 MLD (535 MGD) (89.6 % of installed capacity)
- MLD of sewage being treated through Alternate technology : Nil
- Gap in Treatment Capacity in MLD : 559 MLD (123 MGD) (17 %)
- No. of Operational STPs : 35 (Samples could be taken by DPCC Lab only from 33 STPs in the month of October, 2020)
- No. of Complying STPs : 10
- No. of Non-complying STPs : 23 (excluding 2 STPs in which case samples could not be taken) (Letter issued to DJB on 18.11.2020 for taking rectification measures to meet the prescribed standards)

Details of Each Existing STP of Delhi Jal Board in Delhi

S. No.	Location	Existing STP Capacity	Capacity Being Utilized	Operational Status of STP	Compliance Status of STP
	Details of Each Existing STP of Delhi Jal Board in Delhi is at **Annexure-1**				

Details of Under Construction STPs of Delhi Jal Board in Delhi

S.No.	Location (Name of STP)	Capacity of the plant in MLD	Physical Progress in % (upto October, 2020)	Status of I&D or House sewer connections	Completion Timeline
Rehabilitation / Up-gradation of Existing STPs					
1.	Yamuna Vihar STP Phase II	45.46 MLD (10 MGD)	-	-	March , 2022 (Plant has already been made operational as per existing parameters.)
2.	Kondli STP Phase I, II & III	204.57 MLD [45 MGD (10+25+10)]	46.8 (3.36% in Oct, 2020)	-	Phase I- December, 2021 Phase II- December, 2022 Phase III- December, 2021
3.	Rithala STP Phase I	181.84 MLD (40 MGD)	33 (4.5 % in Oct, 2020)	-	December, 2022
Construction of New STPs					
4.	Coronation Pillar	318 MLD (70 MGD)	78 (1.5% in Oct, 2020)	-	June, 2021
5.	Okhla	564 MLD (124 MGD)	17.41 (1.65% in Oct, 2020)	-	December, 2022

Details of Proposed STPs of Delhi Jal Board in Delhi

S. No.	Location	Capacity of the STPs proposed (in MLD	Status of Project (at DPR Stage/ Under Tendering/ Work to be Awarded)	Likely Date of Completion
1.	42 Decentralized STPs at various locations in Delhi	281.50	Estimate Stage : Land for construction of 42 DSTPs and connecting SPSs have been identified at various locations and it is still in the process of allotment by Revenue Department of GNCT Delhi. Necessary action will be taken by DJB after allotment of land.	24 to 36 months after allotment of land.
2.	14 (7+7) STPs in Najafgarh Drainage Zone	145	Work awarded . Funding from NMCG is to be obtained for balance 7 STPs . Out of 14 locations, land is available only at 08 locations and land at balance 06 locations is yet to be allotted.	18 to 30 months after approval of funding of balance STPs by NMCG and allotment of land.

STPs to be Constructed at the Mouth of the Drains

No of STPs to be constructed	Consultancy Awarded for No of STPs	No of STPs at Tender Stage	No. of STPs Work Awarded (Work is in progress)	Time line for Completion	Remarks
2 (Mori Gate Drain and Barapullah Drain)	Nil	Nil	Nil	3-4 years after availability of land & funds	Land for construction of STP at the mouth of Mori Gate and Barapullah drains identified and to be allotted by DDA.

Status of Interceptor Sewer Project (ISP) of Delhi Jal Board

Total flow to be trapped	Provision of trapping made during the month of October, 2020	Cumulative Status as in September, 2020 Provision of trapping made	Time line for completion of work	Remarks
1100.86 MLD **(242.16 MGD)**	**NIL**	1028.76 MLD **(226.30 MGD)**	December, 2020	721.54 MLD (158.72 MGD) is being trapped and treated out of 1028.76 MLD (226.3MGD). Provision for trapping of Balance 72.1 MLD (15.86 MGD) is likely to be made by December, 2020. Entire flow of 1100.86 MLD (242.16 MGD) shall be trapped and treated by December, 2022 after construction / rehabilitation of Coronation Pillar & Rithala and Kondli STPs under YAP III.

Status of Sewerage Network in Unauthorised Colonies (As provided by DJB)

S. No	Status	Increase/ Progress during month of October , 2020	Cumulative Status as in October, 2020 (No)	Remarks
1	Sewer line laid and notified	Nil	561	-
2	Work of sewer network is in progress	Nil	470	Deep sewer work are not allowed during rainy season by road owning agency.
3	Work of sewer network in tendering stage	Nil	116	During the month of June, tenders were processed for award of the work for laying sewer lines in Kirari GOC consisting 114 colonies.
4	Colonies where NOC is awaited/O Zone	Nil	131	-
5	Colonies where sewerage network is to be laid along with Decentralized STPs	Nil	521	The work shall be taken up after allotment and possession of land by DDA & Revenue Deptt.
	Total	**Nil**	**1799**	

Trapping of Drains :

There are 18 major drains which are out falling into river Yamuna in the Delhi stretch between Wazirabad to Okhla. Out of 18 drains, Trap completed in 13 drains, 02 major drains i.e. Najafgarh & Shahdara are included in Interceptor Sewer Project where substantial flow of sub-drains under its command areas will be trapped and treated.

Further, in-situ treatment in these drains are also being proposed for which the consultants will be appointed shortly. For the balance 03 drains, action plan has been prepared which requires construction of STPs at the mouth of two drains i.e. Mori Gate and Barapullah drain. The land for these STPs is yet to be provided by DDA. In respect of the 3rd drain i.e. Maharani Bagh drain, the same has been partially trapped to the extent of 9-10 MLD flow and the balance 15 MLD flow will be trapped in the Batla House Sewerage System by 30.04.2022.

Status of 18 Major Drains directly out falling into River Yamuna (as per the Information provided by DJB) is at **Annexure -2**

IV. Details of Industrial Pollution (Industries / Units in 28 Approved Industrial Areas in Delhi) (As per the Consent Records of DPCC) :

- No. of Industries / Units in the State : 28117 (in 28 Approved Industrial Areas)
- No. of Water Polluting Industries/ Units in the State : 1516
- Quantity of Effluent generated from the Industries / Units in MLD : About 36 MLD
- Quantity of Hazardous Sludge generated from the Industries in TPD : 6.86 (Excluding CETPs)
- Number of Industrial Units / Units having ETPs : 1516
- Number of Industrial Units/ Units connected to CETPs : 33690 (in 17 Approved Industrial Areas)
- Number and total capacity of ETPs (details of Existing/ Under Construction / Proposed) : 1516 ETPs
- Compliance Status of the ETPs : -
- Number and Total Capacity of CETPs (Details of Existing/ Under Construction / Proposed) : Existing CETPs–13(List at **Annexure-3**)
  Capacity – 212.3 MLD
  Under Construction/Proposed – Nil

Status of Compliance and Operation of the CETPs

Town	No. of Industries/ Units (in 28 Approved Industrial Areas)	Industrial Discharge	Status of ETPs	Status of CETPs (Existing, Under Construction & Proposed)
Delhi	28117	36 MLD	-	Existing – **13 CETPs** (List alongwith Compliance Status is at **Annexure-3**) Complying – 8 Not Complying – 5 Under Construction / Proposed - **Nil** Letters issued on 18.11.2020 to the concerned CETP Societies in respect of 5 CETPs which were found not complying for taking rectification measures to meet the prescribed standards.

Common Effluent Treatment Plants (CETPs)

All the existing 13 CETPs are being monitored by DPCC Laboratory on monthly basis and Analysis Reports are placed on the website of DPCC and also conveyed to the CETP Societies/ Operator of CETPs for rectification of the deficiencies to meet the prescribed standards. Sufficient treatment capacity (212.3 MLD) is available with existing 13 CETPs for management of industrial effluent generated from 17 approved industrial areas. The units which are operational in non-CETP industrial areas have individual waste water treatment facilities. Online Monitoring System (OLMS) have been installed on all the 13 CETPs for measuring the pH, TSS, BOD & COD at the outlet of the CETPs. All these OLMS are connected to servers of DPCC and CPCB. Calibration of OLMS installed at CETPs is being carried out by DPCC Water Laboratory on quarterly basis.

DSIIDC has engaged CSIR-NEERI vide letter dated 05.11.2019 for providing consultancy w.r.t various issues related to CETPs including up gradation of CETPs as per following scope of work :

a) Formulating an action plan for the survey of the individual industries in various industrial areas for ensuring their connectivity with the waste water conveyance system of CETPs and identifying industrial units violating environmental pollution norms.
b) To assess the overall functioning of all 13 CETPs through a physical survey.
c) To formulate an action plan for 13 CETPs after the study of the survey report in terms of
   I. Required up-gradation and retrofitting of CETPs to make them compatible with the composition of effluent reaching CETP for capacity utilisation (use of CETP as STP) and to conform the effluent discharge standards and to work out cost associated with this task.
   II. Management of the hazardous sludge being generated by CETPs.
   III. Maximizing utilization of treated water from CETPs in order to achieve Zero Liquid Discharge and reducing dependency of greenbelts/parks in and around CETPs on ground water.
d) Study regarding requirement of CETPs in 11 industrial areas which are presently not having CETP.

Out of 13 CETPs, NEERI has started the study of CETP Wazirpur and CETP SMA and collected the preliminary data of these CETPs. Besides this, Out of 11 industrial areas, the study of the Tilak Nagar Industrial Area has also been taken up by the NEERI. Meetings are held regularly to review the progress.

- CSIR –NEERI and DSIIDC carried out the joint inspections of the 13 CETPs from 31.07.2020 to 07.08.2020. Stakeholders meetings were conducted during 19 -31 August, 2020.
- Issues related to industrial areas including sewerage system / conveyance system, storm water drains, parks, reuse of treated water, Jhuggi Jhopri (JJ) clusters etc. were discussed. Questionnaires were circulated to various stakeholders for providing information.
- A meeting was held on 09.10.2020 with all the CETP operators to discuss & freeze few points to work on the improvements, requirements / re-design of the CETPs. Total flow volume to be treated by each CETP, presently very less quantity is reaching the CETPs in comparison to the design capacity. Waste water characteristics has changed in many industrial areas & likely to change when all the untreated streams are connected to CETPs. Cleaning of silt / sludge deposited in the various units of CETPs , disposal / Utilisation of stored sludge and areas for utilization of treated water by each CETP were also discussed.
- Industries Department has issued Notice to all the 13 CETPs on 28.10.2020 giving them a week time to remove the sludge from various units/tanks of CETPs for their efficient functioning.

