

**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/ 3840 - 3843

Dated: 29-07-2020

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 June, 2020 w.r.t Order Dated 06.12.2019 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"

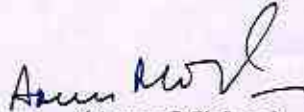
Sir,

Please find enclosed herewith Monthly Progress Report of Govt. of NCT of Delhi for the Month of June, 2020 for Rejuvenation of River Yamuna (Priority -I Stretch) w.r.t Order Dated 06.12.2019 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"

It is informed that 1st Monthly Progress Report of Govt. of NCT of Delhi was submitted vide letter dated 14.02.2020, 2nd Monthly Progress Report was submitted through Email dated 27.03.2020 and 3rd Monthly Progress Report (for the month of May, 2020) was submitted vide letter dated 29.06.2020.

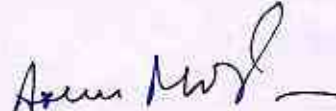
Yours Sincerely,

Enclosure : As Above


(Arun Mishra)
Spl. Secy (Env) cum
Member Secretary, DPCC

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.


(Arun Mishra)
Spl. Secy (Env) cum
Member Secretary, DPCC

Monthly Progress Report of Govt. of NCT of Delhi w.r.t. the order dated 06.12.2019 of Hon'ble NGT in the matter of OA No. 673/2018 (for the month of June, 2020)

Sl.No. (1)	Activity to be monitored (2)	Timeline (3)	Progress / Compliance Status (4)
1	Ensure 100% treatment of sewage at least in-situ remediation	31.03.2020	Out of waste water generation of 3273 MLD (720 MGD) in Delhi, 2364 MLD (520 MGD) is currently being treated at 20 locations of STPs. Hence, about 72 % waste water is being treated currently. For 100% treatment of sewage atleast in-situ remediation, action plans are being prepared by the Drain owning Agencies (DoA). The preparation of in-situ remediation action plan of the drains is being coordinated by the Integrated Drain Management Cell (IDMC), constituted under the chairmanship of Chief Secretary as per the orders of Hon'ble NGT dated 05.03.2020 in OA No. 06/2012 in the matter of Manoj Mishra Vs Union of India & Ors. The waste water in KushakNala running through NDMC areas is under bio-remediation and the parameters like BOD, TSS, COD are being monitored. Similarly, Delhi Cantonment Board has already started implementation of bioremediation plan w.e.f 11.06.2020. All the Drain Owing Agencies (DOA) i.e. DDA, North Delhi Municipal Corporation, South Delhi Municipal Corporation, East Delhi Municipal Corporation, New Delhi Municipal Council, I&FC, Cantonment Board etc. have submitted their action plan and some of the Drain Owing Agencies/Departments have started implementing their Action Plans. The waste water in KushakNala running through NDMC areas is under bio-remediation and the parameters like BOD, TSS, COD are being monitored. Similarly, Delhi Cantonment Board has already started implementation of bioremediation plan w.e.f 11.06.2020. The matter is being pursued by IDMC. The 35 STPs installed at 20 locations having total treatment capacity of 2714 MLD (597 MGD) are already functioning. The list is enclosed at <u>Annexure-1</u>. The Interceptor Sewer Project (ISP) for trapping 108 sub drains falling into Najafgarh, Supplementary & Shahdara drains to trap 1100.86 MLD (242.16 MGD) has commenced and provision has been made for trapping 1028.76 MLD (226.3MGD) of waste water. Presently 721.54 MLD (158.72 MGD) is being trapped and treated. Provision for trapping of balance 72.1MLD (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 STP under YAP-III. Details of STPs of DJB (Setting up of new STPs/rehabilitation & up-gradation of existing STPs at Okhla, Kondli, Rithala and Coronation Pillar) & Sewerage Projects under Yamuna Action Plan-III / Namami Gange and Progress as on 30.06.2020 are given at <u>Annexure-2</u>.
	Commencement of setting up of STPs and connecting all the drains and other sources of generation of sewage to the STPs must be ensured	31.03.2020	

	Timeline for completing all steps of action plans including completion of setting up STPs and their commissioning	31.03.2021	The timeline for completing the 6 packages of the Interceptor Sewer Project (ISP) is given at <u>Annexure-3</u>. Though the initial target to complete the project was 31.03.2020 but due to ban on construction activities in Delhi from October to December, 2019, subsequent lockdown from 22nd March, 2020 and non availability of construction workers in Delhi due to pandemic, the completion of the project will be delayed as informed by DJB. The commissioning of the project is expected by 31.12.2020. The revised timelines for completing the setting up of new and up-gradation/rehabilitation of STPs have been detailed at <u>Annexure-2</u>.
5	Chief Secretaries may set up appropriate monitoring mechanism at State level • Specifying accountability of nodal authorities not below the Secretary level • Chief Secretaries may have an accountable person attached in their office for this purpose	22.01.2020 22.01.2020	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.”
	• Monitoring at State level must take place	Fortnightly Commencing 21.12.2019	Monitoring by Chief Secretary, GNCTD, is being done and the last meeting in this regard was held on 19.03.2020.
6	Progress report may be furnished by the States/UTs to • Secretary, Ministry of Jal Shakti • Member Secretary, CPCB	Monthly (preferably before 20 th of every month)	Monthly Progress Report of Government of NCT of Delhi for the month of May, 2020 was submitted to Ministry of Jal Shakti and CPCB on 29.06.2020.
6.1	Progress Report may be comprised of details along with completion timelines on: (i) Identification of polluting sources including drains contributing to river		(i) There are 18 major drains which are directly discharging wastewater into river Yamuna in the Delhi stretch between Wazirabad to Okhla. Out of 18 drains, 13 drains have already been completely trapped. 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 by 31.12.2020. Status of 18 Major Drains Directly Out Falling into River Yamuna (as per the Information provided by DJB) is at <u>Annexure - 4</u> 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

