

Mi/24/2020-HR NMCG
Government of India
Ministry of Jal Shakti
Department of Water Resources, RD&GR
(National Mission for Clean Ganga)

1st Floor, Maj. Dhyanchand National Stadium
Near India Gate, New Delhi — 110001
Dated: 7 March, 2023

Sub: Minutes of 47th meeting of the Executive Committee (EC) of National Mission for Clean Ganga held on 22nd February 2023 through hybrid mode.

Please find enclosed the minutes of 47th meeting of the Executive Committee (EC) of National Mission for Clean Ganga held on 22nd February 2023 at 11.00 AM through hybrid mode for information and necessary action.


(Kanchan Bala Hamza)
Deputy Secretary

1. Joint Secretary (PFC-I/PF-States), Department of Expenditure, Ministry of Finance, North Block, New Delhi-1 10001
2. JS & FA, DoWR, RD & GR, MOJS, Shram Shakti Bhawan, New Delhi-110001.
3. Shri Avinash Mishra, Adviser (WR&LR), NITI Aayog, Yojana Bhawan, Sansad Marg, New Delhi-110001
4. Secretary, Department of Drinking Water & Sanitation, Uttarakhand, 43/6 Mata Mandir Road, Dharmapur, Dehradun, Uttarkhand-248001.
5. Principal Secretary (LID), Urban Development Department (UDI)), 834, Bapu Bhawan, Lucknow- 226001.
6. Principal Secretary (UD&Housing), Urban Development and Housing Department (UDHD), Vikas Bhawan, Bailey Road, Patna, Bihar-800015.
7. Principal Secretary (UI)), Urban Development Department (UDD), 4th Floor, Project Building, Dhurwa, Ranchi- 834004.
8. Principal Secretary (UD), Department of Municipal Affairs (DMA), Nagarayan, Sector-I, Block-DF-8, Bidhan Nagar, Kolkata-700064.
9. All Executive Directors of NMCG

Copy to:

1. PS to Hon'ble Minister for Jal Shakti
2. PPS to Secretary (WR, RD & GR)
3. Project Director, SPMG Group 1 17, Indira Nagar, Dehradun-248001, Uttarakhand.
4. Project Director, SPMG, Plot No. 18, Sector-7, Gomti Nagar, Lucknow-226010.
5. Project Director, SPMG Group (Secretary Urban Development), Government of Bihar, Vikash Bhawan, Bailey Road, Patna, Bihar — 800001.
6. Project Director, SPMG Group Urban Development & Housing Department, Room no. 403, 4th Floor, Project Bhawan, Dhurwa, Ranchi, Jharkhand-834004.
7. Project Director, SPMG Group Unnayan Bhawan', 3rd Floor, DJ-I I, Sector-II, Block-A, KMDA, Kolkata- 700091.
8. PS to DG, NMCG- for his information

Minutes of 47th meeting of the Executive Committee (EC) of National Mission for Clean Ganga (NMCG) held on 22nd February 2023 through hybrid mode

The 47th meeting of the Executive Committee (EC) of National Mission for Clean Ganga (NMCG) was held on 22nd February 2023 at 11:00 AM through hybrid mode under the Chairmanship of Director General (DG) of NMCG.

Executive Director (Admin.), NMCG welcomed the Director General, NMCG, members of the Executive Committee and all officials present in the meeting.

Thereafter, the agenda items were taken up for discussions.

Agenda Item No. 46.3: Detailed Project Report for Pollution Abatement Sewerage Project (Interception and Diversion with STP) at Chakdaha Municipal Town in West Bengal State, Under Namami Gange Program.

- **DPR appraised by IIT Roorkee**
- Financial Effect: Central Share as 100% of project cost
- Project Status: Design, Build, Operate and Transfer (DBOT)
- Completion period – 24 Months
- **Major components: -**
 - ❖ Nala Tapping – 30 nos.
 - ❖ Diversion sewers, 200 to 800 mm diameter- 5050 m
 - ❖ Sewage pumping stations- 4 nos.
 - ❖ MPS- 1 no.
 - ❖ Rising mains- 4400 m
 - ❖ STP- 1 no. 13 MLD
 - ❖ De-centralized STP – 1 no. 300 KLD
 - ❖ O&M for 15 years

In absence of sewerage in Chakdaha Municipality, the whole of sewerage of the town is partly discharged through 30 outfalls, in three Khals namely Laxmijhola, Ukherdaha and Herer Khal. All three Khals are connected with another canal named Buriganga, which finally meets river Ganga. The proposed DPR envisages interception and diversion of 30 outfalls in Buriganga Khal and ultimately in River Ganga. The flow from these drains have to divert through carrier sewer lines to the proposed Sewage Treatment Plants (STPs) for treatment.

