



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/ 6080-6083

Dated: 21-06-2021

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 May, 2021 w.r.t Orders Dated 06.12.2019, 29.06.2020, 21.09.2020 & 22.02.2021 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 May, 2021 for Rejuvenation of River Yamuna (Priority -I Stretch) w.r.t Orders Dated 06.12.2019, 29.06.2020 21.09.2020 & 22.02.2021 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 Reports (for the months of March & April, 2021) were submitted vide letter dated 16.06.2021.

Yours Sincerely,

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

Enclosures : 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 Pr. 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 May, 2021

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 MLD (597.26 MGD)
- Capacity Utilization of existing STPs : 2444 MLD (537.7 MGD)
(90 % 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
- No. of Complying STPs : Samples could not be taken/analyzed by
: DPCC in the month of May, 2021 due
- No. of Non-complying STPs :to Covid-19 Pandemic/Lockdown in Delhi.

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 <u>Annexure-1</u>				

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 May,2021)	Status of I&D or House sewer connections	Completion Timeline
Rehabilitation / Up-gradation of Existing STPs for achieving BOD / TSS : 10 / 10 mg/l.					
1.	Yamuna Vihar STP Phase II	45.46 MLD (10 MGD)	-	-	March , 2022 (STP is operational as per existing designed parameters however work is yet to be awarded for Rehabilitation / Up-gradation of STP.)
2.	Kondli STP Phase I, II & III	204.57 MLD [45 MGD (10+25+10)]	60.40 (1.03 % in May, 2021)	-	Phase I- December, 2021 Phase II- December, 2022 Phase III- December, 2021 [Phase-II work is to start on 01.10.21 after completion of Phase I & III. Revised proposal for tree cutting permission of 826 trees under Phase-II submitted to Forest Deptt. Joint site visit with Forest Deptt. conducted on 18.05.2021. Matter is being pursued for grant of tree cutting permission.
3.	Rithala STP Phase I	181.84 MLD (40 MGD)	46.30 (1.1 % in May, 2021)	-	December, 2022
Construction of New STPs					
4.	Coronation Pillar	318 MLD (70 MGD)	87 (0 % in May, 2021)	-	August, 2021 (Trial run of 50% started on 31.03.2021. STP was to be completed by 30.06.2021 but due to lockdown on account of 2nd wave of Covid-19 date of commissioning has been rescheduled to 30.08.2021)
5.	Okhla	564 MLD (124 MGD)	33.89 (0.58 % in May,2021)	-	December, 2022

Status of Remaining 16 STPs Proposed to be up-graded for achieving BOD / TSS : 10 / 10 mg/l.

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
4 (Rohini, Keshopur, Narela & Rithala Ph-II)	Nil	Nil	3-4 Years after availability of funds	Matter is being taken up by working out some alternate economic feasible technology for achieving the better results by dosing of PAC, Ferric Chloride etc. in the existing STPs. The PAC / Ferric Chloride dosing is likely to be started by 30.06.2021. In addition, aeration will be increased by installing Floating Aerators / Repair of Diffusers etc. and installation of Disc Filter at FST out let so as to treat sewage to get treated effluent parameters of BOD/TSS as close to 10 / 10 mg/l..

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/ DDA. 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	The work of 9+5 STP has been rescinded and the whole scheme is being reframed so as to accommodate the maximum nos. of unauthorised colonies in the 8 parcels of land already in possession of DJB.	December, 2023

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 allotted by DDA. Cost of land demanded is on higher side. Matter is being taken with DDA to allot land either free of cost or at nominal rates.

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

Total flow to be trapped	Provision of trapping made during the month of May, 2021	Cumulative Status as in May, 2021 Provision of trapping made	Time line for completion of work	Remarks
1100.86 MLD (242.16 MGD)	-	1082 MLD (238 MGD)	Completed	About 771.5 MLD (169.7 MGD) is being trapped and treated out of 1082 MLD (238 MGD). Entire flow shall be trapped and treated by December, 2022 after construction / rehabilitation of Coronation Pillar, Rithala and Kondli STP under YAP-III. YMC had got an independent assessment done through a team consisting of Sh R.S Tyagi former Member (Dr) DJB and Prof Singh, Head of Department of Env. Engineering, Delhi Technological University. Said team has confirmed that sewage trapping part of ISP has been completed.

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

S. No	Status	Increase/ Progress during month of May, 2021	Cumulative Status as in May, 2021 (No)	Remarks
1	Sewer line laid and notified	Nil	561	-
2	Work of sewer network is in progress	Nil	595	-
3	Colonies where NOC is awaited/O Zone	Nil	131	The work shall be taken up after NOC from Forest Department/Ozone.
4	Colonies where sewerage network is to be laid along with Decentralized STPs	Nil	512	The work shall be taken up after allotment and possession of land by DDA & Revenue Deptt.
	Total		1799	

Sewage and Faecal Sludge Management (Septage Management)

Septage Management Regulations notified by the Urban Development Department, GNCTD on 12.11.2018 and necessary action is to be taken by Delhi Jal Board, District Magistrates and Local Bodies / Municipal Corporations as per the provisions of the said Notification. On an average 6 to 7 lakh litres of septage per month is being collected and treated at the STPs of DJB.