	pollution and action as per NGT order on in-situ treatment		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. Integrated Drain Management Cell (IDMC) has been constituted under the chairmanship of Chief Secretary, vide order dated 17.03.2020 & 5 Meetings (2 in June, 2020) of the IDMC have been held so far. Action as per NGT order regarding in-situ treatment of drains is being taken and action plans are being prepared by the Drain owning Agencies (DoA). The preparation of in-situ remediation action plan of the drains is being coordinated by the IDMC. The waste water in KushakNala running through NDMC areas is under bio-remediation and the parameters like BOD, TSS, COD are being monitored. Similarly, Delhi Cantonment Board has already started implementation of bioremediation plan w.e.f 11.06.2020. Drain owning agencies have been asked to submit their action plans along with timelines for bio-remediation of drains under their control and the matter is being pursued by IDMC.
	(ii) <u>Status of STPs, I&D and sewerage networks</u> Details of Existing Infrastructure, Gap Analysis, Proposed along with completion timeline		(ii) Out of 3273 MLD (720 MGD) waste water generation in Delhi, 2364 MLD (520 MGD) is currently being treated at 20 locations of STPs. Hence, about 72 % waste water is being treated currently. Information given at Sl.No.1 & 2 in respect of 35 STPs installed (<u>Annexure-1</u>). Setting up of new STPs / Rehabilitation and Up-gradation of existing STPs (<u>Annexure-2</u>) & the timeline for completing the 6 packages of the Interceptor Sewer Project (ISP) (<u>Annexure-3</u>) be referred. Details of Up-gradation of Remaining STPs of Delhi Jal Board in Delhi is at <u>Annexure – 5</u>. 56 Decentralized Sewage Treatment Plants (DSTPs) are proposed to be constructed by DJB in Najafgarh Drainage Zone and at Narela, Okhla, Outer South Delhi, Kanjhawala, Bawana, Shahdara Zone. Status of proposed 56 Decentralized Sewage Treatment Plants (DSTPs) of DJB in Delhi is given at <u>Annexure-6</u>. Status of Sewerage Network Providing Sewerage Network in Unsewered Areas in Delhi In Delhi, about 78% of population is already connected to sewerage network. The unsewered areas mainly consists of unauthorized colonies. There are 1799 unauthorized colonies out of which sewer lines have been laid and notified in 561 colonies and the work is in progress in 470 colonies. In 768 colonies, sewer network is yet to be laid, out of these 768 colonies, 116 are under tendering stage, 56 colonies are under O Zone and for 75 colonies, NOC is awaited on account of being on Forest, ASI land etc. Thus, sewerage system is to be laid in about 768 colonies @ Rs. 4 Crore per colony on an average are required for providing sewer network. Status of Sewerage Network in Un-authorised Colonies, as provided by DJB, is at <u>Annexure –7</u> Cost of Construction of New STPs, Laying of Sewerage System and Upgradation of Existing STPs by DJB in Delhi is given at <u>Annexure – 8</u>.

(iii) <u>Status of CETPs</u> Details of Existing CETP and ETP Infrastructure, Gap Analysis, Proposed along with completion timeline, No. of industries and complying status	There are 28 Approved Industrial Areas in Delhi and 28117 industries/units in these industrial areas as per the records of DPCC. Out of 28117 industries/units, 1516 industries/units are water polluting and have installed captive Effluent Treatment Plants (ETPs). Total waste water generation from these industrial areas is about 36 MLD. There are 13 CETPs to cater the waste water generated from 17 Approved Industrial Areas with total capacity of 212.3 MLD. Rest of the 11 Approved industrial areas out of 28 Approved Industrial Areas are not having CETPs as they are not generating substantial liquid waste. 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 from time to time. 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. 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. A meeting was held on 15.06.2020 with CSIR-NEERI to review the progress of the work. CSIR-NEERI has submitted a report on 21.06.2020 in terms of timeline along with an action plan.They will submit an interim report on the status of waste water management and other related issues in industrial areas having CETPs by 30.09.2020. Brief Status of CETPs in Delhi is given at <u>Annexure – 9.</u>
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	(iv) <u>Status of Solid Waste Management & Details of Processing Facilities</u> Details of Existing Infrastructure, Gap Analysis, Proposed along with completion timeline	Status of Solid Waste Management including Legacy Waste in NCT of Delhi giving details of Processing Facilities, Existing Infrastructure, Gap Analysis, Proposed Facilities along with completion timeline is enclosed as <u>Annexure – 10.</u>
	(v) 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 in the Month of June, 2020 is enclosed as <u>Annexure – 11.</u> Water Quality of major Drains for the samples collected in the Month of June, 2020 is enclosed as <u>Annexure – 12.</u> 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 <u>Annexure – 13.</u>
	(vi) Preventing dumping of waste and scientific waste management including bio-medical wastes, plastic wastes and decentralizing waste processing, including waste generated from hotels, ashrams, etc.	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. There is sufficient capacity with the 2 CBWTFs operating in Delhi to cater Bio-Medical Waste Generated in Delhi. For safe and scientific disposal of biomedical waste generated from various Health Care Facilities/ Institutions, there are two Common Bio-medical Waste Treatment and Disposal Facilities (CBWTFs) operating in Delhi. All the districts of Delhi have been distributed between these two CBWTFs which have adequate capacity to treat the entire biomedical waste generated in Delhi. 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 CBWTFs). Regarding decentralized waste processing facilities for solid waste management, details given at <u>Annexure –10</u> may be referred. Five Star Hotels in Delhi have already installed individual STP to treat the entire waste water generated from the Hotel & have provided Organic Waste Converter etc. for management of Bio-degradable Solid Waste generated from the Hotel.
	(vii) 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. Copy of the said Notification has already been submitted on 27.03.2020 along with Monthly Progress Report for the month of Feb, 2020. The issue of illegal extraction of ground water is being overseen by Hon'ble NGT in OA No 25/2019 (Abdul Faruk Vs GNCTD and Ors). The said matter deals with closure of about 19000 illegal borewells 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 borewells are to be sealed by the revenue department. DPCC is responsible to impose EDC based on the formula devised by CPCB for illegal extraction of ground water for different purposes.

	(viii) Adopting good irrigation practices		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.
	(ix) Protection and management of Flood Plain Zones (FPZ)		Protection of Flood Plain of River Yamuna & Prevention of Encroachment : (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. Work for reinstallation of bollards along with Geo –reference was initiated / awarded to M/s M & G Associates on 29.08.2019. The flood plains from Wazirabad to ISBT and from Sun Dial to Dhobighat was marked. The ring road from Yamuna Bazaar to Sun Dial and the road number 13 /A from Dhobighat to JaitpurGhat and further embankment upto Delhi Haryana Border acts / mark the flood plain boundary on western bank. Similarly , the Pustha road on the eastern Bank mark the entire flood plain boundary. 90 % work for demarcation of flood plains completed and the balance was held up due to construction ban.The 100 Nos. bollards for demarcation on Yamuna River Flood area have already been framed on 19.11.19. The 600 Nos. bollards for the entire stretch from Wazirabad barrage to Okhla barrage have already been installed. In addition to above,formakingdemarcation more visible and convenient to the public, it was Flagged 6 meter height with RCC Foundation&withReflectedPaints on sign board. Accordingly the work was awarded to the agencies 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 in three months time i.e. by August, 2020 subject to improvement/normalization in present situation, availability of labour & materials. (ii) Engagement of Private Security to Stop Illegal Dumping : Private security has been engaged by DDA to stop illegal dumping: 100Nos. of SecurityGuards have been deployed by DDA .