V. Solid Waste Management:

- Total Number of Urban Local Bodies (ULBs) and their Population : 5 [North DMC, South DMC, East DMC, NDMC & DCB]
  Total Population – About 2 Crores

- Current Municipal Solid Waste Generation : 11144 TPD

(Status of Solid Waste Management including Legacy Waste in Delhi is given at **Annexure-4)**

S.No.	Particulars	Information
1.	Number, Installed Capacity and Utilization of Existing MSW Processing Facilities in TPD (Bifurcated by type of processing e.g. Waste to Energy (Tonnage and Power Output), Compost Plants (Windrow, Vermi, Decentralized, Pit Composting), Biomethanation, MRF etc	• Total Capacity of Existing MSW Processing Facilities - 5502.175 TPD • 3 Operational WTE Plants - 5250 TPD (Power generation capacity - 59 MW) • 2 Operational Compost Plants - 900 TPD [200 TPD at Okhla & 700 TPD out of 2000 TPD at Bawana Integrated MSW Facility] • 7 Operational Bio-methanation Plants- 35TPD. • 19 Operational Decentralized Composter Plants – 17.175 TPD • 122 Compost Pits at 53 Locations in various Parks etc. in NDMC Area
2.	Action Plan to bridge gap between Installed Capacity and Current Utilization of Processing Facilities (if Gap > 20%)	Not Applicable since installed capacity of Existing MSW Processing Facilities in Delhi is being utilised.
3.	No. and capacity of C&D Waste Processing Plants in TPD (Existing, Proposed and under construction)	• Existing operational C&D Waste Processing Facilities - 4 Capacity - 4150 TPD • Proposed New C&D Waste Processing Facilities - 3 Capacity - 2500 TPD Existing operational C&D Waste Processing Facilities are located at (i)Jahangir Puri (Burari) (2000TPD) (ii) Shastri Park (1000 TPD) (iii) Bakkarwala (1000 TPD) (iv) Rani Khera (Mundka) (150 TPD) Proposed C&D Waste Processing Facilities are (i) Maidangarhi (1000 TPD) (ii) Ranikhera (1000 TPD) (iii) Libaspur (500 TPD) (iv)
4.	Total No. of Wards, No. of Wards having Door to Door Collection Service, No. of Wards practicing segregation at source	**No. of Wards** – 294 [North DMC – 104, SDMC – 104, EDMC-64, DCB-08 & NDMC-14 Circles]. **Door to Door collection** in all wards and circles of North DMC, SDMC, NDMC & DCB and about 90% in EDMC.

		Segregation of Waste : • NDMC - 90% • DCB - 90% in Civil Area & 60% in the Army Area. • EDMC - 100% in 3 Model Wards, 75% in 6 Wards & 30% in 55 Wards • North DMC - 80% in 3 Model Wards • SDMC - About 80% in 13 Wards. (Including 03 Model Wards)
5.	Details of MSW Treatment Facilities proposed and under construction (No., Capacity and technology)	Proposed MSW Processing / Treatment Facilities (i) **2000 TPD** Waste to Energy Plant (WTE) at Tehkhand by 31.12.2021 (SDMC). (ii) **2000 TPD** Integrated Municipal Waste Processing Facility at Ghonda Gujran by 30.09.2022 (Joint Venture between NTPC & EDMC). (iii) Engineered Sanitary Landfill at Tehkhand by 30.09.2021 (iv) **2000 TPD** Integrated Waste Collection, Segregation, Transportation, Processing & Disposal in 3 Zones of North DMC (City – SP, Karol Bagh & Narela Zone) by 31.12.2021
6.	No. and Area (in Acres) of uncontrolled garbage dumpsites and Sanitary Landfills.	Name of Dumpsite: Area in Acres Ghazipur Dump Site: 70 Bhalaswa Dump Site: 36 Okhla Dump Site: 46
7.	No. and Area (in Acres) of Legacy Waste within 1 km buffer of both side of the rivers	Nil
8.	No. of Drains falling into rivers and no. of drains having floating racks/screens installed to prevent solid waste from falling into the rivers:	18 Major Drains out falling into river Yamuna & having Floating Racks / Screens to prevent solid waste falling into the river.

Status of ULB wise Management of Solid Waste

ULB	Total MSW Generation in TPD	Total MSW being Processed in TPD	Existing MSW Facilities	Utilization Capacity of the Existing MSW Facilities	Proposed MSW Facilities & Completion Timeline
North DMC	4500	2400 (53%)	• One WTE Plant at Bawana Integrated MSW Facility - 2000 TPD (including 700 TPD Compost Plant) • 2 Bio-Methanation Plants - 10 TPD (5 TPD each at Roshanara Bagh & MVID Hospital)	Installed Capacity of Existing MSW Processing Facilities is being	• **2000 TPD** Integrated Waste Collection, Segregation, Transportation, Processing & Disposal in 3 Zones of North DMC(City–SP,Karol Bagh & Narela Zone) by 31.12.2021 • 2 Bio-Methanation Plants - 10 TPD (5 TPD each at

			• 3 Composter Plants – 3 TPD (1 TPD each at Bhorgarh Nursery, Rajendra Nagar & Maurya Enclave.)	utilised.	Mangolpuri Industrial Area Ph-I & Naraina Industrial Area Ph-I by 31.12.2020) • 3 Composter Plants – 3 TPD (1 TPD each at Sector -11 Rohini, Mori Gate & 3rd site to be decided in place of earlier proposed site at Haiderpur Water Treatment Plant) by 31.12.2020 except 3rd site.
SDMC	3600	1850 (51%)	• One WTE Plant at Okhla – 1950 TPD • 3 Bio-Methanation Plants - 15TPD (5 TPD each at Sarita Vihar, Dwarka Sec-14 & Punjabi Bagh Nursery) • 3 Composter Plants – 3 TPD (1 TPD each at Chirag Delhi, Punjabi Bagh Nursery & Near Lady Shri Ram College East of Kailash.)	Installed Capacity of Existing MSW Processing Facilities is being utilised.	• **2000 TPD** WTE Plant at Tehkhand by 31.12.2021 • Engineered Sanitary Landfill at Tehkhand by 30.09.2021 • One Bio-Methanation Plant - 5 TPD at Masood Pur in Vasant Kunj by Jan, 2021 • One Composter Plant - 1 TPD at Dwarka Sector 14 by March, 2021
EDMC	2700	705 (26%)	• One WTE Plant at Ghazipur – 1300 TPD • Two Bio-Methanation Plants of 5 TPD each at Geeta Colony & Shastri Park) • 9 Composter Plants – 9 TPD (1 TPD each at Trilokpuri near Block-13, Mayur Vihar Ph-II, Preet Vihar, Jhilmil, New Trilokpuri near Block-13, Saini Enclave, Usmanpur, Kheda Village & Sunder Nagri)	Installed Capacity of Existing MSW Processing Facilities is being utilised.	• **2000 TPD** Integrated Municipal Waste Processing Facility (including Waste to Energy Plant) at Ghonda Gujran by 30.09.2022 (Joint Venture between NTPC & EDMC). • One Composter Plant - 1 TPD at Gokalpur by Nov, 2020
NDMC	272	272 (100%)	• 2 Organic Waste Converter – 2 TPD (1 TPD each at Madhulimey Marg & Raza Bazar in New Delhi) • 122 Compost Pits at 53 Locations in various Parks etc. in NDMC Area	Installed Capacity of Existing MSW Processing Facilities is being utilised.	No. of Composter Plants of 1 TPD each.
DCB	72	37 (51%)	• 2 Food Waste Composter (One of 0.125 TPD at Tigris Road and One of 0.05 TPD at Tigris Road, New Delhi.)	Installed Capacity of Existing MSW Processing Facilities is being utilised.	-
Total	**11144**	**5264 (47%)**			
Note - Most of the Five & Four Star Hotels and Major Hospitals having 50 Beds or more have installed Organic Waste Convertor.					

VI. Bio-medical Waste Management:

- Total Bio-medical Waste Generation : 28.785 TPD
- No. of Hospitals and Health Care Facilities : 10277 including 1225 Bedded Hospitals.
- Status of Treatment Facility/ CBMWTF : Treatment & Disposal through existing 2 CBMWTFs

There are following 2 CBMWTFs having Capacity of about 63 TPD for collection and Treatment of the Bio-medical waste generated from the Health Care Establishments in Delhi :

1. M/s Biotic Waste Solutions Pvt. Ltd., 46 SSI Industrial Area, G.T.Karnal Road, Delhi -110033
2. M/s SMS Water Grace BMW Pvt. Ltd., Nilothi Sewage Treatment Plant Complex of DJB, Nilothi, Delhi -110041.

Both the CBMWTFs are having Incinerators, Autoclaves & Shredders for the treatment of Bio Medical Waste collected from the Health Care Establishments in Delhi and have installed Air Pollution Control System and Online Monitoring System. Bio-medical Waste including COVID-19 waste is being dealt as per the provisions of the Bio Medical Waste Management Rules, 2016 and Guidelines issued by CPCB from time to time. For preventing illegal dumping of biomedical waste in Delhi, a Standard Operating procedure (SOP) has already been developed and circulated to all the District Magistrates (being Chairman of the District level Committees comprising of all the concerned departments including CBMWTFs).

VII. Hazardous Waste Management:

- Total Hazardous Waste Generation : 2683.46 MT/year
- No. of Industries generating Hazardous Waste : 1912
- Treatment Capacity of all TSDFs : Presently No TSDF in Delhi
- Average Quantity of Hazardous Waste reaching the TSDFs and Treated : Presently No TSDF in Delhi
- Details of on-going or proposed TSDF :

Common Hazardous Waste, Treatment, Storage & Disposal Facility (TSDF) is to be developed at Bawana in Delhi. DSIIDC has awarded the work of development of TSDF for Hazardous Waste to M/s Tamil Nadu Waste Management Limited. Public Hearing for Environmental Clearance for TSDF was held on 14.07.2020 and Proceedings of the Public Hearing were sent to MoEF&CC on 20.07.2020. MoEF&CC has granted Environmental Clearance for the TSDF vide letter dated 23.11.2020.

VIII. Plastic Waste Management:

- Total Plastic Waste generation : 1500 TPD
- Treatment/ Measures adopted for reduction or management of plastic waste :
  315 Plastic Waste Reprocessing/ Recycling units have been given Consent to Operate under Air & Water Acts and Registration under the Plastic Waste Management Rules, 2016.

IX. Details of Alternate Treatment Technology being adopted by the State/UT :

In-situ Bioremediation / Phytoremediation of Sewage in Drains :

Integrated Drain Management Cell (IDMC) has been constituted vide order dated **17.03.2020** for remediation and management of all drains of Delhi. IDMC is headed by Chief Secy, Delhi and having members from all the Drain Owning Agencies (DOAs). Meetings of IDMC are held on regular basis and **6 Meetings of the IDMC were held till October, 2020.** Some of the Drain Owning Agencies (EDMC & DCB) have submitted their action plan & started implementation. The waste water in Kushak Nala running through NDMC areas is under bio-remediation and the parameters like BOD, TSS, COD are being monitored. Delhi Cantonment Board has already started implementation of bioremediation plan w.e.f 11.06.2020. SDMC has chosen Chirag Delhi for the Pilot Project & approached CPCB for funding of the project. Drain Owning Agencies were directed

to start a small pilot project on some of their drains from their own funds till required budget is available with them for implementation of action plan in totally. EDMC has informed that one of their pilot project is already operational. Drain Owning Agencies have been requested to submit Action Plan along with timelines for management of waste water in their drains.

X. Identification of Polluting Sources including Drains contributing to river pollution and action as per NGT order on insitu treatment:

Refer Information provided at **IX** regarding In-situ Bioremediation / Phytoremediation of Sewage in Drains.

Prevention of Dumping of Solid Waste in Drains :

Directions issued by Chief Secretary vide order dated 09.01.2019 and Urban Development Department, GNCTD vide order dated 15.01.2019 for prevention of the dumping of solid waste in the drains are to be complied by all the Drain Owning Agencies in Delhi. The matter is being coordinated by the Urban Development Department, GNCTD.