DJB has so far registered 208 licensed vendors (Emptiers) for collection and transportation of sewage from the septic tanks and has identified 86 SPS points for receiving the Septage. The Board also plans to engage 200 more septage machines.

Agency	No of Vehicles Authorised by DJB (As on 31.05.2021)	No. of Functional SPSs for collection of septage from vendors	Septage collected & Treated in May, 2021	Septage treated by DJB (As on 31.05.2021)
DJB	208	86	2.21 Crore Litres	54.56 Crore Litres

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.

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 have been allotted by DDA however cost of land demanded is on higher side. Matter is being taken up with DDA to allot land either free of cost or at nominal rates.

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 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 is expected to be completed by 31.12.2021.

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/ :Existing CETPs-13(List at **Annexure-3**)
Under Construction / Proposed) 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 Under Construction / Proposed - Nil Samples could not be taken/analyzed by DPCC in the month of May, 2021 due to Covid-19 Pandemic/ Lockdown in Delhi. DPCC has issued Show Cause Notices on 05.04.2021 to 10 CETP Societies and 2 Operators of CETPs at Narela & Bawana for Imposition of Environmental Compensation (Total EC Amount Rupees 12.05 Crores) for Not Meeting the Prescribed Standards in the period of February, 2019 to February, 2021.

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.

(i) 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 :

- 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.
- To assess the overall functioning of all 13 CETPs through a physical survey.
- To formulate an action plan for 13 CETPs after the study of the survey report in terms of
 - 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.
 - Management of the hazardous sludge being generated by CETPs.
 - 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.
- Study regarding requirement of CETPs in 11 industrial areas which are presently not having CETP.

NEERI has carried out preliminary studies of all the 13 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. Industries Department issued Notice to all the 13 CETPs on 28.10.2020 for removal of the sludge from various units/tanks of CETPs for their efficient functioning.

(ii) Progress Report for the Month of May, 2021

Following activities have been carried out:

1. Project Meetings/ Discussions/ Presentations with DSIIDC

- No Physical meetings could be possible due to Lockdown, however discussions were held with concerned Engineers of DSIIDC on different occasions.

2. Sampling, Analysis and Report Preparation

The activities affected due to lockdown in Delhi since April 19, 2021, however following activities were carried out :

- DPCC compliance monitoring data for all the 13 CETPs for last 2 years was retrieved and analysed.
- Preparation of report based on sampling done in March 2021 for all the 13 CETPs to assess the suitability of treated water for horticulture/irrigation purpose. Results were shared with DSIIDC.
- Prepared report titled "Naraina CETP- "Status, GAP analysis and Suggestions for Improvement and Upgradation" and submitted to DSIIDC for review. Similar reports for Mayapuri and Mangolpuri CETPs are under progress.

(iii) Timelines for upgradation of CETPs

Broad Timelines for the upgradation CETPs provided by NEERI through DSIIDC has already been provided to Central Monitoring Committee with the Monthly Progress Reports of February & March, 2021.

V. Solid Waste Management:

- Total Number of Urban Local Bodies (ULBs) : 5 [North DMC, South DMC, East DMC, NDMC & DCB]
and their Population Total Population – About 2 Crores
- Current Municipal Solid Waste Generation : 10978 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 - 5662 TPD • 3 Operational WTE Plants - 4550 TPD (Power generation capacity - 59 MW) • 2 Operational Compost Plants - 950 TPD [200 TPD at Okhla & 750 TPD out of 2000 TPD at Bawana Integrated MSW Facility] • 9 Operational Bio-methanation Plants- 45 TPD. • 19 Operational Decentralized Composter Plants – 17.175 TPD • Others (Compost Pits, OWC etc) : 132 TPD [118 Compost Pits, 2 Organic Waste Converter (OWC) & 6 Biogas Plants in NDMC area having total capacity of 78.6 TPD + 2 Food Waste Composters of Total Capacity of 0.175 TPD (0.125 TPD + 0.05 TPD) in DCB area + Five Star Hotels/ Other Bulk Waste Generators having Individual OWC]

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 Capacity - 4150 TPD - Proposed New C&D Waste Processing Facilities Capacity - 2500 TPD Existing operational C&D Waste Processing Facilities are located at (i) Jahangir Puri (Burari) (2000 TPD) (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)
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 - 96 – 100% (in all Circles) - DCB - 90% (Civilian Area) 60% (Army Area) - EDMC - 80 - 100% (in 3 Model Wards), 75% (in 6 Wards), 30% (in 55 Wards) - North DMC - 80 - 100% (in 3 Model Wards), 33% (in rest of 101 Wards) - SDMC - 80 - 100% (in 3 Model Wards), 50 - 60% (in 13 Wards), 30 – 40% (in 42 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 31.12.2021 (iv) 2500 TPD Integrated Waste Collection, Segregation, Transportation, Processing & Disposal in 3 Zones of North DMC (City – SP, Karol Bagh & Narela Zone) by 31.12.2023