		(iii) Installation of Electronic Surveillance System: The work for installation of 102 Nos. CCTV Cameras at 34 Locations from Wazirabad to Jaitpur to check the illegal dumping of Malba into the Yamuna Flood Plain was awarded to M/s Technosys Security System Pvt. Ltd. 36 Nos. Cameras have been installed at 12 Locations. Out of remaining 66 Cameras to be installed at 22 remaining locations, it is feasible to make 13 Locations functional catering to 39 Cameras. However, for remaining 9 locations catering to 27 Nos. Cameras are not feasible as per current scenario due to various hindrances. CCTV cameras have been installed by DDA from Old Railway Bridge to Yamuna Bank Metro Station, Khijrabad and MCRs at Geeta Colony, at Golden Jubilee Park and Khijrabad. Details of installation of CCTV cameras has already been submitted on 27.03.2020 along with the Monthly Progress Report for the month of Feb, 2020. Due to Election in Delhi, Ban on Construction activities and lockdown due to COVID-19, minimum 6 months are required for the further remobilization of works (related to labour and material). (iv) Removal of Encroachment from the Flood Plain: DDA has informed that 550 Nos. Jhuggis / Chappers have been demolished and an area of 5500 Sqr. Meter has been freed from encroachment. In, all out of 1026 Jhuggis / Structures existing of nearly 11.0 Acres of land in Okhla, Khijrabad and Jogabai 600 Jhuggis have been removed and 5.00 Acres of land has been reclaimed nearly 2.0 acres of land with 150 Jhuggis could not be removed due to stay by Courts. Balanced Jhuggis are proposed to be removed in due course. Details of Demolition carried out by DDA have already been submitted on 27.03.2020 along with the Monthly Progress Report for the month of Feb, 2020. (v) 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 being dumped is being explored by DDA. An Electronic Surveillance System with patrolling along with a static party has been deployed by DDA. For monitoring of encroachments on vacant land using satellite imageries the subject has been taken up with ISRO and DDA has signed MOU with ISRO on 6th July 2018 . If successful, will be implemented in monitoring of Yamuna River Flood Plain. (vi) Restoration and Rejuvenation of the Floodplains of River Yamuna. DDA is going ahead with the Restoration and Rejuvenation of the 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 Colony. Brief Status of 10 Projects taken up / to be taken up by DDA for Development of Yamuna River Front (Restoration & Rejuvenation of River Yamuna Flood Plains Status- June , 2020) is enclosed as <u>Annexure – 14.</u>
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(x) Rain water harvesting		Progress of Rain Water Harvesting System installed / monitored by DJB is as under : <table><tr><th>S. No.</th><th>Departments</th><th>Total</th><th>Installed</th><th>Target to be installed in Year 2020</th></tr><tr><td>1.</td><td>DJB Installations</td><td>594</td><td>439</td><td>155</td></tr><tr><td>2.</td><td>By DJB for other Departments</td><td>88</td><td>05</td><td>83</td></tr><tr><td>3.</td><td>Monitored by DJB for other Government Departments</td><td>2537</td><td>1305</td><td>1232</td></tr><tr><td>4.</td><td>Schools</td><td>4603</td><td>3675</td><td>928</td></tr><tr><td></td><td>Total</td><td>7822</td><td>5424</td><td>2398</td></tr></table>	S. No.	Departments	Total	Installed	Target to be installed in Year 2020	1.	DJB Installations	594	439	155	2.	By DJB for other Departments	88	05	83	3.	Monitored by DJB for other Government Departments	2537	1305	1232	4.	Schools	4603	3675	928		Total	7822	5424	2398
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(xi) Maintaining minimum environmental 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. Interim Report of NIH was received in December, 2019 & Final Draft Report has been received however Final Report is yet to be submitted to NMCG.																														
(xii) Plantation on both sides of the river		Department of Forests & Wildlife, Govt. of NCT of Delhi has carried out plantations on Yamuna Flood Plains from time to time and details of land handed over to Forest Department in Yamuna Flood Plains under various schemes and plantation carried out are given in the Action Plan submitted to CPCB.																														
(xiii)Setting up biodiversity parks on flood plains by removing encroachment		Yamuna Biodiversity Park is already existing and located in JagatpurKhadar 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 KalindiColony.The project has been awarded to CEMDE on 13.12.2019 . Water hyacinth and <i>Alternanthera</i> 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.
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Functional Sewage Treatment Plants (STPs) of Delhi Jal Board in Delhi

S.No.	Location of STP	Phase wise break up	Capacity in MLD (MGD)
1.	Okhla	Phase-II	54.55 (12 MGD)
		Phase- III	168.2 (37 MGD)
		Phase-IV	204.57 (45 MGD)
		Phase-V	72.74 (16 MGD)
		Phase-VI	136.38 (30 MGD)
2.	Rithala	Phase-I	90.92 (20 MGD)
		Phase-II	181.84 (40 MGD)
3.	Kondli	Phase-II	113.65 (25 MGD)
		Phase-IV	204.57 (45 MGD)
4.	Keshopur	Phase -I(New)	54.55 (12 MGD)
		Phase-II	90.92 (20 MGD)
		Phase-III	181.84 (40 MGD)
5.	Yamuna Vihar	Phase-I	45.46 (10 MGD)
		Phase-II	45.46 (10 MGD)
		Phase-III	113.65 (25 MGD)
6.	VasantKunj	Phase-I	10 (2.2 MGD)
		Phase-II	13.64 (3 MGD)
7.	Mehrauli	-	22.73 (5 MGD)
8.	Coronation Pillar	Phase-I & II	90.92 (20 MGD)
		Phase-III	45.46 (10 MGD)
9.	Narela	-	45.46 (10 MGD)
10.	Nilothi	Phase-I	181.84 (40 MGD)
		Phase-II	90.92 (20 MGD)
11.	Najafgarh	-	22.73 (5 MGD)
12.	Pappankalan	Phase-I	90.92 (20 MGD)
		Phase-II	90.92 (20 MGD)
13.	Sen Nursing Home Nallah	-	10 (2.2 MGD)
14.	Delhi Gate Nallah	Phase-I	10 (2.2 MGD)
		Phase-II	68.19 (15 MGD)
15.	Rohini	-	68.19 (15 MGD)
16.	Ghitorni	-	22.73 (5 MGD)
17.	Kapashera	-	22.73 (5 MGD)
18.	Chilla	-	40.91 (9 MGD)
19.	Common Wealth Games Village	-	4.55 (1 MGD)
20.	Molar Bandh	-	3 (0.66 MGD)
	Total	35 STPs at 20 Locations	2715.14 MLD (597.26 MGD)

**Details of STPs of DJB New / under Up-gradation /Rehabilitation & Sewerage Projects under Yamuna Action Plan-III / Namami Gange
(Progress as on 30.06.2020)**

S. No	Packages Name/ Details of Project	Name of Agency	Contract Amount (Rs. in Crore)	Date of Start	Schedule Date of Completion	Physical Progress up to May, 2020 (%)	Progress during the Month of June, 2020 (%)	Physical Progress up to June, 2020 (%)	Likely Date of Completion	Reasons for Delay
1	R1a : Rithala - Rehabilitation of Trunk/Peripheral Sewer	M/s Shristi Sam - Lain JV	30.71	21.03.2018	20.03.2020	57.91	3.48	61.75	31.03.2021	No progress from 22.03.2020 to 17.05.2020 due to lockdown. Further no work to be taken up during monsoon. Work also delayed on account of EPCA ban and permission from DDA Horticulture Dept. etc.
2	R1b: Rithala – Rehabilitation / Replacing of Rising Main	M/s. Tirupati Cement Products	37.58	04.07.2018	03.07.2020	63.75	1.00	64.75	31.10.2020	Slow progress during the month due to shortage of labour. Work delayed due to Constraints on account of Lockdown / COVID-19 & EPCA ban and permission from Haryana Irrigation etc.
3	R2 : Rithala - Rehabilitation & up gradation of Rithala (Ph-I) WWTP	M/s. VA Tech Wabag Ltd.	223.70	15.06. 2018	14.12.2021	27.00	0.25	27.25	31.12.2022	Slow progress during the month due to shortage of labour. Work delayed due to tree cutting permission. The part permission for transplantation of 88 No of Trees was received and transplantation work completed in March 2020. Case for transplantation/ cutting of 524 No of Trees still pending with Forest Deptt. Work also delayed on account of Lockdown / COVID-19, EPCA ban etc.