XI. Details of Nodal Officer appointed by Chief Secretary in the State/UT :

Following Monitoring Mechanism is mentioned in the Action Plan prepared by RRC Delhi and submitted to CPCB on 21.02.2020 :

"Action Plan for rejuvenation of river Yamuna shall be monitored by the concerned Departments / Agencies for the projects / works pertaining to them. Urban Development Department, Govt. of NCT of Delhi which is the Nodal Department & Co-ordinating the various Departments in Delhi for compliance of the orders and directions given by the Hon'ble NGT in the similar case on river Yamuna i.e. OA No. 06/2012 in the matter of Manoj Mishra Vs. Union of India & others, has been assigned to monitor the implementation of the Action Points & Timelines given in the Action Plan for rejuvenation of river Yamuna from time to time and submit monthly progress report to the Secretary, Ministry of Jal Shakti , Govt of India with copy to Member Secretary, CPCB."

Regarding the Nodal Authorities from various concerning Departments and for Coordination & Compliance of the directions of the Hon'ble National Green Tribunal the matter is under process for setting up of "Environment Monitoring Cell" in the office of Chief Secretary.

XII. Details of Meetings carried under the Chairmanship of Chief Secretary in the State/UT :

The matter related to control of pollution in river Yamuna is being monitored by Chief Secretary through various meetings e.g. meetings of Integrated Drain Management Cell (IDMC) (6 meetings of IDMC were held till October, 2020.), Meetings on the Interceptor Sewer Project (ISP) and Meetings related to Hon'ble NGT orders in OA No. 06/2012 in the matter of Manoj Mishra Vs. Union of India & Ors. which is being monitored by Yamuna Monitoring Committee. Regarding OA No. 673/2018, the issue is also being monitored by Chief Secretary and meeting was held on 19.03.2020 and last meeting was held on 22.10.2020.

XIII. Latest Water Quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river :

Water Quality of River Yamuna at 9 Locations for the samples collected by DPCC Water Laboratory in the Month of October, 2020 is at **Annexure-5.**

Water Quality of major Drains for the samples collected by DPCC Water Laboratory in the Month of October, 2020 is at **Annexure-6**.

Ground Water Quality near the 3 Dumpsites (Bhalaswa, Ghazipur & Okhla) and Engineered Sanitary Landfill at Bawana for the samples collected in June , 2020 are collectively enclosed as **Annexure-7**.

XIV. Ground Water Regulation:

Ground water extraction and management in NCT of Delhi is regulated as per the provisions of the Notification Dated 12.07.2010 issued by Environment Department, Govt. of NCT of Delhi. The issue of illegal extraction of ground water is being overseen by Hon'ble NGT in OA No 25/2019 (Abdul Farukh Vs GNCTD and Ors). The said matter deals with closure of about 19000 illegal bore wells as per the list submitted by Delhi Jal Board to Hon'ble NGT. As per the decisions taken in the meeting by the Chief Secretary, GNCTD the list is to be provided by the DJB to the Revenue Department and illegal bore wells are to be sealed by the revenue department. DPCC is to impose Environmental Damage Compensation (EDC) based on the formula devised by CPCB for illegal extraction of ground water for different purposes.

XV. Good Irrigation Practices being adopted by the State:

Not applicable in case of NCT of Delhi since there is very less Agricultural Land available however Farmers are being made aware of the following good irrigation practices for water conservation by Development Department, Govt. of NCT of Delhi :-

1. Farmers are being advised to adopt inter-cropping and multiple-cropping to get maximum returns per unit of area and per unit of time with optimum use of water.
2. Farmers are being advised to grow crop which requires less water.
3. Farmers are being advised to adopt Sprinkler and drip irrigation system to irrigate their crops for conservation of water.
4. Farmers are being advised to use water, as per crop-wise prevailing package of practices to conserve water.
5. Farmers are being advised to conserve rain water, by adopting deep ploughing and bunding etc. of their fields for conservation of water.

XVI. Rain Water Harvesting:

Progress of Rain Water Harvesting System installed / monitored by DJB is as under:

S. No.	Departments	Total	Installed	Target to be installed in Year 2020
1.	DJB Installations	594	563	31
2.	By DJB for other Departments	89	32	57
3.	Monitored by DJB for other Government Departments	5198	3449	1749
4.	Schools	4549	3687	862
	Total	**10430**	**7731**	**2699**

XVII. Demarcation of Floodplain and Removal of Illegal Encroachments :

Demarcation of 1 in 25 years Flood Plains & Fixing up of Bollards and Fencing :

The demarcation of 1: 25 years flood plain of River Yamuna from Wazirabad to Jatipur on both banks. Work for reinstallation of bollards along with Geo reference was initiated/ awarded to M/s M and G Associates on 29 August 2019. The flood plains from Wazirabad to ISBT and from Sundial to Dhobighat was marked. The ring road from Yamuna Bazaar to Sun Dial and the road number 13/A from Dhobi Ghat to Jaitpur Ghat and further embankment upto Delhi Haryana border acts/mark the floodplain boundary on western bank. Similarly, the Pustha road on the eastern bank mark the entire flood plain boundary.100% work for demarcation of flood plains completed. 100 numbers bollards for demarcation on Yamuna River Flood area have already been framed on 19 November 2019. The 600 nos. bollards for the entire stretch from Wazirabad barrage to Okhla Barrage have already been installed. In addition to above, for making

demarcation more visible and convenient to the public, it was Flagged 6 metre height with RCC foundation and with reflected Paints on sign board. Accordingly, the work was awarded to the agency before the Lockdown and the agency has also commenced the work. The progress of work has been hampered due to unforeseen factors viz. Unseasonal rain, imposition of ban on construction, outbreak of covid-19. The work is likely to be completed by November, 2020.

Engagement of Private Security to Stop Illegal Dumping:

Private security has been engaged by DDA to stop illegal dumping.120 Nos. of security guards have been deployed by DDA.

Installation of Electronic Surveillance System:

The work for installation of 102 number CCTV cameras at 34 locations from Wazirabad to Jaitpur to check the illegal dumping of Malba into Yamuna flood plain was awarded to M/s Technology Security System Private Limited. 78 number cameras have been installed at 26 number locations. Out of remaining 3 cameras to be installed at one remaining location, 9 locations catering to 27 nos. cameras are not feasible as per current scenario due to various hindrances. The remaining work will be completed by 15th November, 2020 subject to availability of power supply by BSES.

Removal of Encroachment from the Flood Plain:

DDA has informed that 550 nos. Jhuggies / Chappers have been demolished and an area of 5500 square metre has been freed from encroachment. In all out of 1026 jhuggies/Structures existing of nearly 11 acres of land in Okhla, Khijrabad and Jogabai 600 jhuggies have been removed and 5 acre of land has been reclaimed, nearly 2 acre of land with 150 jhuggies could not be removed due to stay by Courts. Balanced Jhuggies are proposed to be removed in due course. Details of demolition carried out by DDA have already been submitted on 27 March 2020 along with the Monthly Progress Report for the month of February 2020.

Use of Technology like Artificial Intelligence for Aerial Mapping etc.

Possibility of using Technology like Artificial Intelligence, Aerial Mapping etc. or Drones to keep a track of quantum and location of debris is being dumped is being explored by DDA. An electronic surveillance system with patrolling along with static party has been deployed by DDA. For monitoring of encroachment on vacant land using satellite imageries the subject has been taken up with ISRO and DDA has signed an MOU with ISRO on 6 July 2018. If successful, will be implemented in monitoring of Yamuna River Flood Plain.

Restoration and Rejuvenation of the Floodplains of River Yamuna.

DDA is going ahead with the Restoration and rejuvenation of floodplains of River Yamuna. The complete stretch of Zone-'O' falling under the jurisdiction of DDA has been subdivided into 10 projects including the development of Bio-diversity Park near Kalindi Kunj Colony. Brief status of 10 projects taken up to/be taken up by DDA for development of Yamuna River Front (Restoration and Rejuvenation of River Yamuna Flood Plains Status October, 2020) is enclosed as **Annexure - 8**

XVIII. Maintaining Minimum e-flow of River:

To assess the minimum required environmental flow of river Yamuna for stretch between Hathini Kund to Okhla, a comprehensive study was assigned by NMCG to National Institute of Hydrology (NIH), Roorkee on 24.12.2018. Interim Report of NIH was received in December, 2019 & Final Draft Report has been received by NMCG.

XIX. Plantation activities along the rivers:

(i) Details of plantations under DPTA, 1994 against tree felling permissions issued in various projects:

- Total **137.43** ha of land has been handed over by DDA to Forest Department, Delhi for the purpose.
- **137.43** ha of land planted (162276 tree saplings) by Forest Department, Delhi.

(ii) Details of plantations carried out as Compensatory Afforesation against the Forest land diverted under Compensatory Afforestation Act (FCA), 1980:

- Total **80.744 ha** of land has been handed over by DDA to Forest Department, Delhi for the purpose.
- **80.74** ha of land planted (**105,247** tree saplings) by Forest Department, Delhi.

- **Total land handed over by DDA till date = 575.774 ha**
- **The area that has been afforested till date = 575.744 ha**

XX. Development of Biodiversity Park:

Yamuna Biodiversity Park is already existing and located in Jagatpur Khadar Yamuna Flood Plains in 9770 Hectares (upstream of Wazirabad).

South Biodiversity Park is being developed by Delhi Development Authority in the 115 Hectares area in Yamuna Flood Plains near Kalindi Colony.The project has been awarded to CEMDE on 13.12.2019 . Water hyacinth and Alternanthera have been removed from wetlands covering an area of 25 Hectare. In a small stretch of 500 meter long and 10 meter wide strip along the road plantation has been done. In some wetlands, after removal of water hyacinth, lemna has been growing and removing high levels of nitrates and phosphates from the sewage water and hence improvement in the quality of polluted water. This also serves as a food material for aquatic birds. In these wetlands fish that feed on detritus has also been recorded.

Greenway and recreational park development:
A small stretch of 500 m long and 10 m wide stripe along the Ashram Road has been planted with 300 plants. A large solid waste dump behind the Kalindi Colony has been landscaped and this is being developed into a recreational park.

Development of Nature Trails:
Two nature trails - one trail from Ashram Road to DND Flyover has been made; both sides of this nature trail would be developed into a greenway.

Development of Terrestrial Communities:
About 20 Hectare of elevated portion beneath the DND flyover has been processed for planting 15000 saplings of native trees. Due to ban on the construction activity and movements of vehicles, there has been some delay in getting the materials for constructed wetland systems. Once the material is available, 3-5 in-situ constructed wetland system will be taken up for treatment of sewage water that enter into wetlands and finally into river Yamuna.

XXI. Reuse of Treated Water:

Action Plan for use of treated waste water form STPs has been prepared by Delhi Jal Board and submitted to CPCB in compliance of the Orders of Hon'ble NGT dated 21.05.2020 & 21.09.2020 in OA No. 148/2016 in the matter of Mahesh Chandra Saxena Vs. South Delhi Municipal Corporation & Ors.

Out of 535 MGD of treated waste water form STPs about 90 MGD is being used for various purpose e.g. Horticulture, Irrigation, DTC Depot etc.