IIT-Roorkee, TPA agency has done the joint inspection with KMDA/SMPG officials and accordingly appraised the DPR technically and financially and recommended the cost of Rs. 123.02 Cr. including 15 years O&M.

The capacity of the STP was increased from 13 MLD to 15 MLD considering the flow in the drains. The EC suggested that the capital cost of the proposed STP may be increased by Rs.3.00 crore to accommodate increased capacity of 15 MLD STP. The

recommended cost for O&M of Cess Pool vehicle needs to be deducted from the proposal, as it would be borne by the State.

After detailed discussions, Executive Committee (EC) decided to approve the proposal for according administrative approval and expenditure sanction (AA&ES) for Detailed Project Report for Pollution Abatement Sewerage Project (Interception and Diversion with STP) at Chakdaha Municipal Town in West Bengal State under Namami Gange Program for an estimated amount of Rs 121.66 Cr. (including cost of O & M for 15 years – Rs 55.74 Cr.) under DBOT mode.

While the costs include estimated O&M costs for 15 years, the O&M arrangements will be reviewed after 7 years based on the measures of compliance by State Government/SMCG of various general & specific conditions stipulated in AA & ES including insurance of assets created, levy of user charges etc.

It was also decided that the observations of NMCG, TPA would be complied with by the State Government/ Executing Agency at the time of finalization of bid document/ at the time of execution and during O&M. The project has been considered to be funded under National Ganga Plan (NGP)- Component Non-EAP Component of Namami Gange Program. The State Government would ensure the availability of land in its possession before awarding the works. The State needs to submit a revised DPR, before bidding, incorporating Third Party Agency's recommendations, if applicable.

NMCG logo and name to be inscribed at strategic locations.

If required, Executing Agency shall obtain prior approval of NMCG before making any changes in the sanctioned scope.

EC has clarified that cost escalation due to change of land and delay in project shall be borne by the State and not by NMCG. Executing agency/SPMG must complete the work within stipulated time. EC also directed the Executing agency/SPMG that the tender works must be awarded within six months from the date of issue of AA&ES.

SPMG confirmed that after implementing of this project, no untreated drains will fall into the river Ganga from the municipality etc.

In addition, EC decided that installation of trash arresting rack and its regular O&M at the mouth of all drains and adequate provision for handling septage in the STP facility would also be made part of project proposal for implementation.

The utility shifting charges were removed by TPA. However, State has requested that for speedy execution of the project, utility shifting charges may be considered. EC suggested utility shifting charges will be payable as per actual basis.

EC desired that state Government should pari-pasu implement the project for reuse of treated wastewater for agriculture & industrial purposes. For this purpose, State

government would adopt a policy document and make serious endeavors for reuse of treated wastewater accordingly.

Agenda Item No. 46.17: DPR of Additional Decentralized STP to cater Abatement of river pollution of Kanh, Indore in Madhya Pradesh State, Under Namami Gange Program.

- **DPR appraised by Jamia-Milia Islamia University, New Delhi**
 - ❖ Financial Effect: Central Share as 100% of project cost
 - ❖ Design, Build, Operate and Transfer (DBOT)
 - ❖ Completion period – 24 Months

- **Major components: -**
 - ❖ Interception and Diversion of the one drain (i.e., Kanadiya Nala) - Length - 6.5 km
 - ❖ Diversion of excess flow from sewer line of 1600 mm dia. to proposed 35 MLD - STP near Laxmibai Statue.
 - ❖ Diversion of existing sewer line of 1800 mm dia. to proposed 120 MLD
 - ❖ Construction of three Main Pumping Stations (MPSs)
 - ❖ Construction of three STPs - 120 MLD, 40 MLD & 35 MLD
 - ❖ Online monitoring system at each location
 - ❖ Treated water reuse network at 120 MLD STP & 35 MLD STP.
 - ❖ Operation & Maintenance for 15 Years

After detailed discussions, Executive Committee (EC) decided to approve the proposal for according administrative approval and expenditure sanction (AA&ES) for DPR of Additional Decentralized STP to cater Abatement of river pollution of Kanh, Indore in Madhya Pradesh State, under Namami Gange Program for an estimated amount of Rs 511.15 Cr. (including cost of O & M for 15 years – Rs 190.02 Cr.) under DBOT mode.