S. No	Packages Name/ Details of Project	Name of Agency	Contract Amount (Rs. in Crore)	Date of Start	Schedule Date of Completion	Physical Progress up to May, 2020 (%)	Progress during the Month of June, 2020 (%)	Physical Progress up to June, 2020 (%)	Likely Date of Completion	Reasons for Delay
4	K1 : Kondli - Rehabilitation of Trunk Sewer No.4	M/s Shristi Sam - Lain JV	55.41	29.11.2017	28.11.2019	73.59	0.81	74.40	31.03.2021	Slow progress during the month due to shortage of labour. Work delayed due to Delay due to Constraints on account of Lockdown/ COVID-19, EPCA ban and road cutting permission etc.
5	K2 : Kondli - Rehabilitation of Trunk Sewer No.5	M/s. Gypsum-Ludwig (JV)	74.35	29.11.2017	28.11.2019	90.46	0	90.46	31.10.2020	No progress during the month due to non availability of labour. Work delayed due to constraints on account of Lockdown/ COVID-19, EPCA ban and road cutting permission etc.
6	K3 : Kondli - Rehabilitation & up gradation of Phase I, II and III WWTPs	M/s Triveni - GSJ - Gharpure JV	314.70	10.08.2018	09.02.2022	31.72	3.13	34.85	31.12.2022	Slow progress during the month due to shortage of labour. Work delayed due to delay in permission for transplantation / cutting of 492 No. of Trees for Phase-I & III, which has been received on 08.04.2020 and work of transplantation/ cutting of trees is in progress, likely to be completed by 31.08.2020. Work also delayed on account of Lockdown/COVID-19, EPCA ban etc. Tree cutting permission for 1185 No of Trees under Phase-II is also being pursued with Forest Deptt.

S. No	Packages Name/ Details of Project	Name of Agency	Contract Amount (Rs. in Crore)	Date of Start	Schedule Date of Completion	Physical Progress up to May, 2020 (%)	Progress during the Month of June, 2020 (%)	Physical Progress up to June, 2020 (%)	Likely Date of Completion	Reasons for Delay
7	K4 : Kondli - Rehabilitation of Rising Main	M/s. Tirupati Cement Products	42.90	11.07.2018	10.07.2020	45.84	5.66	51.50	31.03.2021	Slow progress during the month due to shortage of labour. Work delayed due to constraints on account of Lockdown/ COVID-19, EPCA ban and road cutting permission etc.
8	O : Okhla - Construction of 564 MLD (124MGD) New WWTP	M/s. SUEZ India Pvt. Ltd. - SUEZ International JV	942.17	19.06.2019	18.12.2022	12.50	1.10	13.60	30.06.2023	Case for permission for cutting of 442 No of Trees, now reduced to 391 Trees by adjustment in the alignment of the proposed new units is still pending with Forest Department. Delay due to constraints on account of Lockdown/ COVID-19, EPCA ban and tree cutting permission etc.
Namami Gange (NMCG) Funded Project										
9	Construction of 318 MLD WWTP at Coronation Pillar.	M/s. Larsen & Toubro Ltd. - Passavant Energy & Environment JV	414.78	12.10.2016	11.04.2019	72.25	2.55	74.80	31.03.2021	Slow progress during the month due to shortage of labour. Work delayed due to delay in handing over the land of Nirankari Smagam. Extra time required for Stabilization of soil strata, DPCC / EPCA ban from time to time, Lockdown, shortage of labour, material etc. due to COVID-19 and initial fund constraints.

New STPs and Rehabilitation / Up-gradation of Existing STPs of DJB in Delhi

S. No.	Location / Name of STP	Capacity	Target Date of Completion (Revised Timeline)	Remarks
1.	Kondli STP Phase I	45.46 MLD (10 MGD)	December, 2022	Are being rehabilitated under YAP-III.
2.	Kondli STP Phase II	113.65 MLD (25 MGD)	December, 2022	
3.	Kondli STP Phase III	45.46 MLD (10 MGD)	December, 2022	
4.	Yamuna Vihar STP Phase II	45.46 MLD (10 MGD)	March , 2022	The plant has already been made operational as per existing parameters.
5.	Okhla STP Phase I	136.38 MLD (30 MGD)	June, 2023	564 MLD (124 MGD) STP at Okhla will be constructed instead of existing Okhla STP (Phase I to IV). The New STP will be constructed at a new location. Till the new plant is constructed & commissioned, the existing plants will remain in operation.
6.	Okhla STP Phase II	54.55 MLD (12 MGD)		
7.	Okhla STP Phase III	168.2 MLD (37 MGD)		
8.	Okhla STP Phase IV	2047.6 MLD (45 MGD)		
9.	Rithala STP Phase I	181.8 MLD (40 MGD)	December, 2022 subject to grant of tree cutting permission from Forest department	Is being rehabilitated under YAP – III.
10.	Coronation Pillar STP Phase-I	45.46 MLD (10 MGD)	New 318 MLD (70 MGD) STP at Coronation Pillar is under construction which is likely to be commissioned by March, 2021 (excluding trial run & commissioning).	
11.	Coronation Pillar STP Phase-II	45.46 MLD (10 MGD)		
12.	Coronation Pillar STP Phase-III	45.46 MLD (10 MGD)		
	Total	249 MGD (1131.98 MLD)		

Status of 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 and Barapullah)	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.

Details of Interceptor Sewer Project (ISP) of DJB in Delhi with Timelines

S. No	ISP Package No	Flow to be Trapped (in MLD)	Name of STP & Treatment Capacity (in MLD)	Capacity Available for Treatment of Intercepted Flow	Flow already Trapped and being Treated (in MLD)	Balance Flow Targeted to be Trapped and Treated with Timeline (in MLD)
1	Package-1	62.7 (13.80MGD)	Pappankalan (Dwarka) -181 (40 MGD)	Yes	62.73 (13.80 MGD)	Already Trapped
2	Package-2	190.48 (41.90MGD)	Nilothi- 272.6 (60 MGD)	Yes	190.48 (41.90 MGD)	Already Trapped
		101.37 (22.30 MGD)	Keshopur – 327 (72 MGD)	Yes	101.38 (22.30 MGD)	Already Trapped
3	Package-3	227.39 (50.02 MGD)	Coronation Pillar- 318 (70 MGD) (New) & Existing STP 136(30 MGD)	Construction of STP is in progress & likely to be commissioned by March, 2021	6.82 (1.50 MGD)	Provision for trapping 222.84 (49.02 MGD) made and shall be trapped for treatment by March, 2021 after construction of Coronation Pillar STP
		87.28 (19.24 MGD)	Rithala – 363.6 (80 MGD)	Rehabilitation of Rithala STP is in progress & likely to be commissioned by December, 2022	-	Provision for trapping is made for 87.47 (19.24 MGD) and shall be trapped for treatment by December, 2022 after Rehabilitation of Rithala STP
4	Package-4	61.37 (13.50 MGD)	Rithala-363.6 (80 MGD)	Yes	45 (9.90 MGD)	16.37(3.6 MGD) By Sept, 2020
		56.8 (12.50 MGD)	Rohini- 68.1 (15 MGD)	Yes	56.8 (12.50 MGD)	Already Trapped
5	Package-5	145 (31.90 MGD)	Yamuna Vihar 159.13(35 MGD) & 45.46(10 MGD) (under Rehabilitation)	Yes	105.1 (23.12 MGD)	Provision for trapping of balance 39.91 (8.78 MGD) shall be made by December, 2020.
6	Package-6	168 (37.0 MGD)	Kondli- 204.6 (45 MGD) New & 204.6 [45(10+25+10)] MGD to be rehabilitated under YAP-III out of which 113.6 (25 MGD) is still in operation. Presently total operational capacity - 318 (70 MGD).	Rehabilitation of 45.46 (10 MGD) STP by December, 2021.	153 (33.7MGD)	Provision for trapping of balance 15 (3.3 MGD) shall be made by December, 2020 and shall be trapped for treatment by December, 2022 after Rehabilitation of Kondli STP
Total		1100.86 MLD (242.16 MGD)			721.54 MLD (158.72 MGD)	379.32 MLD (83.44 MGD)