Progress on better utilisation of treated waste water and number of bore-wells sealed agency wise

The DJB has made continues efforts for better utilization of treated wastewater, which are mentioned below:-

1. DJB has written to respective stakeholders/ park owning agencies vide letter dated 23/5/2019 & subsequent reminders dated 11/6/2019, 17/6/2019, 21/6/2019, 16/7/2019 & 19/7/2019 requesting them to start taking treated effluent form DJB STPs for the parks which are falling within the radius of 5 KM of DJB STP by tankers as an interim arrangement as desired by the monitoring committee. DJB has installed filling points at its all major STPs for filling the tankers.
2. Notices were issued to DDA, NDMC, Municipal Corporations, CPWD, DMRC, PWD, DUSIB to submit ATR to Monitoring Committee to utilize treated effluent in their parks which are within 5 km radius of STPs filling points
3. DJB has sent the request letter dated 5/9/2019 to all District Magistrate to seal the bore well in parks which are used for horticulture purposes. Subsequently multiple reminders dated 7/10/2019,11/11/2019 & 25/11/2019 by Member (Drainage) have also been sent to District Magistrates to seal the bore well in parks which used for horticulture purposes.
4. Further, In order to utilise treated effluent for horticulture purposes in the nearby park, a study has been conducted by M/s WAPCOS and a DPR amounting to Rs. 850.11 Crore for utilizing 39.49 MGD treated wastewater from different STPs of Delhi Jal Board has been prepared. As per the demand received from various stakeholders, the STPs wise DPRs prepared by M/s WAPCOS Ltd. for laying of peripheral pipe line network for reuse of treated effluent for horticulture purpose in Delhi were sent to all stakeholders for scrutiny and further action by the respective departments/stakeholders. The scheme shall be implemented after consent of stake holders to share the proportionate cost of the scheme.

   In the DPR the peripheral network from each STP has been extended upto a tapping point in the park owned by the respective agencies. From these tapping points the respective agencies can extend the internal network in their park or can create hydrant for filling tankers as per their convenience.

Bore wells Sealed and Tankers Deployed

The details of tanker deployment before commencement of lockdown by various stakeholders departments are as under:-

Agency	No. of Tankers Deployed
SDMC	9
EDMC	40
NORTH DMC	14
DCB	04
DDA	00
NDMC	02
PWD	70
DTC	17
DUSIB	01
FOREST	56
TOTAL	**213**

XXII. Model River being adopted by the State & Action Proposed for achieving the bathing quality standards:

In case of Delhi there is only one river i.e. Yamuna river and efforts are being made to comply with the directions of Hon'ble NGT in OA No. 673/2018 & OA No. 06/2012 in the matter of Manoj Mishra Vs. Union of India & others.

In absence of minimum Environmental Flow of river Yamuna in Delhi it is very difficult to achieve the bathing quality standards.

XXIII. Status of Preparation of Action Plan by the 13 Coastal States: Not applicable in case of Delhi

XXIV. Regulation of Mining Activities in the State/UT: Not applicable in case of Delhi

XXV. Action against identified polluters, law violators and officers responsible for failure for vigorous monitoring:

DPCC takes action against the violating Industries/ Units including Water Polluting Industries /Units and imposes Environmental Compensation (EC) on the Polluter Pays Principle. Action taken by DPCC against the Industries / Units and Environmental Compensation (EC) imposed was informed to the Hon'ble Tribunal vide Action Taken Report filed before the Tribunal on 01.08.2019, 10.12.2019 & 13.05.2020

Action was taken against 980 Water Polluting Industries / Units in the period of 01.01.2020 to 31.10.2020.

Show Cause Notices were issued by DPCC u/s 33(A) of Water Act to 260 Water Polluting Industries / Units and Directions for Closure u/s 33(A) of Water Act were issued to 720 Water Polluting Industries / Units in the period of 01.01.2020 to 31.10.2020.

Environmental Compensation of Rs. 25.28 Crores was imposed and Rs. 2.69 Crores was received in the period of 01.01.2020 to 31.10.2020.

Annexure-1

Details of Each Existing STP of Delhi Jal Board in Delhi

S. No.	Location	Existing STP Capacity (in MLD)	Capacity Being Utilized (in MLD)	Operational Status of STP	Compliance Status * of STP (October, 2020)
1.	Mehrauli (5 MGD)	22.73	18.8	Operational	Not Meeting the Prescribed standard in respect of TSS (18 mg/l against the prescribed standard of ≤ 10 mg/l), BOD (18 mg/l against the prescribed standard of ≤ 10 mg/l) and COD (72 mg/l against the prescribed standard of ≤ 50 mg/l)
2.	Okhla, Phase -II (12 MGD)	54.55	29.5	Operational	**Not Meeting the Prescribed standard in respect of TSS (18 mg/l against the prescribed standard of ≤ 10 mg/l) and BOD (12 mg/l against the prescribed standard of ≤ 10 mg/l)**
3.	Okhla Phase -III (37 MGD)	168.2	130	Operational	**Not Meeting the Prescribed standard in respect of TSS (32 mg/l against the prescribed standard of ≤ 10 mg/l) and BOD (16 mg/l against the prescribed standard of ≤ 10 mg/l)**
4.	Okhla Phase -IV (45 MGD)	204.57	175	Operational	**Not Meeting the Prescribed standard in respect of TSS (34 mg/l against the prescribed standard of ≤ 10 mg/l), BOD (20 mg/l against the prescribed standard of ≤ 10 mg/l), COD (64 mg/l against the prescribed standard of ≤ 50 mg/l) and Ammonical Nitrogen (6.4 mg/l against the prescribed standard of ≤ 5 mg/l)**
5.	Okhla Phase -V (16 MGD)	72.74	60	Operational	**Not Meeting the Prescribed standard in respect of TSS (16 mg/l against the prescribed standard of ≤ 10 mg/l)**
6.	Okhla Phase -VI (30 MGD)	136.38	130	Operational	Meeting the Prescribed standards.
7.	Molar Band (0.66 MGD)	3	2.45	Operational	**Not Meeting the Prescribed standard in respect of TSS (36 mg/l against the prescribed standard of ≤ 10 mg/l), BOD (24 mg/l against the prescribed standard of ≤ 10 mg/l), COD (76 mg/l against the prescribed standard of ≤ 50 mg/l), Ammonical Nitrogen (7.2 mg/l against the prescribed standard of ≤ 5 mg/l) and Dissolved Phosphate as P (4.2 mg/l against the prescribed standard of ≤ 2 mg/l)**
8.	Sen Nursing Home Nallah (2.2 MGD)	10	10	Operational	Meeting the Prescribed standards.
9.	Vasant Kunj (Old) Phase-I (2.2 MGD)	10	7.5	Operational	

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10.	Vasant Kunj (New) Phase-II (3 MGD)	13.64	7.9	Operational	**Not Meeting the Prescribed standard in respect of TSS (16 mg/l against the prescribed standard of ≤ 10 mg/l)**
11.	Ghitorni (5 MGD)	22.73	6.8	Operational	
12.	Delhi Gate Nallah (Old) Phase-I (2.2MGD)	10	10	Operational	Meeting the Prescribed standards.
13.	Delhi Gate Nallah (New) Phase-II (15 MGD)	68.19	68.2	Operational	Meeting the Prescribed standards.
14.	Kondli Phase - II (25 MGD)	113.65	116.62	Operational	**Not Meeting the Prescribed standard in respect of TSS (26 mg/l against the prescribed standard of ≤ 10 mg/l), BOD (18 mg/l against the prescribed standard of ≤ 10 mg/l), COD (58 mg/l against the prescribed standard of ≤ 50 mg/l), Ammonical Nitrogen (5.8 mg/l against the prescribed standard of ≤ 5 mg/l) and Dissolved Phosphate as P (3.6 mg/l against the prescribed standard of ≤ 2 mg/l)**
15.	Kondli Phase - IV (45 MGD)	204.57	227.18	Operational	**Not Meeting the Prescribed standard in respect of TSS (36 mg/l against the prescribed standard of ≤ 10 mg/l), COD (88 mg/l against the prescribed standard of ≤ 50 mg/l), BOD (32 mg/l against the prescribed standard of ≤ 10 mg/l), Ammonical Nitrogen (8.6 mg/l against the prescribed standard of ≤ 5 mg/l) and Dissolved Phosphate as P (4.2 mg/l against the prescribed standard of ≤ 2 mg/l).**
16.	Chilla (9 MGD)	40.91	42.51	Operational	Meeting the prescribed standards.
17.	Yamuna Vihar Phase-I (10 MGD)	45.46	44.85	Operational	Meeting the prescribed standards.
18.	Yamuna Vihar Phase-II (10 MGD)	45.46	44.31	Operational	**Not Meeting the Prescribed standard in respect of TSS (16 mg/l against the prescribed standard of ≤ 10 mg/l) and Dissolved Phosphate as P (2.3 mg/l against the prescribed standard of ≤ 2 mg/l).**
19.	Yamuna Vihar Ph-III (25 MGD)	113.65	139.52	Operational	**Not Meeting the Prescribed standard in respect of TSS (36 mg/l against the prescribed standard of ≤ 10 mg/l), COD (88 mg/l against the prescribed standard of ≤ 50 mg/l), BOD (28 mg/l against the prescribed standard of ≤ 10 mg/l), Ammonical Nitrogen (7.8 mg/l against the prescribed standard of ≤ 5 mg/l) and Dissolved Phosphate as P (3.8 mg/l against the prescribed standard of ≤ 2 mg/l).**

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20.	Akshardham / Common Wealth Games Village (1 MGD)	4.55	0.5	Operational	Meeting the prescribed standards.
21.	Coronation Pillar Phase- I & II (20 MGD)	90.92	88.53	Operational	**Not Meeting the Prescribed standard in respect of TSS (60 mg/l against the prescribed standard of ≤ 10 mg/l), BOD (42 mg/l against the prescribed standard of ≤ 10 mg/l), COD (144 mg/l against the prescribed standard of ≤ 50 mg/l), Ammonical Nitrogen (6.8 mg/l against the prescribed standard of ≤ 5 mg/l) and Dissolved Phosphate as P (2.7 mg/l against the prescribed standard of ≤ 2 mg/l)**
22.	Coronation Pillar Phase - III (10 MGD)	45.46	38.59	Operational	**Not Meeting the Prescribed standard in respect of TSS (48 mg/l against the prescribed standard of ≤ 10 mg/l), COD (136 mg/l against the prescribed standard of ≤ 50 mg/l), BOD (38 mg/l against the prescribed standard of ≤ 10 mg/l) and Ammonical Nitrogen (5.8 mg/l against the prescribed standard of ≤ 5 mg/l).**
23.	Narela (10 MGD)	45.46	18.16	Operational	**Not Meeting the Prescribed standard in respect of TSS (16 mg/l against the prescribed standard of ≤ 10 mg/l)**
24.	Rithala Phase -I (20 MGD)	90.92	106.69	Operational	**Not Meeting the Prescribed standard in respect of TSS (70 mg/l against the prescribed standard of ≤ 10 mg/l), BOD (40 mg/l against the prescribed standard of ≤ 10 mg/l), COD (160 mg/l against the prescribed standard of ≤ 50 mg/l), Ammonical Nitrogen (9.4 mg/l against the prescribed standard of ≤ 5 mg/l) and Dissolved Phosphate as P (2.3 against the prescribed standard of ≤ 2 mg/l)**
25.	Rithala Phase -II (40 MGD)	181.84	186.14	Operational	**Not Meeting the Prescribed standard in respect of TSS (14 mg/l against the prescribed standard of ≤ 10 mg/l), Ammonical Nitrogen (6.8 mg/l against the prescribed standard of ≤ 5 mg/l) and Dissolved Phosphate as P (3.6 against the prescribed standard of ≤ 2 mg/l)**
26.	Rohini (15 MGD)	68.19	22.7	Operational	**Not Meeting the Prescribed standard in respect of TSS (20 mg/l against the prescribed standard of ≤ 10 mg/l), BOD (16 mg/l against the prescribed standard of ≤ 10 mg/l), COD (60 mg/l against the prescribed standard of ≤ 50 mg/l) and Dissolved Phosphate as P (2.8 against the prescribed standard of ≤ 2 mg/l)**
27.	Keshopur Phase - I (New) (12 MGD)	54.55	54.48	Operational	**Not Meeting the Prescribed standard in respect of TSS (14 mg/l against**