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	2300 (51%)	• One WTE Plant at Bawana Integrated MSW Facility - 2000 TPD (including 750 TPD Compost Plant) • 2 Bio-Methanation Plants - 10 TPD (5 TPD each at Roshanara Bagh & MVID Hospital) • 3 Composter Plants – 3 TPD (1 TPD each at Bhorgarh Nursery, Rajendra Nagar & Maurya Enclave.)	Installed Capacity of Existing MSW Processing Facilities is being utilised.	• 2500 TPD Integrated Waste Collection, Segregation, Transportation, Processing & Disposal in 3 Zones of North DMC(City-SP,KarolBagh& Narela Zone) by 31.12.2023 • Two Bio-Methanation Plants of 5 TPD each at Mangolpuri Industrial Area Ph-I & Naraina Industrial Area Ph-I by August, 2021) • 3 Composter Plants – 3 TPD (1 TPD each at Sector -11 Rohini & Mori Gate by July, 2021 and 3rd at Nursery of Ramleela Ground by August, 2021.
SDMC	3600	1835(52.4%)	• One WTE Plant at Okhla – 1950 TPD • 4 Bio-Methanation Plants – 20 TPD (5 TPD each at SaritaVihar, Dwarka Sec-14, Punjabi Bagh Nursery & Masood Pur in Vasant Kunj) • 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 31.12.2021 • One Composter Plant - 1 TPD at Dwarka Sector 14 by June, 2021
EDMC	2700	1275 (47%)	• One WTE Plant at Ghazipur – 1300 TPD • Two Bio-Methanation Plantsof 5 TPD each at Geeta Colony&Shastri Park) • 9 Composter Plants – 9 TPD (1 TPD each atTrilokpuri near	Installed Capacity of Existing MSW Processing Facilities is being	• 2000 TPD Integrated Municipal Waste Processing Facility (including Waste to Energy Plant) at GhondaGujran by 30.09.2022

			Block-13, MayurViharPh-II, PreetVihar, Jhilmil, New Trilokpuri near Block-13, Saini Enclave, Usmanpur, Kheda Village & Sunder Nagri)	utilised.	(Joint Venture between NTPC & EDMC). • One Composter Plant - 1 TPD at Gokalpur by July, 2021.
NDMC	206	206(100%)	• 2 Organic Waste Converter – 2 TPD (1 TPD each at Madhulimey Marg & Raza Bazar in New Delhi) • 118 Compost Pits, 23 Organic Waste Converter (OWC) & 6 Biogas Plants in NDMC area having total capacity of 78.6 TPD	Installed Capacity of Existing MSW Processing Facilities is being utilised.	No. of Composter Plants of 1 TPD each.
DCB	72	46(64%)	• 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	10978	5662 (51.6 %)			
Note - Most of the Five & Four Star Hotels and Major Hospitals having 50 Beds or more have installed Organic Waste Converter.					

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 : 2026
- 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 MoEF&CC has granted Environmental Clearance vide letter dated 23.11.2020. Consent to Establish under the Air & Water Acts has been issued by DPCC to the Project Proponent (M/s Tamil Nadu Waste Management Limited) on 31.12.2020. Work of development of TSDF for Hazardous Waste at Bawana is Under Progress & Landfill (SLF) for Hazardous Waste is expected to be completed by June / July, 2021 and whole TSDF including Incinerator is expected to be commissioned by December, 2021.

VIII. Plastic Waste Management:

- Total Plastic Waste generation: 1000 TPD (Appx.)
- Registration under the Plastic Waste Management Rules, 2016 (as amended upto 2018) issued to 930 units as briefed below:
 - Recyclers : 315
 - Producers : 251
 - Manufacturers : 364

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 **9 Meetings of the IDMC were held till May, 2021.** 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 given consultancy to IIT Delhi for the pilot project for Phyto / Bio Remediation of Pushp Vihar drain. One pilot project of EDMC at Shahdara Jheel (NEERI as consultant) is in progress (about 70 % work completed). North DMC has given consultancy to IIT Delhi for the pilot project for Phyto / Bio-Remediation of Kudesia Nallah. Drain Owning Agencies have been directed to start a small pilot project on some of their drains. Drain Owning Agencies have been requested to submit Action Plan along with timelines for management of waste water in their drains.

Delhi Jal Board has adopted natural treatment technology to treat raw sewage for rejuvenation of existing water bodies. At present work of 50 water bodies has been awarded, where Phytoid Treatment Technology developed by CSIR-NEERI is adopted to revive existing water bodies.

Natural Treatment Technology under the guidance of Centre for Science & Environment has been adopted to recycle waste water at the DJB office at Jal Sadan.

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

Urban Development Department, Govt of NCT of Delhi has been decided as Nodal Department for Govt of NCT of Delhi in respect of following two NGT cases related to control of pollution in river Yamuna in Delhi.

- OA NO. 06/2012 in the matter of Manoj Mishra vs. Union of India & Ors.
- 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".

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) (9 meetings of IDMC were held till May, 2021), 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. Regarding OA No. 673/2018, the issue is also being monitored by Chief Secretary on regular basis.

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

Samples could not be taken/ analyzed by DPCC in the month of April & May, 2021 for River Yamuna at 9 Locations and major Drains due to Covid-19 Pandemic/ Lockdown.

Ground Water Quality near the 3 Dumpsites (Bhalaswa, Ghazipur & Okhla) and Engineered Sanitary Landfill at Bawana for the samples collected in June, 2020 have already been submitted to the Ministry of Jal Shakti vide Monthly Progress Reports submitted in the past.