Note – Two small parts (i) Seelampuri stretch & (ii) Brahmpuri stretch are de-scoped from P6 and P5 respectively. The awarded cost of P6 and P5 are considered including these two parts as original. Work will be completed by Dec., 2020.

Summary of Interceptor Sewer Project (ISP)

Total flow to be trapped	Status as in May, 2020 Provision of trapping made	Provision of trapping made during the month of June , 2020	Commutative Status as in June, 2020- Provision of trapping made	Time line for completion of work	Remarks
1100.86 MLD (242.16 MGD)	1028.76 MLD (226.30 MGD)	NIL	1028.76 MLD (226.30 MGD)	December, 2020	721.54 MLD (158.72MGD) is being trapped and treated out of 1028.76 MLD(226.3MGD) Balance trapping provision of 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 STP under YAP-III.

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.	---- Do--
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 is being constructed to completely stop the overflow. The work is expected to be completed by March, 2020.
14.	QudsiaBagh+ Morigate Drain	43.2(9.51 MGD)	Land identified but is in O zone. DDA 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 can not 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 sewerred area are proposed to be trapped. The trappings at KrishiVihar, 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 SangamVihar 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)	1. The 70% work 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 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 August, 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 Dec., 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.

Details of Up-gradation of Remaining STPs of Delhi Jal Board in Delhi

Up-gradation of Balance Existing STPs with Parameters of BOD/TSS as 10/10 mg/l (including Bio-nutrient & Pathogen Removal & Sludge Management)						
S. No.	Name of STP	Phase Wise Breakup	Design Capacity in MLD (MGD)	Design Outlet Parameters BOD/TSS	Estimated Cost for Upgradation to 10/10 Parameters (Rs. Crore)	Expected Time lines of Completion (subject to availability of funds)
1	Rithala	Phase – II	181.84 (40)	15/20	312.76	The completion period for up-gradation of STPs is 3 to 4 years from the date of availability of funds.
2	Okhla	Phase-V	72.74 (16)	30/50	125.10	
		Phase-VI	136.38 (30)	20/30	234.57	
3	Kondli	Phase – IV	204.57(45)	20/30	351.86	
4	Keshopur	Phase-I	54.55(12)	20/30	93.83	
		Phase-II	90.92(20)	30/50	156.38	
		Phase-III	181.84 (40)	30/50	312.76	
5	Yamuna Vihar	Phase – I	45.46(10)	30/50	78.19	
		Phase-III	113.65(25)	20/30	195.48	
6	VasantKunj	Phase – I	9.09 (2.0)	30/50	15.64	
		Phase – II	13.64 (3)	30/50	23.46	
7	Mehrauli	-	22.73 (5)	20/30	39.10	
8	Narela	-	45.46(10)	30/50	78.19	
9	Nilothi	Phase – I	181.84 (40)	30/50	312.76	
10	Najafgarh	-	22.73(5)	30/50	39.10	
11	Pappankalan	Phase – I	90.92 (20)	30/50	156.38	
12	Dr. Sen Nursing Home Nalla	-	10 (2.2)	10/15	17.20	
13	Delhi Gate	Phase – I	10 (2.2)	10/15	17.20	
14	Rohini	-	68.19 (15)	30/50	117.29	
15	Ghitorni	-	22.73 (5)	30/50	39.10	
16	Molar Bandh	-	3 (0.66)	30/50	5.16	
			1582.28 MLD (348.06 MGD)		Rs. 2721Crore	
Total Fund Requirement for 348.06 MGD @7.82 Crore / MGD = Rs. 2721 Crores						

No of STPs to be up-graded	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
16	4(Rohini,Keshopur, Narela&Rithala Phase-II)	Nil	Nil	3-4 years after availability of funds	The estimates for consultancy for the balance STPs are being finalized.

Status of 56 Decentralized Sewage Treatment Plants (DSTPs) of DJB in Delhi**(A) Detailed Status of Land for DSTPs**

Allocation of land pending with the other department as on May,2020 (No of locations)	Name of Deptt	Allocation of land pending with the other department as on May, 2020 (No of locations)	Land allotted during month of June,2020 (No oflocations)	Commutative pending Status on June ,2020 (No of locations)
13	Land and Building Department , GNCTD after acquisition from Private persons	13	Nil	13
11	Gram Sabha lands- Land and Building Department , GNCTD	11	Nil	11
39	Delhi Development Authority	39	Nil	39

(B) Status of Construction of DSTPs

No of DSTPs to be constructed	Consultancy Awarded for No of DSTPs	No of DSTPs Tender invited	No of DSTPs Work Awarded (Work is in progress)	Time line for Completion	Remarks
56	14	Nil	14*	24 Months	*Out of 14 DSTP funding for 07 DSTPs has been received from NMCG. Land for 08 locations has been allocated to DJB. However, the work of these 14 STPs will be taken up after receiving funds and possession of balance land.

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

S. No	Status	Status as on May, 2020 of Unauthorised Colonies (Numbers)	Increase/ Progress during month of June, 2020 (Numbers)	Commutative Status as on June, 2020 (Numbers)	Remarks
1	Sewer line laid and notified	561	Nil	561	-
2	Work of sewer network is in progress	470	Nil	470	12.45 km length of sewer line has been laid during the month of June,2020.
3	Work of sewer network in tendering stage	116	Nil	116	During the month of June, tenders were process for award of the work of providing laying sewer lines in Kirari GOC consisting 114 colonies.
4	Colonies where NOC is awaited/OZone	131	Nil	131	-
5	Colonies where sewerage network is to be laid along with Decentralized STPs	521	Nil	521	The work shall be taken up after allotment and possession of land by DDA & Revenue Deptt.
	Total	1799		1799	

Annexure – 8

Cost of Construction of New STPs, Laying of Sewerage System and Upgradation of Existing STPs by DJB in Delhi