While the costs include estimated O&M costs for 15 years, the O&M arrangements will be reviewed after 7 years based on the measures of compliance by State Government/SMCG of various general & specific conditions stipulated in AA & ES including insurance of assets created, levy of user charges etc.

It was also decided that the observations of NMCG, TPA would be complied with by the State Government/ Executing Agency at the time of finalization of bid document/ at the time of execution and during O&M. The project has been considered to be funded under National Ganga Plan (NGP)-Component Non-EAP Component of Namami Gange Program. The State Government must ensure the availability of land in its possession before awarding the works. The State needs to submit a revised DPR, before bidding, incorporating Third Party Agency's recommendations. NMCG logo and name to be inscribed at strategic locations.

If required, Executing Agency shall obtain prior approval of NMCG before making any changes in the sanctioned scope.

EC has clarified that cost escalation due to change of land and delay in project shall be borne by the State and not by NMCG. Executing agency/UD&MA must complete the work within stipulated time. EC also directed the Executing agency/ UD&MA that the tender works must be awarded within six months from the date of issue of AA&ES.

EC has directed that the scope of upgradation/rehabilitation must be clearly mentioned in tender documents for avoiding the delay in tendering process.

Executing agency/UD&MA confirmed that after implementation of this project, no untreated drains will fall into the river Kanh & Saraswati from the municipality etc.

In addition, EC decided that installation of trash arresting rack and its regular O&M at the mouth of all drains and adequate provision for handling septage in the STP facility would also be made part of project proposal for implementation.

EC desired that state Government would pari-pasu implement the project for reuse of treated wastewater for agriculture & industrial purpose. For this purpose, State government would adopt a policy document and make serious endeavors for reuse of treated wastewater accordingly.

EC also decided that several projects are being taken up by NMCG in MP State, however there is not one common agency like SPMG/Sate Ganga Council in Madhya Pradesh. State must establish SPMG/SGC at State level similar as required under NMCG authority notification of 2016. Admin wing of NMCG shall take up the matter with State in this regard.

Agenda Item No. 46.18: Detailed Project Report (DPR) for Interception & Diversion (I&D) with STP works at Ujjain town, Madhya Pradesh State, Under Namami Gange Program.

- **DPR appraised by Jamia-Milia Islamia University, New Delhi**
 - ❖ Financial Effect: Central Share as 100% of project cost
 - ❖ Design, Build, Operate and Transfer (DBOT)
 - ❖ Completion period – 24 Months
- **Major components: -**
 - ❖ Construction of SPS – 2 nos.
 - ❖ Provision of SPM of 600 mm diameter and 920m length
 - ❖ Construction of STP of 22 MLD capacity
 - ❖ Provision of SPM of 200 mm diameter and 500m length
 - ❖ Construction of ETP of 2.38 MLD capacity
- **Operation & Maintenance for 15 Years**

After detailed discussions, Executive Committee (EC) deferred the proposal and instructed that within the next 2 weeks, an NMCG team shall visit the project site and examine the interception of Bhairavgarh nala where 2.38 MLD ETP has been

proposed. Based on the recommendations of team, proposal will be considered in next EC meeting. However, EC accorded in principle approval to construction of STP at Piliakhal

Agenda Item No. 46.19: Rejuvenation of river Kali East by development of in-situ Constructed Wetland System at eight locations in District Muzaffarnagar, Meerut, Hapur and Bulandshahr (UP) under Namami Gange Program.

- DPR appraised and recommended by IIT-Roorkee in consultation with professor Dr. C. R. Babu.
- Project Cost: ₹ 95.47 Crore including O&M for 05 years (Capital Cost - ₹ 88.30 Crore ; O&M Cost - ₹ 7.17 Crore)
- Major components: -
 - i. Construction of Wetland D/S of Khatauli Meerapur Bridge in Distt-Muzaffarnagar
 - ii. Construction of Wetland D/S of Near Vill-Jalalpur Distt-Meerut
 - iii. Construction of Wetland D/S of kadrabad drain Kithore Hapur Road Bridge Distt-Hapur
 - iv. Construction of Wetland D/S of Gulawathi Saidpur Road Bridge Distt-Bulandshahr
 - v. Construction of Wetland Vill-Mohankutti Distt-Bulandshahr
 - vi. Construction of Wetland Vill-Kiryawali Distt-Bulandshahr
 - vii. Construction of Wetland Vill-Surjawali Distt-Bulandshahr
- Operation & Maintenance for 05 years
- Financial Effect: Central Share as 100% of project cost.
- Project Status: DBOT mode
- Completion period – 12 Months including Bidding Period

The proposal was placed before Executive Committee (EC) for according the approval to proposed Rejuvenation of river Kali East by development of in-situ Constructed Wetland System at eight locations in District Muzaffarnagar, Meerut, Hapur and Bulandshahr (UP) under Namami Gange Program at an estimated cost of ₹ 95.47 Cr.. The project shall help in abating the pollution in River Kali. It was informed that the project has been earlier successfully implemented in NOIDA with good result.