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 upto 31.06.2021
1.	DJB Installations	594	588	06
2.	By DJB for other Departments	89	74	13
3.	Monitored by DJB for other Government Departments	5472	3705	1767
4.	Schools	4549	4142	407
	Total	10704	8509	2193

XVII. Demarcation of Floodplain and Removal of Illegal Encroachments:**(i). 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 pertains from Wazirabad to Jaitpur on both banks. 100% work for demarcation of flood plains completed. 594 Nos Bollards (marked with GPS Coordinates), 375 Flag Posts & 27 sign boards for the entire stretch from Wazirabad barrage to Dhobighat Jaitpur have been installed.

(ii). Engagement of Private Security to stop illegal Dumping:

Private security has been engaged by DDA to stop illegal dumping. 125 Nos. of security guards have been deployed by DDA.

(iii). 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 Technosys Security System Private Limited. 81 no. cameras have been installed at 27 locations. 21 CCTV cameras at Wazirabad are not feasible due to various hindrance.

(iv). 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 11.0 acres (44,517 Sqm.) of land in Okhla, Khijrabad and Jogabai 600 jhuggies have been removed and 5.00 acre of land has been reclaimed. Nearly 2.0 acre of land with 150 jhuggies could not be removed due to stay by Courts.

(v). 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 KalindiKunj 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 as on 16.06.2021) is at Annexure - 5

XVIII. Maintaining Minimum e-flow of River:

To assess the minimum required environmental flow of river Yamuna for stretch between HathiniKund to Okhla, a comprehensive study was assigned by NMCG to National Institute of Hydrology (NIH), Roorkee on 24.12.2018. Final Draft Report has been submitted by NIH to NMCG and Principal Committee/ Ministry of Jal Shakti are to take necessary action w.r.t. said report.

XIX. Plantation activities along the rivers:

(i) Details of Old Plantation at Garhi Mandu and Sonia Vihar:

- Total 384.60 ha of land has been handed over by DDA to Forest Department, Delhi in phases during the period w.e.f. 1975 to 2003 for plantation purpose.
- In 384.60 ha of land 193,000 saplings have planted by Forest Department, Delhi.

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

- Total 139.5 ha of land has been handed over by DDA to Forest Department, Delhi for the purpose in phases during the period w.e.f. 2014 to 2020 for plantation purpose.
- 139.5 ha of land planted (165,086 tree saplings) by Forest Department, Delhi.

(iii) Details of plantations carried out as Compensatory Afforestation 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 in phases during the period w.e.f. 2014 to 2020.
- 80.74 ha of land planted (105,247 tree saplings) by Forest Department, Delhi.

- Total land handed over by DDA till date = 604.844 ha
- The area that has been afforested till date = 604.844 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. Six out of Nine number of wetlands have been completed. The balance three Nos wetlands will be completed by 31.07.2021.

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 from 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 537 MGD of treated waste water from 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

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

1. DJB has written letters to respective stakeholders/ park owning agencies dated 23/5/2019 followed by reminders dated 11/6/2019, 17/6/2019, 21/6/2019, 16/7/2019 & 19/7/2019 requesting them to start taking treated effluent from STPs of DJB for their parks within the radius of 5 KM of 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. CEO DJB vide letter dated 28.12.2020 has also requested stakeholders to utilize the treated effluent through tankers in parks within 5 Kms radius of STP.
2. Notice were issued to DDA, NDMC, Municipal Corporations, CPWD, DMRC, PWD, DUSIB to submit ATR to Monitoring Committee to utilize treated effluent in their parks within 5 km radius of STPs filling points.
3. DJB has requested vide letter dated 5/9/2019 all District Magistrates to seal the bore well in parks which are used for horticulture purposes. Reminders dated 7/10/2019, 11/11/2019 & 25/11/2019 were issued to District Magistrates to seal the bore well in parks used for horticulture purposes.
4. Another request was sent to Divisional Commissioner vide letter dated 29.10.2020 for issuance of suitable directions to respective District Magistrates to initiate/expedite sealing of bore wells in the parks where treated effluent from nearby STPs is not being used. CEO DJB vide letter dated 28.12.2020 has also asked Divisional Commissioner & District Magistrates to seal the borewells in the parks where treated effluent from nearby STPs is not being used.
5. As requested by the UD Deptt. vide letter dated 25.11.2020 , list of parks where bore wells were being used for horticulture purposes was sent to the District Magistrates on 26.11.2020 for sealing of bore wells.

Number of Tankers Deployed:

The details of tanker deployment by various stakeholders departments during the month of May, 2021 are as under:-

Agency	No. of tankers engaged
DTC	9
PWD	78
EDMC	40
IL & FS	1
DDA	17
Private Agencies	86
SDMC	14
AAI	8
Forest Department	14
DMRC	1
CPWD	4

M/s L&T	5
NBCC	5
DJB internal Horticulture use	8
NHAI	2
North DMC	3
Total	295

Order dated 25.02.2021 of Hon'ble National Green Tribunal in OA No. 386/2017 in the matter of "Rear Admiral A P Revi IN (Retd.) Vs Delhi Jal Board & Ors." regarding use of treated water for gardening in public parks :

Operative part of the said order is reproduced below :

"We are of the view that even though the steps are reported to have been taken, the matter needs to be taken forward, after due consideration of the objections of the applicant to ensure that fresh water is not used for gardening in public parks by the DDA and the South Delhi Municipal Corporation and instead only treated water is so used. The order of this Tribunal dated 27.01.2021 in OA No. 6/2012, Manoj Mishra v. Union of India & Ors. approving the recommendations of the Yamuna Monitoring Committee may be duly followed. The DJB may ensure supply of such treated water with adequate pressure and wherever piped supply is not available, supply may be ensured by tankers. DPCC may monitor similar action by other agencies in Delhi owning parks and by bulk users, including other Municipal Corporations for adopting similar course of action to save drinking water for drinking purposes to fulfil basic need of maximum people. This may be overseen by the Secretary, Environment, Delhi."