S. No.	Description	Estimated Cost (Rs.in Crores)	Timelines
1	P/L Internal sewer network in about 597 unauthorized colonies where works are in progress	1000	Upto December, 2022 in phased manner
2	Providing & Laying internal sewer system in balance Unauthorised Colonies/ Unsewered Area (about 768 colonies) @ Rs 4 Crore per colony.	3072	03 Years time will be required after availability of land for Decentralized STPs and committed funds for DSTPs and connecting sewer network
3	Cost of 56 Nos. Decentralized STPs having treatment capacity of about 92 MGD + 32 MGD = 124 MGD @ Rs 9 Crore per MGD and cost of land about Rs. 300 Crores	1416	24 to 36 months after allotment of land and availability of funds
4	Cost of upgradation of existing STPs on BOD/SS (10/10)@Rs 7.82 Crore per MGD.	2721	03 to 04 years from the date of availability of funds
	Total	8, 209 Crores	

Note :

- Approximately Rs. 8209 Crore fund allocation is required to complete the assigned task whereas, the present yearly budget allocation for the sewerage sector is about 1000 Crore, therefore it is not possible to complete all these works with the present fund allocation of budget by the Govt.
- Moreover land is also required for construction of STPs/ SPSs and the scheme for the sewerage system can only be taken up after finalization of the location of the STPs/ SPSs.
- Allotment of land is to be made by the concerned land owning agency i.e. Revenue Department of GNCT Delhi and DDA.
- Any delay in the allotment process of land is beyond control of DJB.

It will take minimum 03 to 04 years after the firm commitment of funds and allocation of land to construct the new Decentralized STPs and its connected sewerage network.

S.No.	Name of CETP	Indl. Areas Connected with CETP	Capacity (in MLD)	Flow (in MLD) (Average Flow)	Date of Sampling	Influent Quality at Inlet (in mg/l)	Effluent Quality at Outlet(in mg/l)	Brief of Analysis Report (For Treated Effluent)
1	Jhilmil CETP	Jhilmil and Friends Colony Indl. Areas	16.8	3.41	16.06.2020	pH - 7.6 TSS - 200 BOD - 106 COD - 320 TDS - 1070 Sulphide as S- 10.8	pH - 7.8 TSS - 34 BOD - 22 COD - 78 TDS - 1510 Sulphide as S- 7.2	Not meeting the Prescribed Standard in respect of Sulphide as S (7.2 mg/l against Prescribed Standard of 2 mg/l) and TDS (23680 mg/l against Prescribed Standard of 2100 mg/l).
2	Badli CETP	Badli Industrial Estate	12	1.000	18.06.2020	pH - 7.1 TSS - 212 BOD - 110 COD - 338 TDS - 1010	pH - 7.7 TSS - 50 BOD - 30 COD - 108 TDS - 882	Meeting the Prescribed Standards.
3	Mayapuri CETP	Mayapuri Indl. Area	12	3.4	23.06.2020	pH - 7.8 TSS - 204 BOD - 112 COD - 340 TDS - 1300	pH - 7.6 TSS - 42 BOD - 28 COD - 88 TDS - 1270	Meeting the Prescribed Standards.
4	Mangolpuri CETP	Mangolpuri Indl. Area	2.4	2	22.06.2020	pH - 7.1 TSS - 292 BOD - 148 COD - 450 TDS - 420	pH - 7.3 TSS - 112 BOD - 62 COD - 196 TDS - 2700	Not meeting the Prescribed Standards in respect of BOD (62 mg/l against Prescribed Standard of 30 mg/l), TSS (112 mg/l against Prescribed Standard of 100 mg/l), TDS (2700 mg/l against Prescribed Standard of 2100 mg/l).
5	Wazirpur CETP	Wazirpur Indl. Area	24	2.200	17.06.2020	pH - 5.3 TSS - 292 BOD - 150 COD - 452 TDS - 1520	pH - 7.4 TSS - 104 BOD - 60 COD - 182 TDS - 1780	Not meeting the Prescribed Standards in respect of BOD (60 mg/l against Prescribed Standard of 30 mg/l) and TSS (104 mg/l against Prescribed Standard of 100 mg/l).
6	Nangloi CETP	Nangloi & Udyog Nagar Indl. Areas	12	2.12	22.06.2020	pH - 7.9 TSS - 372 BOD - 198 COD - 600 TDS - 2040 Chlorides - 1925 Sulphide as S- 6.0	pH - 6.8 TSS - 192 BOD - 98 COD - 302 TDS - 2820 Chlorides - 1205 Sulphide as S- 5.2	Not meeting the Prescribed Standards in respect of BOD (98 mg/l against Prescribed Standard of 30 mg/l), COD (302 mg/l against Prescribed Standard of 250 mg/l), TSS (192 mg/l against Prescribed Standard of 100 mg/l), TDS (2820 mg/l against Prescribed Standard of 2100 mg/l), Chlorides (1205 mg/l against Prescribed Standard of 1000 mg/l) and Sulphide as S (5.2 mg/l against Prescribed Standard of 2 mg/l).
7	SMA CETP	SMA, Rajasthani Udyog Nagar and SSI Industrial Areas	12	1.65	17.06.2020	pH - 6.5 TSS - 484 BOD - 250 COD - 752 TDS - 2010	pH - 8.1 TSS - 38 BOD - 24 COD - 80 TDS - 1590	Meeting the Prescribed Standards.

S.No.	Name of CETP	Indl. Areas Connected with CETP	Capacity (in MLD)	Flow (in MLD) (Average Flow)	Date of Sampling	Influent Quality at Inlet (in mg/l)	Effluent Quality at Outlet (in mg/l)	Brief of Analysis Report (For Treated Effluent)
8	Okhla CETP	Okhla Indl. Area	24	1.864	19.06.2020	pH - 8.2 TSS - 269 BOD - 138 COD - 420 TDS - 1110	pH - 7.7 TSS - 64 BOD - 38 COD - 120 TDS - 1140	Not meeting the Prescribed Standards in respect of BOD (38 mg/l against Prescribed Standard of 30 mg/l).
9	Narela CETP	Narela Indl. Area	22.5	9.35	24.06.2020	pH - 7.3 TSS - 280 BOD - 142 COD - 428 TDS - 2120 Sulphide as S - 5.0	pH - 7.8 TSS - 180 BOD - 92 COD - 280 TDS - 2450 Sulphide as S - 3.2	Not meeting the Prescribed Standards in respect of BOD (92 mg/l against Prescribed Standard of 30 mg/l), COD (280 mg/l against Prescribed Standard of 250 mg/l), TSS (180 mg/l against Prescribed Standard of 100 mg/l), TDS (2450 mg/l against Prescribed Standard of 2100 mg/l) and Sulphide as S (3.2 mg/l against Prescribed Standard of 2 mg/l).
10	Bawana CETP	Bawana Indl. Area	35	13.0	24.06.2020	pH - 6.9 TSS - 220 BOD - 120 COD - 368 TDS - 3290 Sulphide as S - 4.8 Chlorides - 2165	pH - 7.4 TSS - 42 BOD - 32 COD - 104 TDS - 2700 Sulphide as S - 4.0 Chlorides - 1390	Not meeting the Prescribed Standards in respect of BOD (32 mg/l against Prescribed Standard of 30 mg/l), TDS (2700 mg/l against Prescribed Standard of 2100 mg/l), Chlorides (1390 mg/l against Prescribed Standard of 1000 mg/l) and Sulphide as S (4.0 mg/l against Prescribed Standard of 2 mg/l).
11	Naraina CETP	Naraina Indl. Area	21.6	5.21	23.06.2020	pH - 7.0 TSS - 348 BOD - 182 COD - 550 TDS - 691	pH - 7.2 TSS - 38 BOD - 24 COD - 78 TDS - 633	Meeting the Prescribed Standards.
12	GTK CETP	GTK Road Indl. Area	6	0.83	23.06.2020	pH - 7.4 TSS - 512 BOD - 268 COD - 810 TDS - 1300	pH - 7.6 TSS - 48 BOD - 28 COD - 96 TDS - 1380	Meeting the Prescribed Standards.
13	Lawrence Road CETP	Lawrence Road Indl. Area	12	0.6	18.06.2020	pH - 7.5 TSS - 256 BOD - 132 COD - 400 TDS - 2010 Chlorides - 920 Sulphide as S - 2.8	pH - 7.8 TSS - 56 BOD - 30 COD - 110 TDS - 2050 Chlorides - 1015 Sulphide as S - 5.2	Not meeting the Prescribed Standards in respect of Sulphide as S (5.2 mg/l against Prescribed Standard of 2 mg/l) and Chlorides (1015 mg/l against Prescribed Standard of 1000 mg/l).
Total			212.3	46.634				