After detailed discussions, Executive Committee (EC) decided to approve the proposal for according administrative approval and expenditure sanction (AA&ES) for Rejuvenation of river Kali East by development of in-situ Constructed Wetland System at eight locations in District Muzaffarnagar, Meerut, Hapur and Bulandshahr (UP) under Namami Gange for an estimated amount of ₹ 95.47 Crore (Capital Cost - ₹ 88.30 Crore ; O&M Cost - ₹ 7.17 Crore) under DBOT mode considering GST @18%, under NGP-Non EAP funding, subject to the following conditions:

- i. *Executing Agency shall be SMCG-UP and implementing Agency shall be UPPCL. Further, Prof. C. R. Babu would be the advisor for the Project.*
- ii. *UPPCL shall ensure that proper measures are taken to avoid siltation in the structures to be developed.*

- iii. *UPPCL shall ensure that the average life span of the structures shall be 10 years.*
- iv. *UPPCL shall ensure that during flood in the monsoon season, the structure must not get washed away.*

Agenda Item No. 46.21: Detailed Project Report for Development of Ghat at Nageshwar Dham Ashram, Fatehpur, Uttar Pradesh

- DPR appraised by NIT-Allahabad
- Project Cost- **Rs. 2.84 Crores** (including 6 months O&M)
- Completion time- 12 months (including bidding and awarding of project)
- Financial Effect- 100% central funding under Clean Ganga Fund (CGF) head of NMCG
- Executing Agency- Uttar Pradesh Irrigation Department
- Land to be provided by State Government

Based upon the discussions on the above, the proposal was recommended by Executive Committee of NMCG for according Administrative Approval & Expenditure Sanction (AA&ES) by the competent authority at an estimated cost of Rs 2.84Cr. (including 6 months O&M) along with the compliance and observations of NMCG and TPA to be ensured by the Executing Agency at the time of finalization of Bid Document with the following conditions:

- (i) *EC approved the development of following infrastructure under this proposed project:*
 - a. *Ghat (50m X 45.60 m) and steps towards river(80 steps), a landing of 2.4 m after every 10 steps*
 - b. *Bank protection*
 - c. *Landscaped park with path and seating (50m X 30m with 3m CC interlocking path)*
 - d. *Male, female and 'Divyangjan' toilet block (5.51m X6.20m)with decentralized S.T.P.*
- (ii) *Suitable plantation and landscaping work would be undertaken.*
- (iii) *O&M for 6 months duration is included in the sanctioned project scope. State Government must ensure proper O & M arrangement beyond that.*
- (iv) *The existing trees would be protected if possible.*
- (v) *Post completion of O&M period by executing agency, ULB would put revenue generation mechanism in place for sustaining the O&M activities.*
- (vi) *Issues pertaining to land, consultations with local authorities and observations from the State must be addressed & resolved before tendering with necessary evidence of such consultations.*
- (vii) *SMCG Uttar Pradesh is the State Nodal Monitoring Agency for the project.*
- (viii) *Before issuance of Tender drawings, approval from NMCG would be taken. NMCG would revert back its observation within 10 days of receipt of the drawings else submitted drawings shall be deemed approved.*
- (ix) *Executing Agency shall obtain prior approval of NMCG before making any changes in the sanctioned scope.*

- (x) *EC directed that strict compliance with time and cost must be ensured by Executing/Implementing Agency.*

Agenda Item No 47.1: Interception and diversion of balance discharge of 13 drains and augmentation of Salori STP (Sewerage District C), at Praygaraj Under Namami Gange.