In view of the above said order of Hon'ble NGT, DPCC sent a letter on 09.03.2021 to all the park Owning Agencies & concerned Authorities to take necessary action w.r.t said order of Hon'ble NGT and ensure that only treated water [from Sewage Treatment Plants (STPs) etc] is used in the parks under the jurisdiction of their departments and fresh water is not used for gardening in public parks.

All the concerned Departments / Agencies have also been requested to nominate concerned Senior Officer as Nodal Officer & provide information regarding use of treated water in the Parks / Bulk Use on monthly basis to DPCC.

As informed by Delhi Jal Board, a meeting was held on 13.04.2021 through Video Conferencing regarding Hon'ble NGT order dated 26.03.2021 in OA no 06/2012 in MA no 25/2021 titled Manoj Mishra Vs South Delhi Municipal Corporation & Union of India & Ors under chairmanship of Chief Secretary, Delhi. After detailed deliberations and discussions on the various aspects of the issue, Chief Secretary Delhi, directed that a long term perspective plan should be prepared for the optimum use of treated effluent in Delhi, which must include the maximum utilization of treated water for horticulture purpose including the coverage of all parks and gardens in Delhi, to replace the extraction of precious ground water through bore-wells for this purpose. In this regard, Delhi Jal Board shall carry out the survey, preparation of DPR, cost estimates, etc. of the complete scheme by providing piped network up to each park.

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 1160 Water Polluting Industries / Units in the period of 01.01.2020 to 31.03.2021 including action taken against 34 Water Polluting Industries / Units in the month of March, 2021.

Show Cause Notices were issued by DPCC u/s 33(A) of Water Act to 393 Water Polluting Industries / Units and Directions for Closure u/s 33(A) of Water Act were issued to 767 Water Polluting Industries / Units in the period of 01.01.2020 to 31.03.2021. Environmental Compensation of Rs. 27.36 Crore was imposed and Rs. 2.81 Crore was received in the said period.

Action could not be taken against the Water Polluting Industries / Units in the month of May, 2021 due to Covid-19 Pandemic / Lockdown in Delhi.

Details of Each Existing STPs of Delhi Jal Board in Delhi

(Samples could not be taken / analyzed by DPCC in the months of April & May, 2021 due to Covid-19 Pandemic/ Lockdown.)

S. No.	Location	Existing STP Capacity (in MLD)	Capacity Being Utilized (in MLD)	Operational Status of STP
1.	Mehrauli (5 MGD)	22.73	18.8	Operational
2.	Okhla, Phase -II (12 MGD)	54.552	29.5	Operational
3.	Okhla Phase -III (37 MGD)	168.2	130	Operational
4.	Okhla Phase -IV (45 MGD)	204.57	175	Operational
5.	Okhla Phase -V (16 MGD)	72.73	60	Operational
6.	Okhla Phase -VI (30 MGD)	136.38	130	Operational
7.	Molar Band (0.66 MGD)	3	2.45	Operational
8.	Sen Nursing Home Nallah (2.2 MGD)	10	10	Operational
9.	Vasant Kunj (Old) Phase-I (2.2 MGD)	10	7.5	Operational
10.	Vasant Kunj (New) Phase-II (3 MGD)	13.64	7.9	Operational
11.	Ghitorni (5 MGD)	22.73	6.8	Operational
12.	Delhi Gate Nallah (Old) Phase-I (2.2 MGD)	10	10	Operational
13.	Delhi Gate Nallah (New) Phase-II (15MGD)	68.2	68.2	Operational
14.	Kondli Phase - II (25 MGD)	113.65	116.62	Operational
15.	Kondli Phase - IV (45 MGD)	204.57	227.18	Operational
16.	Chilla (9 MGD)	40.91	42.51	Operational
17.	Yamuna Vihar Phase-I (10 MGD)	45.46	44.85	Operational
18.	Yamuna Vihar Phase-II (10 MGD)	45.46	44.31	Operational
19.	Yamuna Vihar Ph-III (25 MGD)	113.65	139.52	Operational
20.	Akshardham / Common Wealth Games Village (1 MGD)	4.55	0.5	Operational
21.	Coronation Pillar Phase- I & II (20 MGD)	90.92	88.53	Operational
22.	Coronation Pillar Phase - III (10 MGD)	45.46	38.59	Operational
23.	Narela (10 MGD)	45.46	18.16	Operational
24.	Rithala Phase -I (20 MGD)	90.92	106.69	Operational
25.	Rithala Phase -II (40 MGD)	181.84	186.14	Operational