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	280	64	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) 30% (in 101 Wards)	80- 100% (in Model Wards)	100% (in 3 Model Wards) 70% (in 6 Wards) 25% (in 55 Wards)	100% (All Circles)	90% (Civil Area) 60% (Army Area)	NA
5	Processing of Waste in TPD (in %)	2300 (51%)	1850 (51%)	1275 (47%)	280 (100%)	47 (73%)	5752 (52%)
6	Disposal of MSW in Landfill Sites	2200 (49%)	1750 (49%)	1425 (53%)	Nil	17 (27%)	5392 (48 %)

(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 GhondaGujran. 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 GhondaGujran. After commissioning of these 2 proposed WTEs capacity of WTE Plants will increase from 5250 TPD to about 9000 TPD by June,2022.

Operational Waste to Energy Plants in Delhi

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

(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	5752	5392	(i) 2000 TPD WTE Plant at Tehkhand by 31.12.2021 (SDMC). (ii) 2000 TPD Integrated Municipal Waste Processing Facility at GhondaGujran by 30.06.2022 (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	June , 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:

NORTH DMC

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

- 2 Plants commissioned at Bhorgarh Nursery and Rajendra Nagar Nursery.
- 4 Plants (at Sector 11 Rohini, Haiderpur Water Treatment Plant ,Maurya Enclave at Pitampura and one at some other location) to be commissioned by 30.09.2020.

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

- 2 Plants commissioned at RoshanaraBagh and MVID Hospital.
- 2 Plants to be commissioned by 30.09.2020.

(iii) 200 TPD Bio-Methanisation Plant (Based on Cow Dung) at Bhalswa Dairy Colony:

- Work awarded,to be commissioned by 31.12.2020.

EAST DMC

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

- 7 Plants commissioned
- 3 Plants to be commissioned by Sept, 2020.

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

- One Plant at Geeta Colony commissiond.
- Another Plant at Shastri Park to be commissioned by Sept, 2020.

(iii) 100 TPD Bio-Methanisation Plant at Ghazipur:

- Clearance from PESO is awaited. The plant is excepted to be commissioned by 31.10.2020.

SOUTH DMC

(i) Four Compost Plants of 1 TPD each

- Two plants commissioned.
- Two plants likely to be commissioned by Sept,2020 .

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

- Two plants commissioned.
- Two plants likely to be commissioned by Sept,2020

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 is legacy waste of 28 Million Tons. Brief about these dumpsites is given in following Table :

Brief of Landfill / Dump Sites in NCT of Delhi

S. No.	Name of Landfill / Dump Site	Location	Area (in Acres)	Concerned Local Body	Height of Dump Site (Appx.) (in Meters)	Legacy Waste (in Million Tons)
1	Bhalaswa	North Delhi	36	North DMC	62	8
2	Ghazipur	East Delhi	70	EDMC	65	14
3	Okhla	South East Delhi	46	SDMC	40	6
	Total		152			28

Hon'ble National Green Tribunal vide order dated 17.07.2019 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." 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 per the said order legacy waste dumpsites is to be cleared within one year and substantial progress must be made and demonstrated within six months.

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. Chief Secretary in the meeting held on 20.12.2019 has decided that DCB has to deposit Rs. 5 Crore.

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 trommels for 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 & 19 Trommels have already been installed and about 3 Lakh MT of legacy waste has been processed. 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

S. No.	Name of Local Body (Dumpsite)	No. of Trommels Installed	No. of Trommels Operational	No. of Trommels Proposed to be Installed	Total Processed Quantity of Legacy Waste (MT)	% of Inert Material by Weight
1	SDMC (Okhla Dumpsite)	3	3	2 (by July, 2020) + Additional 3 / 4 later on	1,00,000	60 -70%
2	EDMC (Ghazipur Dumpsite)	6	6	6 (by July, 2020)	1,30,000	60-70%
3	North DMC (Bhalaswa Dumpsite)	17	14	3 (Already installed will be started shortly)	5,35,384	60-70%
	Total	26	23	15	7,65,384 MT	



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WATER QUALITY STATUS OF RIVER YAMUNA

REPORT NO: DPCC/W/Y/20-21/123-129 / 2232

DATE OF SAMPLING: 02/06/2020

8/7/2020

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	8.1	10	2.8	9.0	21×10^1
2	Surghat (Down stream of Wazirabad Barrage)	8.0	18	4	7.3	26×10^2
3	Khajori Paltoon Pool (Downstream Najafgarh Drain)	7.9	110	38	Nil	40×10^5
4	Kudesia Ghat	8.0	82	32	Nil	50×10^5
5	ITO Bridge	8.1	76	28	2.0	50×10^5
6	Nizamudin Bridge	7.9	68	22	1.6	30×10^5
7	Agra Canal (Okhla)	8.2	98	32	Nil	33×10^4
8	After meeting Shahdara Drain (Downstream Okhla Barrage)	8.7	78	28	1.3	70×10^5
9	Agra Canal (Jaitpur)	7.3	88	30	Nil	60×10^5

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 visit us at : <http://dpcc.delhigovt.nic.in>
WATER QUALITY STATUS OF DRAIN

REPORT NO: DPCC/W/O/20-21/289-312/2233

Date of Sampling- 02/05/2020

8/7/2020

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	7.8	164	268	82
2	Metcalf House Drain	NO FLOW	NO FLOW	NO FLOW	NO FLOW
3	Khyber Pass Drain	8.4	32	80	24
4	Sweeper Colony Drain	8.4	110	210	68
5	Magazine Road Drain	7.9	60	140	40
6	ISBT Drain	8.2	116	200	72
7	Tonga Stand Drain	8.0	42	88	28
8	Moat Drain	NO FLOW	NO FLOW	NO FLOW	NO FLOW
9	Civil Mill Drain	8.1	248	400	130
10	Power House Drain	8.1	112	194	62
11	Sen Nursing Home Drain	7.9	126	208	68
12	Drain No. 12A	NO FLOW	NO FLOW	NO FLOW	NO FLOW
13	Drain No. 14	8.0	60	120	38
14	Barapulla Drain	7.8	78	156	48
15	Maharani Bagh Drain	7.9	166	284	88
16	Kalkaji Drain	8.0	136	316	78
17	Sarita Vihar Drain (Mathura Road)	8.0	96	180	58
18	Tehkhand Drain	8.1	76	148	48
19	Tuglakabad Drain	8.1	108	212	68
20	Drain Near LPG Bottling Plant	NO FLOW	NO FLOW	NO FLOW	NO FLOW
21	Drain Near Sarita Vihar Bridge	8.0	116	230	72
22	Shahdara Drain	7.2	320	542	180
23	Sahibabad Drain	8.2	284	488	160
24	Indrapuri Drain	8.2	446	680	228