					the prescribed standard of ≤ 10 mg/l).
28.	Keshopur Phase-II (20 MGD)	90.92	95.34	Operational	**Not Meeting the Prescribed standard in respect of TSS (68 mg/l against the prescribed standard of ≤ 10 mg/l), BOD (40 mg/l against the prescribed standard of ≤ 10 mg/l), COD (96 mg/l against the prescribed standard of ≤ 50 mg/l), Ammonical Nitrogen (9.2 mg/l against the prescribed standard of ≤ 5 mg/l) and Dissolved Phosphate as P (4.2 mg/l against the prescribed standard of ≤ 2 mg/l)**
29.	Keshopur Phase - III (40 MGD)	181.84	186.14	Operational	**Not Meeting the Prescribed standard in respect of TSS (72 mg/l against the prescribed standard of ≤ 10 mg/l), COD (120 mg/l against the prescribed standard of ≤ 50 mg/l), BOD (45 mg/l against the prescribed standard of ≤ 10 mg/l), Ammonical Nitrogen (9.6 mg/l against the prescribed standard of ≤ 5 mg/l) and Dissolved Phosphate as P (4.6 against the prescribed standard of ≤ 2 mg/l)**
30.	Nilothi Phase-I (40 MGD)	181.84	68.1	Operational	**Not Meeting the Prescribed standard in respect of TSS (46 mg/l against the prescribed standard of ≤ 10 mg/l), BOD (32 mg/l against the prescribed standard of ≤ 10 mg/l), COD (128 mg/l against the prescribed standard of ≤ 50 mg/l), Ammonical Nitrogen (8.9 mg/l against the prescribed standard of ≤ 5 mg/l) and Dissolved Phosphate as P (4.7 mg/l against the prescribed standard of ≤ 2 mg/l)**
31.	Nilothi Phase-II (20 MGD)	90.92	88.53	Operational	Meeting the Prescribed standards.
32.	Papankalan Phase - I (20 MGD)	90.92	108.96	Operational	**Not Meeting the Prescribed standard in respect of TSS (40 mg/l against the prescribed standard of ≤ 10 mg/l), COD (80 mg/l against the prescribed standard of ≤ 50 mg/l), BOD (28 mg/l against the prescribed standard of ≤ 10 mg/l), Ammonical Nitrogen (6.9 mg/l against the prescribed standard of ≤ 5 mg/l) and Dissolved Phosphate as P (3.8 mg/l against the prescribed standard of ≤ 2 mg/l)**
33.	Papankalan Phase - II (20 MGD)	90.92	90.8	Operational	Meeting the Prescribed standards.

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34.	Najafgarh (5 MGD)	22.73	11.35	Operational	**Not Meeting the Prescribed standard in respect of TSS (32 mg/l against the prescribed standard of ≤ 10 mg/l), BOD (24 mg/l against the prescribed standard of ≤ 10 mg/l), COD (76 mg/l against the prescribed standard of ≤ 50 mg/l), Ammonical Nitrogen (5.8 mg/l against the prescribed standard of ≤ 5 mg/l) & Dissolved Phosphate as P (2.6 mg/l against the prescribed standard of ≤ 2 mg/l)**
35.	Kapashera (5 MGD)	22.73	8.17	Operational	Meeting the prescribed standards.
	Total	**2715.14 MLD**	**2444.32 MLD**		

* DPCC has decided following Standards for Treated Effluent of Sewage Treatment Plants (STPs) of Delhi Jal Board (for Old as well as New STPs) and communicated to Delhi Jal Board vide letter dated 31.01.2020 to meet the prescribed standards :

1. pH 6.5 - 9.0
2. Total Suspended Solids (TSS) ≤ 10 mg/l
3. Biochemical Oxygen Demand (BOD) ≤ 10 mg/l
4. Chemical Oxygen Demand (COD) ≤ 50 mg/l
5. Ammonical Nitrogen (NH 4 - N) ≤ 5 mg/l
6. Total Nitrogen (N -Total) ≤ 10 mg/l
7. Phosphate (PO 4 - P) ≤ 2 mg/l
8. Fecal Coliform (FC) (MPN/100ml) ≤ 230

ANNEXURE -2

Status of 18 Major Drains Directly Out Falling into River Yamuna (As per the Information provided by DJB)

S.No.	Name of Drain	Discharge (MLD)	Status	Remarks
1.	Magazine Road Drain	7.8 (1.72 MGD)	Trap Completed.	Pollution in River Yamuna from this drain stopped.
2.	Sweeper Colony Drain	8.6 (1.89 MGD)	Trap Completed.	---- Do--
3.	Khyber Pass Drain	1.7 (0.37 MGD)	Trap Completed.	---- Do--
4.	Metcalf House Drain	17.25 (3.80 MGD)	Trap Completed.	---- Do--
5.	Tonga Stand Drain	7.8 (1.72 MGD)	Trap Completed.	There is small discharge from the local settlements downstream of trapping points for which it is proposed to trap and pump the same to the nearby sewer line.
6.	Moat Drain(Vijay Ghat)	Dry	Trap Completed. Dry drain	---- Do--
7.	Civil Military Drain	14.68 (3.23 MGD)	Trap Completed.	---- Do--
8.	Delhi Gate Drain	75.16 (16.55 MGD)	Trap Completed.	---- Do--
9.	Drain No 14	25.87 (5.70 MGD)	Trap Completed.	---- Do--
10.	Tughlaqabad Drain	25.05 (5.51 MGD)	Trap Completed.	---- Do--
11.	Kalkaji Drain	Merged with Tuglakabad Drain	Trap Completed.	---- Do--
12.	Tehkhand Drain	39.74 (8.75 MGD)	Trap Completed.	---- Do--
13.	Sen Nursing Home Drain	43.20 (9.51 MGD)	Trap Completed. However, overflow was observed from the gates on Sen Nursing Home Nallah installed by the agency operating the STP.	Weir was being constructed to completely stop the overflow. However, the work was stopped and the constructed structure was completely demolished by SDMC in the month of July 2020 with the plea that it is causing obstruction to the flow thereby weakening the embankment of the drain.
14.	QudsiaBagh+ Morigate Drain	43.2 (9.51 MGD)	Land identified but is in O zone. DDA has been requested to take urgent action for allotment of land. Land is yet to be allotted to DJB by DDA.	Due to combined and old mixed sewerage and storm water system in the area, the two cannot be separated and hence there is requirement of separate STP.
15.	Barapulah Drain	145.15 (31.97 MGD)	1. As a short term measure sewers from sewered area are proposed to be trapped. The trappings at Krishi Vihar, Andrews Ganj & Nijamuddin are being renewed which will take around 50 MLD waste water which will be pumped to Okhla STP. 2. As a long term measure, a Sewage Treatment Plant of 90 MLD capacity has been proposed at the mouth of the drain. DDA is being pursued to allot the land for construction of STP.	

			3. The sewerage system in Sangam Vihar GOC in the command area of this drain is being provided which will stop sewage from unauthorized colonies.	
16.	Maharani Bagh Drain	30.24 (6.66 MGD)	The work of trapping has been completed to partially trap the flow to the extent of 9-10 MLD in C.V. Raman Marg Trunk sewer.For balance about 15 MLD flow, the sewerage system is being provided in Batla House GOC, Phase-II. which will trap the same and pump to Okhla STP. The work will be completed by 30.04.2022.	
17.	Najafgarh Drain	2056.32 (452.9 MGD)	Work is in progress.	There is about 453 MGD flow in the Najafgarh drain. Out of this at present 252 MGD comprises of treated effluent from STPs. From Haryana, untreated discharge of 105 MGD is being discharged through Badshahpur and DD-6 drains. The untreated sewage from Delhi area is 93 MGD (21%). After commissioning of ISP and construction of Coronation Pillar STP, untreated discharge from Delhi area will be reduced from 21% to 8% in March, 2021. Untreated discharge from the command area of 14 STPs in Najafgarh Drainage Zone contributes only 2% i.e. 10 MGD. To take care of unsewered areas, Delhi Govt. has already notified Septage Regulations in November, 2018 which will reduce further pollution in Najafgarh drain/river Yamuna.
18.	Shahdara Outfall Drain	475.2 (104.66 MGD)	Work is in progress.	Total discharge in Shahdara drain is about 105 MGD, out of which 50 MGD (i.e. 45%) untreated sewage is being discharged by UP through Shahibabad, Indirapuri and Banthala drain. After commissioning of Interceptor Sewer Project by December, 2020 and notification of various sewerage schemes in unauthorized colonies, Yamuna Vihar STP will trap around 18% and 9% of the flow is already being treated through Chilla STP. After commissioning of Kondli Phase-I, II & III STPs, untreated flow of 25 MGD (23%) will also be treated by December, 2022. The balance untreated flow will remain only about 6 MGD. i.e. 5%. To take care of unsewered areas, Delhi Govt. has already notified Septage Regulations in November,2018 which will reduce further pollution in Shahdara drain/river Yamuna.