Annexure-1

26.	Rohini (15 MGD)	68.19	22.7	Operational
27.	Keshopur Phase - I (New) (12 MGD)	54.55	54.48	Operational
28.	Keshopur Phase-II (20 MGD)	90.92	95.34	Operational
29.	Keshopur Phase - III (40 MGD)	181.84	186.14	Operational
30.	Nilothi Phase-I (40 MGD)	181.84	68.1	Operational
31.	Nilothi Phase-II (20 MGD)	90.92	88.53	Operational
32.	Papankalan Phase - I (20 MGD)	90.92	108.96	Operational
33.	Papankalan Phase - II (20 MGD)	90.92	90.8	Operational
34.	Najafgarh (5 MGD)	22.73	11.35	Operational
35.	Kapashera (5 MGD)	22.73	8.17	Operational
	Total	2715.14 MLD (597.26 MGD)	2444.32 MLD (537.686 MGD)	

Note : 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

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

ANNEXURE- 2

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.	Tekhhand 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.	This drain is trapped into Dr Sen Nursing Home STP of Delhi as well as into the ring road trunk sewer. Some marginal flow passes/overflow. To stop this marginal flow permanent RCC Weir was being constructed to completely stop the overflow. However, the work was stopped by South MCD and the constructed structure was completely demolished by SDMC in the month of July 2020 due to the reason that it is caused obstruction to the flow during the monsoon, wherein WHO building was flooded.
14.	QudsiaBagh+ Morigate Drain	43.2(9.51 MGD)	Land identified but is in O zone. DDA allotted the land. Cost of land demanded is on higher side. Matter is being taken with DDA to allot land either free of cost or at nominal rates.	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. Land allotted in O-zone. Cost of land demanded is on higher side. Matter is being taken with DDA to allot land either free of cost or at nominal rates. Time line :-Completion period is 3 years after handing over of land by DDA..
15.	Barapulah Drain	145.15(31.97 MGD)	1.As a short term measure, sewers from sewerred areas 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. DDA allotted the land. Cost of land demanded is on higher side. Matter is being taken with DDA to allot land either free of cost or at nominal rates. 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. Time line : 3 years after allotment of land by DDA	
16.	Maharani Bagh Drain	30.24(6.66 MGD)	1. 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. 2. 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 31.12.2021.	
17.	Najafgarh Drain	2056.32 (452.9 MGD)	Work is in progress.	This is a large drain having flow about 450 MGD and hence, it cannot be trapped technically. However, its major 77 tributaries including 28 tributaries on Supplementary drain (172 MGD) are being trapped in ISP. 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.
18.	Shahdara Outfall Drain	475.2(104.66 MGD)	Work is in progress.	This is a large drain having flow about 105 MGD and hence it cannot be trapped technically. However, its 31 major tributaries (70 MGD) is being trapped in ISP. Total discharge in Shahdara drain is about 105 MGD, out of which 50 MGD (i.e. 45%) is untreated sewage is being discharged by UP through Shahibabad, Indirapuri and Banthala drain.

Brief Status of Common Effluent Treatment Plants (CETPs) in Delhi

(Samples could not be taken/analyzed by DPCC in the months of March, April & May, 2021 due to Covid-19 Pandemic/ Lockdown.)

S. No.	Name of CETP	Industrial Areas Connected with CETP	Capacity (in MLD)
1	Jhilmil CETP	Jhilmil and Friends Colony Indl. Areas	16.8
2	Badli CETP	Badli Industrial Estate	12
3	Mayapuri CETP	Mayapuri Indl. Area	12
4	Mangolpuri CETP	Mangolpuri Indl. Area	2.4
5	Wazirpur CETP	Wazirpur Indl Area	24
6	Nangloi CETP	Nangloi& Udyog Nagar Indl Areas	12
7	SMA CETP	SMA, Rajasthani Udyog Nagar and SSI Industrial Areas	12
8	Okhla CETP	Okhla Indl. Area	24
9	Narela CETP	Narela Indl. Area	22.5
10	Bawana CETP	Bawana Indl. Area	35
11	Naraina CETP	Naraina Indl. Area	21.6
12	GTK CETP	GTK Road Indl. Area	6
13	Lawrence Road CETP	Lawrence Road Indl. Area	12
		Total	212.3

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	3500	2700	206	72	10978
2	Lifting / Collection of MSW (in %)	100%	100%	100%	100%	100%	NA
3	No. of Wards	104	104	64	14 (Circles)	8	280 Wards + 14 Circles
4	Segregation of MSW at Source (in %)	80 – 100 % (in 3 Model Wards) 30% (in 101 wards)	80 – 100 % (in 3 Model Wards) 50 -60% (in 13 Wards) 30-40% (in 42 Wards)	80 - 100% (in 3 Model Wards) 75% (in 6 Wards) 30% (in 55 Wards)	96 - 100 % in all 14 Circles	90 % in Civilian Area 60% in Army Area)	NA
5	Processing of Waste in TPD (in %)	2300 (51%)	1835 (52.4%)	1275 (47%)	206 (100%)	46 (64%)	5662 (51.6 %)
6	Disposal of MSW in Landfill Sites	2200 (49%)	1665 (47.6%)	1425 (53%)	Nil	26 (36%)	5316 (48.4 %)

(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 10978 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 4550 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 4550 TPD to 7150 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	1300	24
	Total	4550	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
10978	5662	5316	(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 31.12.2021 (iv) 2500 TPD Integrated Waste Collection, Segregation, Transportation, Processing & Disposal by 31.12.2023