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ANALYSIS REPORT OF GROUND WATER NEARBY GAZIPUR LAND FILL SITE

Report No.: DPCC/WLF/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 CaCO ₃ (mg/l)	Ca as Ca (mg/l)	SO ₄ (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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026/10MC-II
27/07/2020



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ANALYSIS REPORT OF GROUND WATER NEARBY OKHLA LAND FILL SITE

Report No.: DPCC/WLF/20-21/ 69-12/2327

Date of monitoring: - 30/06/2020

20/7/2020

S. No	Sampling Location	pH	TDS (mg/l)	Cl (mg/l)	Hardness as CaCO ₃ (mg/l)	Ca as Ca (mg/l)	SO ₄ (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 Hospital Okhla	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. Singh Camp Colony, Near Shiv Mandir	6.7	2050	925	1010	250	121.1	NIL	0.95	0.26	1.08	0.08	ND	ND	ND	ND	ND

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ANALYSIS REPORT OF GROUND WATER NEARBY BHALSWA LAND FILL SITE

Report No.: DPCC/WLF/20-21/05-8/2326
Date of monitoring: -01/07/2020

27/7/2020

S. No	Sampling Location	pH	TDS (mg/l)	Cl (mg/l)	Hardness as CaCO ₃ (mg/l)	Ca as Ca (mg/l)	SO ₄ (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	6.5	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	0.66	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.	Bhalswa Janta 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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Report No.: DPCC/WLF/20-21/ 13-17/ 2328

Date of monitoring: -01/07/2020

ANALYSIS REPORT OF GROUND WATER NEARBY BAWANA LANDFILL SITE

27/7/2020

S. No	Sampling Location	pH	TDS (mg/l)	Cl (mg/l)	Hardness as CaCO ₃ (mg/l)	Ca as Ca (mg/l)	SO ₄ (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.	Sonol 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	1385	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	1.88	ND

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Brief Status of 10 Projects taken up / to be taken up by DDA for Development of Yamuna River Front.
(Restoration & Rejuvenation of River Yamuna Flood Plains Status- June , 2020)

Sr 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 stay is lifted by the Hon'ble Courts 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 drawings have been prepared, estimate framed & are under scrutiny. Major part of the remaining area was under stay by Hon'ble Supreme court till Dec'19 which has been expired.
2.	Geeta Colony Bridge to ITO Barrage (Western Bank) Eco-Tourism Bundh	30 Hectares	31.07. 2022	1. The land stands temporarily allotted to RajGhat 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. Suggestions/ recommendations on the above report were sent to Engineer Department by Wetland Expert. Matter is being taken up for further necessary action.
3.	Old Railway Bridge to ITO Barrage (Eastern Bank) - Asita East	PART A: 90 Hectares of land is within DDA's jurisdiction PART B: 107 Hectare of land is with UP irrigation Department	PART A: 15.09.2020 * Subject to normalization of existing situation and availability of labour and materials.	PART A: Work tendered and awarded on 25.10.19. - 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% work completed, flexible vehicular approach road 540 meter long, 6 meter R.O.W., water body of 15,000 cubic meter capacity & plantation in approx. 35 Ha. Area has been completed. Footpaths/ natural trails etc. are in progress 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 but the nod of the concerned ministry is awaited for release of fund.

4.	NH24 to DND Flyway (Western Bank)	PART A: Approx. 100 Hectares (Incl. 25 Ha Art of Living area) Part B: Rest of the land is presently occupied by construction activities of DMRC, PWD and other agencies.	PART A: Sept.'2020 * Subject to normalization of existing situation and availability of labour and materials. 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 05.11.19. - 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. 40 % progress has been achieved on a/c of digging of 1,02,000 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.
5.	DND to proposed Kalindi By-pass (Western Bank) – Khijrabad	115 Hectares Entrusted to CEMDE	31.10.2020 (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. 15% progress has been achieved by laying RCC pipes across the road to divert stagnated water to wetlands. Due to ban on the construction activity, movements of vehicles and Lockdown due to COVID-19, there has been some delay in procuring the materials for constructed wetland systems. Once the material is available, 3-5 in-situ constructed wetland system will be made for treatment of sewage water that enter into wetlands and finally into river Yamuna.
6.	NH-24 to DND Flyway (Eastern Bank) Part Area- I	PART A: 235 Hectares (With DDA- with/without litigation) and 397.75 Hectares (235 Hectares with DDA+ 162.75 Hectares with UP) PART B: 162.75 Hectares (under UP Irrigation Dept.)	PART A: Mid of June 2021** ** Subject to the availability of land if the stays by the Hon'ble Courts is vacated and the land stands vacated for development after Dec'19.	PART A: 28 hectares approx. of land has been allotted for compensatory plantation - The drawings for the purpose of estimates have been released for further necessary action(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	30.09.2020 * Subject to normalization of existing situation and availability of labour and materials.	- Water hyacinths from both the wetlands have already been removed. - The construction was delayed due to imposition of construction ban and due to COVID-19 w.e.f 25/03/2020 to 31/05/2020 - The work near Hindon cut canal 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 GarhiMandu Village & Usmanpur Village	236.5 Hectares	31.07.2021 *Subject to normalization of existing situation and availability of labour and materials.	- DDA has already planted trees in 25 Ha. of area near Signature Bridge, and two wetlands have been cleared of hyacinths. - The design development of the entire has been completed and landscape drawings have been issued. - Preliminary Estimate has been prepared and is under scrutiny.
9.	Wazirabad to Old Railway Bridge (Western Bank) QUDSIA GHAT	66 Hectares 16 Ha. total area Phase I: 5 Ha.	Phase I: By 30.06.2021 *Subject to normalization of existing situation and availability of labour and materials.	- Total land is 66 Ha. Out of which 16 Ha land has been earmarked as Qudsia Ghat. - Drawings for Qudsia Ghat having an area 16.4 Ha. has been issued and the Preliminary estimate has been submitted and is under scrutiny. - Preparation of drawings for area of Sur Ghat (13.6 Ha) is being taken up and which will be submitted for estimation purpose by next month. - Tender process will be completed on 15.9.2020 and work will be awarded by 30.09.2020 in regard to Qudsia Ghat.
10.	ITO to NH-24 (Eastern Bank)- Area south of Commonwealth Games Village Area	90 Hectares	31.07.2021 *Subject to normalization of existing situation and availability of labour and materials.	Preliminary estimates for the civil and horticulture works of the area under scrutiny.