Brief Status of Common Effluent Treatment Plants (CETPs) in Delhi
(Based on the Analysis Reports of DPCC Laboratory for the Month of October, 2020)

Annexure - 3

S. No.	Name of CETP	Industrial Areas Connected with CETP	Capacity (in MLD)	Flow (in MLD)	Date of Sampling	Influent Quality at Inlet (in mg/l)	Effluent Quality at Outlet (in mg/l)	Brief of Analysis Report (For Treated Effluent)	Action Taken
1	**Jhilmil CETP**	Jhilmil and Friends Colony Indl. Areas	**16.8**	2.48	14.10.2020	pH - 6.5 TSS - 204 BOD - 108 COD - 332 TDS - 1950 SO_4 - 1465	pH - 7.0 TSS - 42 BOD - 26 COD - 88 TDS - 1770 SO_4 - 1460	Not meeting the Prescribed Standard in respect of SO_4 (1460 mg/l against Prescribed Standard of 1000 mg/l).	Letter issued to the CETP Societies on 18.11.2020 enclosing effluent Analysis Report of DPCC Laboratory with the direction to take immediate necessary measures to comply with the prescribed Treated Effluent Standards notified by MOEF&CC and send the compliance report along with rectification measures taken within 15 days.
2	**Badli CETP**	Badli Industrial Estate	**12**	2.0	06.10.2020	pH - 6.5 TSS - 88 BOD - 50 COD - 160 TDS - 1600	pH - 6.5 TSS - 48 BOD - 28 COD - 88 TDS - 1010	Meeting the Prescribed Standards.	
3	**Mayapuri CETP**	Mayapuri Indl. Area	**12**	2.76	09.10.2020	pH - 7.2 TSS - 124 BOD - 72 COD - 228 TDS - 1690	pH - 7.3 TSS - 28 BOD - 18 COD - 64 TDS - 1130	Meeting the Prescribed Standards.	
4	**Mangolpuri CETP**	Mangolpuri Indl. Area	**2.4**	2.4	07.10.2020	pH - 6.8 TSS - 344 BOD - 180 COD - 552 TDS - 3780 Chloride - 2685	pH - 7.0 TSS – 56 BOD - 35 COD - 132 TDS - 3780 Chloride - 2010	Not meeting the Prescribed Standards in respect of BOD (35 mg/l against Prescribed Standard of 30 mg/l) ,TDS (3780 mg/l against Prescribed Standard of 2100 mg/l) and Chloride (2010 mg/l against Prescribed Standard of 1000 mg/l)	
5	**Wazirpur CETP**	Wazirpur Indl Area	**24**	2.5	13.10.2020	pH - 7.4 TSS - 368 BOD - 190 COD - 576 TDS - 1840	pH - 7.4 TSS - 54 BOD - 36 COD - 128 TDS - 890	Not meeting the Prescribed Standards in respect of BOD (36 mg/l against Prescribed Standard of 30 mg/l).	
6	**Nangloi CETP**	Nangloi & Udyog Nagar Indl Areas	**12**	3.367	07.10.2020	pH - 7.3 TSS - 408 BOD - 210 COD - 640 TDS - 3360 Chloride - 2090	pH - 7.2 TSS - 38 BOD - 22 COD - 88 TDS - 3360 Chloride - 2075	Not meeting the Prescribed Standards in respect of TDS (3360 mg/l against Prescribed Standard of 2100 mg/l) and Chloride (2075 mg/l against Prescribed Standard of 1000 mg/l).	

Brief Status of Common Effluent Treatment Plants (CETPs) in Delhi
(Based on the Analysis Reports of DPCC Laboratory for the Month of October, 2020)

Annexure - 3

7	**SMA CETP**	SMA, Rajasthani Udyog Nagar and SSI Industrial Areas	**12**	1.5	13.10.2020	pH - 6.9 TSS - 548 BOD - 280 COD - 848 TDS - 1710	pH - 6.9 TSS - 22 BOD - 18 COD - 64 TDS - 1140	Meeting the Prescribed Standards	
8	**Okhla CETP**	Okhla Indl. Area	**24**	1.20	12.10.2020	pH - 7.2 TSS - 352 BOD - 180 COD - 848 TDS - 3310	pH - 7.2 TSS - 50 BOD - 26 COD - 96 TDS - 1810	Meeting the Prescribed Standards	
9	**Narela CETP**	Narela Indl. Area	**22.5**	12.602	08.10.2020	pH - 7.8 TSS - 142 BOD - 78 COD - 240 TDS - 1810	pH - 7.0 TSS - 32 BOD - 21 COD - 78 TDS - 1060	Meeting the Prescribed Standards	
10	**Bawana CETP**	Bawana Indl. Area	**35**	17.7	08.10.2020	pH - 7.6 TSS - 208 BOD - 110 COD - 336 TDS - 2470	pH - 7.1 TSS - 40 BOD - 27 COD - 120 TDS - 1040	Meeting the Prescribed Standards	
11	**Naraina CETP**	Naraina Indl. Area	**21.6**	4.98	09.10.2020	pH - 7.1 TSS - 162 BOD - 86 COD - 248 TDS - 861	pH - 7.2 TSS - 42 BOD - 28 COD - 92 TDS - 733	Meeting the Prescribed Standards	
12	**GTK Road CETP**	GTK Road Indl. Area	**6**	1.9	13.10.2020	pH - 7.2 TSS - 564 BOD - 280 COD - 848 TDS - 950	pH - 7.4 TSS - 36 BOD - 22 COD - 72 TDS - 891	Meeting the Prescribed Standards	
13	**Lawrence Road CETP**	Lawrence Road Indl. Area	**12**	1.3	13.10.2020	pH - 7.2 TSS - 472 BOD - 240 COD - 728 TDS - 1820 SO_4 - 1293	pH - 7.3 TSS - 66 BOD - 48 COD - 152 TDS - 1620 SO_4 - 1166	Not meeting the Prescribed Standards in respect of BOD (48 mg/l against Prescribed Standard of 30 mg/l) and SO_4 (1166 mg/l against Prescribed Standard of 1000 mg/l)	
		Total	**212.3 MLD**	**56.689 MLD**					

Annexure - 4

Status of Solid Waste Management including Legacy Waste in NCT of Delhi

1. Municipal Solid Waste Management :

Municipal Solid Waste Generation, Processing and Disposal

S.No.	Particulars	North DMC	SDMC	EDMC	NDMC	DCB	Total
1	Total Municipal Solid Waste (MSW) Generation (in TPD)	4500	3600	2700	272	72	11144
2	Lifting / Collection of MSW (in %)	100%	100%	100%	100%	100%	NA
3	No. of Wards	104	104	64	14 (Circles)	8	---
4	Segregation of MSW at Source (in %)	80% (in 3 Model Wards)	About 80% in 13 Wards. (Including 03 Model Wards)	100% (in 3 Model Wards) 75% (in 6 Wards) 30% (in 55 Wards)	90% (All Circles)	90% (Civil Area) 60% (Army Area)	NA
5	Processing of Waste in TPD (in %)	2400* (53%)	1850 (51%)	705 (26%)	272 (100%)	37 (51%)	5264 (47%)
6	Disposal of MSW in Landfill Sites	2100 (47%)	1750 (49%)	1995 (74%)	Nil	35 (49%)	5880 (53 %)

(a) Collection, Segregation & Transportation of Municipal Solid Waste:

There are 5 Local Bodies in Delhi responsible for implementation of the Solid Waste Management Rules, 2016. Total Municipal Solid Waste generation in Delhi is 11144 Tonnes per day (TPD). For proper treatment and disposal of the municipal solid waste, waste segregation is pre-requisite and the local bodies are implementing a detailed plan of waste segregation at source, door to door collection, intermediate storage and transport facility with GPS for the segregated waste.

(b) Municipal Solid Waste Processing and Disposal Facilities:

There is one Integrated Solid Waste Management Facility at Bawana for processing of 2000 TPD of municipal solid waste having Waste to Energy Plant, Compost Plant and Engineered Sanitary Land Fill. This Integrated Solid Waste Management Facility is being operated by M/s Delhi MSW Solutions Ltd. One Engineered Sanitary Land Fill is proposed to be developed by South Delhi Municipal Corporation (SDMC) at Tehkhand. An Integrated Solid Waste Management Facility for 2000 TPD is proposed to be developed by East Delhi Municipal Corporation (SDMC) in joint venture with NTPC at Ghonda Gujran. Besides other facilities the said facility will be having Waste to Energy Plant. There is one Centralised Compost Plant at Okhla with 200 TPD capacity.

(c) Waste to Energy Plants :

Delhi has 3 Waste to Energy Plants (WTE Plants) of capacity 5250 TPD at 3 different locations in Delhi namely Okhla, Ghazipur and Bawana. One New Waste to Energy Plant of capacity about 2000 TPD is proposed at Tehkhand and another in the Integrated Waste Complex at Ghonda Gujran. After commissioning of these 2 proposed WTEs capacity of WTE Plants will increase from 5250 TPD to 8450 TPD by December, 2021.

Operational Waste to Energy Plants in Delhi

S. No	Name of Waste to Energy Plant	Existing Capacity	
		Waste Processing (in TPD)	Electricity Generation(in MW)
1.	Timarpur Okhla Waste management Company Ltd., Old NDMC Compost Site, Okhla.	1950	23
2.	East Delhi Waste Processing Company Ltd., Ghazipur	1300	12
3.	Delhi MSW Solutions Ltd Narela Bawana Road, Bawana	2000	24
	Total	**5250**	**59**

(d) Gap Analysis on Solid Waste Management

Generation (in TPD)	Processing (in TPD)	Gap (in TPD)	Facilities in pipe line to fill the Gap
11144	**5497.175**	**5646.825**	(i) **2000 TPD** WTE Plant at Tehkhand by 31.12.2021 (SDMC). (ii) **2000 TPD** Integrated Municipal Waste Processing Facility at Ghonda Gujran by 30.09.2022 (as a Joint Venture between NTPC & EDMC). (iii) Engineered Sanitary Landfill at Tehkhand by 30.09.2021 (iv) **2000 TPD** Integrated Waste Collection, Segregation, Transportation, Processing & Disposal by 31.12.2021

(e) Proposed Waste Processing Facilities & Sanitary Land Fill in Delhi

S.No.	Particulars	Location	Area of Local Body	Capacity	Expected Timeline for Completion
1.	Waste to Energy Plant	Tehkhand	SDMC	2000 TPD	December, 2021
2.	Integrated Municipal Waste Processing Facility	Ghonda Gujran	EDMC	2000 TPD	September, 2022
3.	Sanitary Landfill	Tehkhand	SDMC	-------	Sept, 2021
4.	Integrated Waste Collection,Segregation, Transportation, Processing & Disposal	3 Zones of North DMC (City – SP, Karol Bagh& Narela Zone)	North DMC	2000 TPD	December, 2021

(f) Decentralized Waste Management Facilities (Compost Plants /Biomethanation Plants)

The Government is in the process of installation of decentralized Waste Management Facilities (Compost Plants / Bio- Methanation Plants) so that the solid waste generated is segregated and treated at source and the transport and dumping of waste in far away areas can be done away with. The details of the decentralized plants already commissioned and those at different stages of commissioning are as follows:

Operational Decentralized Waste Processing Facilities (Composting –21 Nos., Bio- methanation Plant – 7 Nos.)-

Sl. No.	Local Body	Composting	Bio- methanation Plant
1.	DCB	2 Food Waste Composters –Total Capacity - 0.175 TPD (0.125 TPD + 0.05 TPD)	Nil
2.	EDMC	9 TPD (9 Nos of 1 TPD each)	10 TPD (2 Nos of 5 TPD each)
3.	NDMC	122 No. of Pits at 53 locations for Composting in Parks in NDMC Areas Organic Waste Converter- 2	Nil
4.	North DMC	One Centralised Compost Plant in the Integrated Waste Complex at Bawana + 3 Decentralised Compost Plants of 1TPD each	10 TPD (2 Nos of 5 TPD each)
5.	South DMC	202 TPD One Centralised Compost Plant of 200 TPD at Okhla + 3 Decentralised Compost Plants of 1 TPD each	15 TPD (3 Nos of 5 TPD each)

5 Compost plants of 1 TPD each and 3 Bio Methanation plant of 5 TPD each are proposed to be developed.

NORTH DMC

(i) Accelerated Composter / Bio-Methanisation Plant 1 TPD Capacity (6 Nos)

- 3 Plants commissioned at Bhorgarh Nursery, Rajendra Nagar Nursery and Maurya Enclave at Pitampura
- 3 Plants (at Sector -11 Rohini, Mori Gate & for 3rd one site to be decided in place of Earlier Proposed site at Haiderpur Water Treatment Plant) by 31.12.2020 except 3rd site.