(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	-----	December, 2021
4.	Integrated Waste Collection, Segregation, Transportation, Processing & Disposal	3 Zones of North DMC (City – SP, Karol Bagh & Narela Zone)	North DMC	2500 TPD	December, 2023

(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	118 Compost Pits, 2 Organic Waste Converter (OWC) & 6 Biogas Plants in NDMC area	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	203 TPD One Centralised Compost Plant of 200 TPD at Okhla + 3 Decentralised Compost Plants of 1 TPD each	20 TPD (4 Nos of 5 TPD each)

5 Compost plants of 1 TPD each and 2 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 (One each at Sector -11 Rohini & Mori Gate are expected to be commissioned by July, 2021 and remaining one plant at the Nursery of Ramleela Ground is expected to be commissioned August, 2021.

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

- 2 Plants commissioned at Roshanara Bagh & MVID Hospital.
- 2 Plants at Naraina Industrial Area Ph-1 & Mangolpuri Industrial Area Ph-1 are expected to be commissioned by August, 2021.

EAST DMC

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

- 9 Plants commissioned
- 1 Plant (at Gokulpur) to be commissioned by July, 2021.

(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 June, 2021

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

- Four plants commissioned at Sarita Vihar, Dwarka Sector 14, Punjabi Bagh Nursery and Masood Pur in Vasant Kunj.

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 :

- EDMC - Rs. 125 Crores
- North MCD - Rs. 75 Crores
- 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	Total = 125 Crores
ii	North MCD	NCT Delhi North MCD NDMC DCB	Rs. 35 Crore Rs. 30 Crore Rs. 05 Crore Rs. 05 Crore	Total = 75 Crores
iii	SDMC	NCT Delhi SDMC NDMC DCB	Rs. 25 Crore Rs. 15 Crore Rs. 05 Crore Rs. 05 Crore	Total = 50 Crores
Total				250 Crores

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 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.

In pursuance of the Order dated 23.03.2020 passed by Hon'ble National Green Tribunal in above mentioned case and Integrated Special Purpose Vehicle (SPV) was constituted vide order dated 14.07.2020 for the scientific management, processing and disposal of Legacy Waste. The said committee is headed by Chief Secretary and having Pr. Secy. (Env.), Commissioners of SDMC, EDMC & North DMC, Secy. (UD Deptt), Sh. Manish Singh (IAS, Director, Swatch Bharat, Bhopal) and Sh. Vijay Nehra (IAS, Comm., Municipal Corp., Ahmedabad) as members.

As per the said order, a Joint Committee comprising representatives of CPCB, NEERI & IIT Delhi has assessed the Amount of Damage to Environment due to three dumpsites in Delhi as mentioned in following table:

S.No.	Name of the Municipal Corporation	Name of the Dumpsite	Damage Cost assessed, (Rupees)
1.	North DMC	Bhalaswa	155.9 Crore
2.	EDMC	Ghazipur	142.5 Crore
3.	SDMC	Okhla	151.1 Crore
Total			449.5 Crore

Hon'ble NGT has disposed off the above mentioned case vide order dated 29.01.2021 with following directions:

"Accordingly, we direct the NCT Delhi and the Municipal Corporations concerned to coordinate and execute the work of remediating the legacy waste dump sites for enforcing the rule of law and protection of environment and public health, expeditiously in terms of earlier orders of this Tribunal. Due care has to be taken for preventing fire accidents on the landfill sites and maintaining stability of the dumps. The Chief Secretary, Delhi, may continue to hold meetings for coordination with all the stake-holders, at least once in a month, as earlier directed to device ways and means to expedite the pending work, including coercive measures against those responsible for delay. The CPCB is at liberty to recover the compensation already assessed, with further compensation for continuing damage till compliance of law, following due process of law. The amount of recovered compensation be spent on restoration of environment in Delhi."

As per the Action Plans submitted by EDMC, North DMC & SDMC to the Hon'ble NGT, following are the timelines for remediation of legacy waste at three dumpsites in Delhi

Dumpsite	Timeline for 25% remediation	Timeline for 50 % remediation	Timeline for 100% remediation
Ghazipur	March, 2022	March, 2023	Dec, 2024
Bhalaswa	April, 2021	Oct, 2021	June, 2022
Okhla	Oct, 2021	April, 2022	March, 2023

The Status of Bio-Mining of Legacy Waste at 3 Dumpsites at Okhla, Ghazipur & Bhalaswa in Delhi (as on 23.05.2021) is given in following Table :

S. No.	Name of the Dumpsite	Quantity of Legacy Waste Dumped (As on 17.07.2019)	Total Quantity of Legacy Waste Processed (As on 23.05.2021)	No. of Trommels Operational
1	Ghazipur	140 Lakh Ton	6.50 Lakh Ton (4.64%)	20
2	Okhla	60 Lakh Ton	4.95 Lakh Ton (8.25 %)	14
3	Bhalaswa	80 Lakh Ton	16.75 Lakh Ton (20.94%)	24
Total		280 Lakh Ton	28.20 Lakh Ton (10.07 %)	58

Urban Development Department , Govt. of NCT of Delhi is coordinating the said matter, conducting meetings of the said Committee and filing Status Report on behalf of Govt. of NCT of Delhi to Hon'ble National Green Tribunal from time to time.