(ii) Bio-Methanation Plants 5-TPD Capacity (4 Nos)

- 2 Plants commissioned at Roshanara Bagh and MVID Hospital.
- 2 Plants (at Mangolpuri Industrial Area Ph-1 & Naraina Industrial Area Ph-1 by 31.12.2020.)

EAST DMC

(i) Composters of 1 TPD Capacity (10 Nos)

- 9 Plants commissioned
- 1 Plant (at Gokalpur) to be commissioned by 31.12.2020.

(ii) Bio-Methanation Plants 5-TPD Capacity (2 Nos)

Both the 2 Plants at Geeta Colony & Shastri Park have commissioned.

SOUTH DMC

(i) **Four Compost Plants of 1 TPD each**

- Three plants commissioned at Chirag Delhi, Punjabi Bagh Nursery and Near Lady Sriram College, East of Kailash.
- One plant at Dwarka Sector 14 is likely to be commissioned by March, 2021

(ii) Four Bio-Methanation Plants (5 TPD Each).

- Three plants commissioned at Sarita Vihar, Dwarka Sector 14 and Punjabi Bagh Nursery.
- One plant at Masood Pur in Vasant Kunj is likely to be commissioned by Jan, 2021

2. Remediation of Legacy Waste (Old MSW):

There are 3 Dumpsites at Ghazipur, Bhalaswa and Okhla in Delhi where Municipal Solid Waste have been dumped and there was legacy waste of 28 Million Tons as mentioned in the orders dated 17.07.2019 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 JasjeevGandhiok&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.".

In the said case Hon'ble National Green Tribunal has passed detailed order regarding Disposal of 'Legacy' Waste dumped at Bhalswa, Ghazipur and Okhla Dumpsites and given various directions. Hon'ble NGT has directed the Municipal Corporations to go for bio mining using trommels instead of capping of the dump sites at Bhalswa, Ghazipur and Okhla. The estimated cost to clear the above three dump sites at Delhi may be approx. Rs. 250 Crores as given below :

i. EDMC - Rs. 125 Crores
ii. North MCD - Rs. 75 Crores
iii. SDMC - Rs. 50 Crores

As per the directions of the Hon'ble Tribunal the contributions towards said amount of Rs. 250 Crores in three separate ESCROW accounts will be as follows :

i	EDMC	NCT Delhi EDMC NDMC* DCB**	Rs. 65 Crore Rs. 40 Crore Rs. 10 Crore Rs. 10 Crore
ii	North MCD	NCT Delhi North MCD NDMC DCB	Rs. 35 Crore Rs. 30 Crore Rs. 05 Crore Rs. 05 Crore
iii	SDMC	NCT Delhi SDMC NDMC DCB	Rs. 25 Crore Rs. 15 Crore Rs. 05 Crore Rs. 05 Crore

As directed by the Hon'ble NGT, the Committee headed by Chief Secretary, Govt. of NCT of Delhi has been constituted vide order dated 25.07.2019. The ESCROW accounts for North DMC, East DMC and South DMC have been opened. Regular meetings of the Committee headed by Chief Secretary are held to review the progress in the said matter.

Out of Rs. 250 Crores, an amount of Rs. 245 Crores have been contributed by the DPCC, DMCs, DCB& NDMC. DCB has deposited only 15 Crores (out of Rs. 20 Crores) and filed an application before the Hon'ble Supreme Court for exemption of Rs. 5 Crores to be deposited to North DMC, because DCB is not dumping its MSW at Bhalswa landfill site.

The Committee has already prepared the plan under which the legacy waste dumped at the 3 locations is being treated by way of "Bio-mining" utilizing high capacity Trommel machines. North DMC has been appointed as Nodal Corporation among all the three Municipal Corporations for tendering process for hiring trommelsfor bio mining and bio remediation of old dump waste on rental basis. Tenders were called on 30.8.2019. The rates of lowest tender were Rs. 629944/- per month per trommel as per requirement of tender documents. Panel of 9 Contractors was approved by the competent authority.

The implementation of the project has been started w.e.f. 01.10.2019. Inert material generated during the process is about 60% to 70% by weight or 40% by volume of the waste being processed, which needs to be disposed of in a scientific manner. It is a major challenge before the municipal corporations to make suitable land available for disposal of this inert material particularly since the availability of land is extremely scarce in Delhi.

SDMC on behalf of all the three DMCs has moved an application to Forest Department for procurement of space in four empty pits of Bhatti mines for temporarily dumping inert materials generated due to bio-mining. The details of processing of legacy waste by each DMC is given in following Table :

Bio-Mining of Legacy Waste at 3 Dumpsites in Delhi (as on 08.11.2020)

S. No.	Name of Local Body (Dumpsite)	Ht of Dump Site (as on 17.07.2019)	Legacy Waste (in Million Tons, as on 17.07.2019	No. of Trommels Installed	No. of Trommels Operational	Total Processed Qty of Legacy Waste (MT)
1	SDMC (Okhla Dumpsite)	40 m	6	8	8	1,60,000
2	EDMC (Ghazipur Dumpsite)	65 m	14	12	12	3,00,000
3	North DMC (Bhalaswa Dumpsite)	62 m	8	19	15	8,90,590
	Total		**28**	**39**	**35**	**13,50,590 MT**

Annexure - 5

DELHI POLLUTION CONTROL COMMITTEE
4th FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI-06
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WATER QUALITY STATUS OF RIVER YAMUNA

REPORT NO: DPCC/W/Y/20-21/157-165 /2664 DATE OF SAMPLING: 05/10/2020
02/11/2020

S.No	Locations	pH	COD (mg/l)	BOD (mg/l)	DO (mg/l)	Fecal Coliform MPN/100ml
Water Quality Criteria ('C' Class)		6.5-8.5	-	3mg/l or less	5mg/l or more	500(desirable) 2500 (max permissible)
1	Palla	7.9	8	2.5	4.5	17×10^{1}
2	Surghat (Down stream of Wazirabad Barrage)	7.7	16	3.0	4.0	13×10^{2}
3	Khajori Paltoon Pool (Downstream Najafgarh Drain)	7.7	80	20	Nil	6.1×10^{5}
4	Kudesia Ghat	7.4	128	50	Nil	40×10^{3}
5	ITO Bridge	7.3	92	28	Nil	31×10^{4}
6	Nizamudin Bridge	7.1	80	16	4.0	13×10^{2}
7	Agra Canal (Okhla)	7.4	52	14	3.1	37×10^{2}
8	After meeting Shahdara Drain (Downstream Okhla Barrage)	7.5	48	14	2.9	6.8×10^{4}
9	Agra Canal (Jaitpur)	7.4	80	16	1.5	33×10^{3}

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Annexure-6

DELHI POLLUTION CONTROL COMMITTEE
4th FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI-06
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WATER QUALITY STATUS OF DRAIN

REPORT NO: DPCC/W/D/20-21/ 385-408/2665

Date of Sampling– 05/10/2020
02/11/2020

S.No.	Name of Sample	pH	TSS (mg/l)	COD (mg/l)	BOD (mg/l)
	Standards	5.5- 9.0	100	250	30
1.	Najafgarh Drain	7.5	58	124	30
2.	Metcalf House Drain	NO FLOW	NO FLOW	NO FLOW	NO FLOW
3.	Khyber Pass Drain	7.6	20	48	14
4.	Sweeper Colony Drain	7.5	108	220	70
5.	Magazine Road Drain	7.6	70	156	42
6.	ISBT Drain	7.4	52	112	32
7.	Tonga Stand Drain	7.4	38	48	12
8.	Moat Drain	NO FLOW	NO FLOW	NO FLOW	NO FLOW
9.	Civil Mill Drain	7.4	76	184	48
10.	Power House Drain	7.3	112	292	70
11.	Sen Nursing Home Drain	7.3	96	168	34
12.	Drain No. 12A	NO FLOW	NO FLOW	NO FLOW	NO FLOW
13.	Drain No. 14	7.2	50	96	23
14.	Barapulla Drain	6.8	160	240	62
15.	Maharani Bagh Drain	7.0	324	400	160
16.	Kalkaji Drain	7.0	96	168	40
17.	Sarita Vihar Drain (Mathura Road)	7.1	210	320	125
18.	Tehkhand Drain	7.3	188	240	85
19.	Tuglakabad Drain	7.2	40	108	31
20.	Drain Near LPG Bottling Plant	NO FLOW	NO FLOW	NO FLOW	NO FLOW
21.	Drain Near Sarita Vihar Bridge	7.1	48	128	32
22.	Shahdara Drain	7.5	324	460	185
23.	Sahibabad Drain	7.5	264	320	175
24.	Indrapuri Drain	7.5	340	500	180

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Annexure- 7

DELHI POLLUTION CONTROL COMMITTEE

Water Laboratory

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ANALYSIS REPORT OF GROUND WATER NEARBY GAZIPUR LAND FILL SITE

Report No.: DPCC/W/LF/20-21/01-04/2325

Date of monitoring: -30/6/2020

27/7/2020

S. No	Sampling Location	pH	TDS (mg/l)	Cl (mg/l)	Hardness as CaCO3 (mg/l)	Ca as Ca (mg/l)	SO4 (mg/l)	Turbidity (NTU)	Nitrate (mg/l)	Fluoride (mg/l)	Zn (mg/l)	Fe (mg/l)	Pb (mg/l)	Cu (mg/l)	Cr (mg/l)	Ni (mg/l)	Cd (mg/l)
	Desirable Limit for Drinking Water	**6.5-8.5**	**500**	**250**	**300**	**75**	**200**	**5**	**45**	**1**	**5**	**0.3**	**0.05**	**0.05**	**0.05**	**-**	**0.01**
1.	Gazipur Dairy Farm, Gali No -4	6.6	1370	1540	490	130.4	249.9	NIL	0.43	0.13	ND	ND	ND	ND	ND	ND	ND
2.	Gazipur Dairy near Masjid	6.7	1340	390	370	104	227.6	NIL	0.60	0.08	0.47	0.23	ND	ND	ND	ND	ND
3.	Gazipur Landfill Site Near Entry Gate	6.8	890	1625	420	115	268.8	NIL	0.78	0.24	1.06	0.08	ND	ND	ND	ND	ND
4.	Fish Market Landfill site Gazipur	7.1	1080	415	340	95	175.8	NIL	0.78	0.32	ND	ND	ND	ND	ND	ND	ND

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1026/WMC-II
27/07/2020

Annexure-7

DELHI POLLUTION CONTROL COMMITTEE

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ANALYSIS REPORT OF GROUND WATER NEARBY OKHLA LAND FILL SITE

Report No.: DPCC/W/LF/20-21/ 09-12/2327 20/7/2020

Date of monitoring: - 30/06/2020

S. No	Sampling Location	pH	TDS (mg/l)	Cl (mg/l)	Hardness as CaCO3 (mg/l)	Ca as Ca (mg/l)	SO4 (mg/l)	Turbidity(NTU)	Nitrate (mg/l)	Fluoride (mg/l)	Zn (mg/l)	Fe (mg/l)	Pb (mg/l)	Cu (mg/l)	Cr (mg/l)	Ni (mg/l)	Cd (mg/l)
	Desirable Limit for Drinking Water	6.5-8.5	500	250	300	75	200	5	45	1	5	0.3	0.05	0.05	0.05	-	0.01
1.	Okhla Landfill Site	6.6	1990	965	1090	265.5	124.6	NIL	1.1	0.18	2.23	0.23	ND	ND	ND	ND	ND
2.	ESI HospitalOkhla	7.3	660	155	260	75	123.4	NIL	0.26	0.56	0.47	ND	ND	ND	ND	ND	ND
3.	Okhla Bus Depot	6.6	2080	990	1150	280	129.3	NIL	1.6	0.44	1.65	0.39	ND	ND	ND	ND	ND
4.	B.P.SinghCamp Colony, Near Shiv Mandir	6.7	2050	925	1010	250	121.1	NIL	0.95	0.26	1.06	0.08	ND	ND	ND	ND	ND

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ANALYSIS REPORT OF GROUND WATER NEARBY BHALSWA LAND FILL SITE

Report No.: DPCC/W/LF/20-21/ 05- 8/2326

27/7/2020

Date of monitoring: -01/07/2020

S. No	Sampling Location	pH	TDS (mg/l)	Cl (mg/l)	Hardness as CaCO3 (mg/l)	Ca as Ca (mg/l)	SO4 (mg/l)	Turbidity(NTU)	Nitrate (mg/l)	Fluoride (mg/l)	Zn (mg/l)	Fe (mg/l)	Pb (mg/l)	Cu (mg/l)	Cr (mg/l)	Ni (mg/l)	Cd (mg/l)
	Desirable Limit for Drinking Water	**6.5-8.5**	**500**	**250**	**300**	**75**	**200**	**5**	**45**	**1**	**5**	**0.3**	**0.05**	**0.05**	**0.05**	**-**	**0.01**
1.	Bhalswa Sanjay Gandhi Transport	6.6	1270	310	590	150	195.9	NIL	1.1	0.11	1.06	0.23	ND	ND	ND	ND	ND
2.	Bhalswa Dairy	6.6	3330	1495	900	230	153.0	NIL	0.43	0.86	0.47	1.67	ND	ND	ND	ND	ND
3.	Bhalswa landfill site	6.8	5280	2390	1060	270	212	NIL	1.5	0.43	2.23	0.39	ND	ND	ND	ND	ND
4.	BhalswaJanta Colony	7.1	2350	920	810	206.5	74	NIL	0.95	0.24	1.06	1.90	ND	ND	ND	ND	ND

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ANALYSIS REPORT OF GROUND WATER NEARBY BAWANA LANDFILL SITE

Report No.: DPCC/W/LF/20-21/ 13-17/ 2328 27/7/2020

Date of monitoring: -01/07/2020

S. No	Sampling Location	pH	TDS (mg/l)	Cl (mg/l)	Hardness as CaCO3 (mg/l)	Ca as Ca (mg/l)	SO4 (mg/l)	Turbidity (NTU)	Nitrate (mg/l)	Fluoride (mg/l)	Zn (mg/l)	Fe (mg/l)	Pb (mg/l)	Cu (mg/l)	Cr (mg/l)	Ni (mg/l)	Cd (mg/l)
	Desirable Limit for Drinking Water	**6.5-8.5**	**500**	**250**	**300**	**75**	**200**	**5**	**45**	**1**	**5**	**0.3**	**0.05**	**0.05**	**0.05**	**-**	**0.01**
1.	Main Gate Bawana (SLF)	7.4	630	280	840	200	197.4	NIL	20	0.13	0.85	0.48	ND	ND	ND	2.84	ND
2.	Store Waste to Energy	7.8	1397	1060	380	90	84.7	NIL	48	0.11	0.80	0.31	ND	ND	ND	1.92	ND
3.	Sonot Village Bawana	7.9	443	320	410	100	91.6	NIL	36	0.20	1.04	0.17	ND	ND	ND	2.01	ND
4.	Bawana Village	7.1	1386	1330	420	90	93.9	NIL	52	0.18	0.98	0.52	ND	ND	ND	1.32	ND
5.	Sector 5 Bawana	7.2	1650	2130	490	120	76.9	NIL	81	0.25	1.10	0.13	ND	ND	ND	1.86	ND

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Restoration & Rejuvenation of River Yamuna Flood Plains Status of 10 Projects of DDA (As in October, 2020) **Annexure- 8**

S. No.	Project	Effective Site Area for Development	Timelines	Remarks
1.	Old Railway Bridge to ITO Barrage (Western Bank)- **Asita West**	107 Hectares	**30.06.2021** *Subject to the availability of land if the stays by the Hon'ble Courts is lifted and the land stands vacated for development.	Out of 200 hectares of the total area of this project, 93 hectares of the area has already been developed by DDA. The tender for this work was opened on 03.10.2020.
2.	Geeta Colony Bridge to ITO Barrage (Western Bank) **Eco-Tourism Bundh**	30 Hectares	**30.06.2022**	1.The land was temporarily allotted to Raj Ghat Thermal Power Plant. However, efforts are being made to retrieve it. 2. The soil testing of the area and subsoil water samples from the boreholes (2 Nos.) have been got done. The soil test report and water test report was submitted to to Prof. Gauhar Jamia Milia Islamic University & PC (Hort.). The drawings are under preparation.
3.	Old Railway Bridge to ITO Barrage (Eastern Bank) - **Asita East**	**PART A:** 90 Hectares land within DDA's jurisdiction **PART B:** 107 Hectare with UP Irrigation Department	**PART A : 15.11.2020**	**PART A: Work tendered and awarded on 25.10.2019.** • Work delayed due to imposition of construction ban, unseasonal rains and due to Covid-19 Lockdown w.e.f 25/03/2020 to 31/05/2020 for a total of 131 days. • 95% work completed for civil work and 75% for Hort. work, flexible vehicular approach road 540 meter long, 6 meter R.O.W., water body of 15,000 of 15,000 cubic meter capacity & plantation in approx. 60 Ha. area has been completed. Footpaths/ natural trails etc. also completed. Minor defects are being rectified. **PART B:** Financial bids have been opened and L-1 decided but the award of work is held up for deposition of fund by U.P. irrigation department. On enquiry it has been gathered that the A/A & E/S has been accorded on the submitted estimate. Ist installment of Rs. 10 Crores has been released by UP Govt. against Rs. 35.0 Crores but the same is yet to be deposited with DDA.

4.	NH 24 to DND Flyway (Western Bank)	**PART A:** Approx. 100 Hectares (Incl. 25 Ha Art of Living area) **PART B:** Rest is presently occupied by construction activities for DMRC & PWD and other agencies.	**PART A: 30.11.2020** **Part B:** Subject to retrieval of land allotted to various agencies like DMRC, PWD etc. for infrastructure projects.	**PART A: Work tendered and awarded on 05.11.2019.** • Work delayed due to imposition of construction ban, unseasonal rains and due to Covid-19 Lockdown w.e.f 25/03/2020 to 31/05/2020 for a total of 131 days. • Approx. 90 % progress has been achieved on a/c of digging of 1,50,000 cubic meter of 3 nos. water bodies. Rest of the work is in progress. **Part B:** Permanently/ temporarily allotted to various agencies like DMRC, PWD, and Delhi Transco etc. for infrastructure projects. Need to be restored to its original condition after repossessing of the allotted land since a-lot of concretization and damage to the floodplains has taken place due to batching plants and other related construction activities of DMRC/ PWD etc. Minor defects are being rectified.
5.	DND to proposed Kalindi By-pass (Western Bank) – Khijrabad	**115 Hectares** Entrusted to CEMDE	**31.01.2021** (Phase I involves removal of Eichhornia and development of constructed wetlands)	• The work is being executed in the supervision of Prof. C.R.Babu. • The construction of constructed wetlands for treatment of sewage water from 9 Nos. incoming drains. • Work delayed due to imposition of construction ban, unseasonal rains and due to Covid-19 Lockdown w.e.f 25/03/2020 to 31/05/2020 for a total of 131 days. • 50% progress has been achieved by laying RCC pipes across the road to divert stagnated water to wetlands and work of one no. constructed wetland completed and the work is in progress in other constructed wetland. Due to ban on the construction activity, movements of vehicles and Lockdown due to COVID-19, there had been some delay in procuring the materials for constructed wetland systems. After constructed wetland systems are operational treated sewage water will reach River Yamuna.
6.	NH-24 to DND Flyway (Eastern Bank) Part Area- I **397.75 Hectares** (235 Hectares with DDA+ 162.75 Hectares with UP)	**PART A:** 235 Hectares (With DDA- with/without litigation) and **PART B:** 162.75 Hectares (under UP Irrigation Dept.)	**PART A: 15.09. 2021**** **Subject to the availability of land if the stays by the Hon'ble Courts is lifted and the land stands vacated for development.	**PART A:** 1. 28 hectares approx. of land has been allotted for compensatory plantation **2.** The drawings for the purpose of estimates have been released. Estimate prepared and submitted to EM office for A/A & E/S. **PART B:** Request for the release of funds has been sent to the UP Irrigation Department for 162.75 Ha of land on the basis of thumb rule (tentative) costing.

7.	NH-24 to DND Flyway (Eastern Bank) Part Area- II- **Hindon Cut Wetlands I&II**	45 Hectares (15 Ha with DDA + 30 Ha with UP) Entrusted to CEMDE	The land / area under the jurisdiction of UP Govt. / UP Irrigation Department.	The work near Hindon cut canal could not be taken up because the work has been stopped by Chilla village people on the pretext that they had not received the compensation of their land so far.
8.	Wazirabad Barrage to ISBT Bridge (Eastern Bank) around Garhi Mandu Village & Usmanpur Village	236.5 Hectares	**30.09.2021** *Subject to normalization of existing situation and availability of labour and materials.	1. DDA has already planted trees in 25 Ha. of area near Signature Bridge, and two wetlands have been cleared of hyacinths. 2. The design for development of the entire area has been completed and landscape drawings have been issued. 3. . A/A & E/S will be accorded soon.
9.	Wazirabad to Old Railway Bridge (Western Bank) QUDESIA GHAT	66 Hectares 16 Ha. total area Phase 1: 5 Ha.	Phase 1: **30.01.2021** *Subject to normalization of existing situation and availability of labour and materials.	1. Total land is 66 Ha. Out of which for 5.0 Ha land has been taken up in Ph – I of Qudsia Ghat. 2. Drawings for Qudsia Ghat having an area 5.0 Ha. has been issued and the Preliminary estimate has been submitted . FC has been issued and AA & ES is yet to be issued. 3. Preparation of drawings for area of Sur Ghat (13.6 Ha) is being taken up and will be submitted for estimation purpose by next month. 4. Estimate prepared and A/A & E/S will be issued shortly..
10.	ITO to NH-24 (Eastern Bank)- Area south of Commonwealth Games Village Area	90 Hectares	**30.09.2021** *Subject to normalization of existing situation and availability of labour and materials.	Preliminary estimates prepared and A/A & E/S and re-estimate will be issued shortly.