Restoration & Rejuvenation of River Yamuna Flood Plains Status of 10 Projects of DDA (As on 16.06.2021) Annexure- 5

S. No.	Project	Effective Site Area for Development	Timelines	Remarks
1	Asita East [Old Railway Bridge to ITO Barrage (Eastern Bank)] PART A : Under the jurisdiction of DDA. PART B : Under the jurisdiction of UP Irrigation Deptt.	Total Site Area – 197 Ha PART A: 90 Hectares land within DDA's jurisdiction PART B: 107 Hectare with UP Irrigation Department	PART A: Work Completed. PART B: The works will be completed by 30 th September 2021.	PART A: Civil and Horticulture Works completed. PART B: The Civil Work has been started. The progress of the work is 15%.
2	Kalindi Aviral [NH24 to DND Flyway (Western Bank)]	Total Site Area – 100 Ha (DDA Land)	Work completed. The Balance Horticulture work will be completed by 30 th June 2021.	Civil Work Completed and Horticulture work 97 % Completed.
3	Kalindi Biodiversity Park [DND to proposed Kalindi By-pass (Western Bank) Khijrabad] Entrusted to CEMDE	Total Site Area – 115 Ha (DDA Land)	31.07.2021	Six out of Nine number of wetlands have been completed. The balance three Nos wetlands will be completed by 31.07.2021. (for construction of wetlands)- As communicated by Prof. C. R. Babu.
4	Asita West [Old Railway Bridge to ITO Barrage (Western Bank)]	Total Site Area – 200 Ha (DDA Land) (93 Ha already completed)	Work completed (for 93 Ha) 31.08.2021 (for the balance 107 Ha area)	The works have been started at site. Progress of work is 26%.

S. No.	Project	Effective Site Area for Development	Timelines	Remarks
5	ITO to NH-24 (Eastern & Western Bank)- Area south of Commonwealth Games Village Area	Total Site Area - 116.25 Ha (DDA Land) [90 Ha (Eastern Bank to be developed by DDA) + 18 Ha (Western Bank to be developed by DDA) + 8.25 Ha (Western Bank to be development by CPWD)]	31.10.2021 (for 90 Ha on Eastern Bank)	Work has been started for 90 Ha of land. The Progress of the work is 2%.
6	Wazirabad to Old Railway Bridge (Western Bank) [Qudesia Ghat] Entrusted to INTACH	Total Site Area - 66 Hectare (DDA Land) [Qudesia Ghat- 16 Ha. Sur Ghat – 13.6 Ha. Eco-trail – 33 Ha. Yamuna Bazar-3.4 Ha.	30.09.2021 (for Qudsia Ghat) only for 16 Ha Land.	DDA is coordinating with INTACH for the execution of civil and Electrical works in Qudsia Ghat. The proposal of 16 Ha. land has been sent to competent authority regarding acceptance of tender in the favour of M/s INTACH.
7	Yamuna Vanasthali Wazirabad Barrage to ISBT Bridge (Eastern Bank) around Garhi Mandu Village & Usmanpur Village	Total Site Area - 236.5 Ha (DDA Land)	30.09.2021	Work has been started. The Progress of the work is 2%.
8	Mayur Nature Park (NH-24 to DND Flyway (Eastern Bank) PART A: under the jurisdiction of DDA PART B: Under the jurisdiction of UP Irrigation Department.	Total Site Area– 397.75 Ha Part A : 235 Ha (DDA Land) Part B : 162.75 Ha (UP Land)		PART A: Issues: I. LM Department informed that approximately 100 Ha of land has been de-notified out of total 235 Ha. II. The demarcation on ground by TSM in under progress. Accordingly, the landscape plan also needs to be reworked.

S. No.	Project	Effective Site Area for Development	Timelines	Remarks
9	Eco-Tourism Area [Geeta Colony Bridge to ITO Barrage (Western Bank)]	Total Site Area - 30 Ha (DDA Land) (13 Ha land is with DESU now IPGCL)	30 Hectare	Area falls outside 1 in 25 year floodplain. Land Department has been requested to take back the land. The land is yet to be retrieved. Only 9.6 Ha of the land is currently available for development.
10	Hindon Sarovar (NH-24 to DND Flyway - Eastern Bank) Part Area- II- Hindon Cut Wetlands I&II Entrusted to CEMDE PART A: Under the jurisdiction of DDA PART B: Under the jurisdiction of UP Irrigation Department.	Total Site Area – 45 Ha PART A: 15 Ha (DDA Land) PART B: 30 Ha (UP Irrigation Dept.)	 Part A: 31.10.2021 (The land / area under the jurisdiction of UP Govt. / UP Irrigation Department). Part B: Target date will be decided after receiving of funds from UP Irrigation Department.	The project comprises of creation of wetlands for treating water from the Hindon Canal the mouth of which falls under the jurisdiction of UP Irrigation Department. The demarcation on ground by TSM is under progress. Accordingly, the landscape plan also needs to be reworked.
	Total	Part A – 1203.75 Ha (DDA Land) Part B- 299.75 Ha (UP Land) Total – 1503.50 Ha		Phase I work (a) Completed – 283 Ha (DDA Land) (b) In Progress (i) 441.50 Ha (DDA Land) (ii) 107.00 Ha (UP Land)