- DPR appraised and recommended by MNNIT, Praygaraj.
- Project Cost: ₹ **324.35 Crore** including O&M for 15 years (Capital Cost - ₹ 191.49; O&M Cost - ₹ 132.86 Crore)
- Major components: -
 - i. Construction of Nala Tappings - **13 Nos.**
 - a) Shivkuti Drain-01
 - b) Shivkuti Drain-02
 - c) Shivkuti Drain-03
 - d) Shivkuti Drain-04
 - e) Shivkuti Drain-05
 - f) Shivkuti Drain-06
 - g) Shivkuti Drain-07
 - h) Govindpuri Colony Drain Purani Basti
 - i) Govindpuri Colony Drain-01
 - j) Govindpuri Colony Drain-02
 - k) Govindpuri Colony Drain-03
 - l) Govindpuri Colony Drain-04
 - m) Amitabh Bachhan Culvert/ Salori Drain
 - ii. Gravity Interceptor Sewer– **2160 m**
 - iii. Sewage Pumping Stations (New) - **2 Nos.**
 - iv. Rising Main (DI 300 & **1000 mm**) - **4070 m.** including 350 m through micro tunnelling (1000 mm dia DI) under the bund.
 - v. **Effluent Pumping Station** – 1 No. (43 MLD), including 250 m rising main (DI 1000 m)
 - vi. Gravity effluent pipeline (1400 mm) – 200 m including 100 m micro tunneling
 - vii. STP (43 MLD) for (Mid-Year 2039) along with 20 KLD faecal sludge co-treatment facility.
 - viii. Online Monitoring system for STP
 - ix. DG sets, Transformers, panels, SCADA and associated building, staff quarters (at SPS, MPS and STP).
 - x. Rehabilitation of existing 1000 mm dia Interceptor line - 3300 mtr with Manhole, tapping point at AB culvert & UP raising up to HFL of receiving chamber at Bund of Salori STP.
- Operation & Maintenance for 15 years
- Financial Effect: Central Share as 100% of project cost.
- Project Status: DBOT mode
- Completion period – 20 Months

The proposal was placed before Executive Committee (EC) for according the approval to proposed Interception and diversion of balance discharge of 13 drains and augmentation of Salori STP (sewerage district C), at Prayagraj under Namami Gange at an estimated cost of ₹ 324.35 Crore. The project shall help in abating the pollution in river Ganga at Prayagraj.

State Govt. confirmed that

- i. Land for the project is available at Salori STP complex. Other required land parcels have been identified and the process for their transfer is in progress.*
- ii. The design/ capacity is in consideration of the flow measurements and its projections for 15 years.*

After detailed discussions, Executive Committee (EC) decided to approve the proposal for according administrative approval and expenditure sanction (AA&ES) for Interception and diversion of balance discharge of 13 drains and augmentation of Salori STP (sewerage district C), at Prayagraj Under Namami Gange for an estimated amount of ₹ 324.35 Crores (Capital Cost - ₹ 191.49; O&M Cost - ₹ 132.86 Crore) under DBOT mode including GST @18%, under NGP-Non EAP funding, subject to the following conditions:

- i. The treated effluent from this STP will comply with the discharge standards prescribed by Hon'ble NGT vide April 2019 order.*
- ii. The necessary identified land parcels required for pumping stations and I&D structures must be in possession of Executing Agency (UPJN-Rural) before award of the work.*
- iii. After commissioning of this project, no untreated sewage discharge will flow into River Ganga through Sewerage District D, Prayagraj during the project design period of 15 years.*
- iv. Cost escalation due to delay in land acquisition, change in location; additional scope post EC approval and any other factors attributable to State Government and defects in DPR shall be borne by the State Government and not by NMCG.*
- v. In view of Kumbh Mela 2025, the project would be completed within 20 months (including bidding) and latest by November 2024 in all aspects. Executing agency / SMCG-UP must ensure to get the project completed within stipulated time and accordingly works tender must be awarded within two months from the date of issue of AA&ES.*
- vi. Observations of NMCG, TPA would be complied with by the State Government/ Executing Agency at the time of finalization of bid document/ at the time of execution and during O&M.*
- vii. While the costs include estimated O&M costs for 15 years, the O&M arrangements will be reviewed after 7 years based on the measures of compliance by State Government/SMCG of various general & specific conditions stipulated in AA & ES including insurance of assets created, levy of user charges etc.*
- viii. The treatment of all the smaller drains of < 1 MLD flow emanating from the establishments/ Households along/ within the flood plain of Ganga/ Yamuna/*

Sangam would be addressed by the State Govt. The State Government would also ensure that all the drains are tapped and no untreated sewage is discharged into river Ganga/ Yamuna.

- ix. State Government of Uttar Pradesh / Prayagraj Nagar Nigam would take necessary steps for the realistic measurements of the water produced, water supplied, water billed, additional water generated through private bores etc to arrive at non-revenue water and action plan to reduce the water consumption at par with CPHEEO recommended levels.*
- x. In view of Kumbh Mela 2025 and major sewerage works like sewerage network, sewage treatment plants already completed and/or tied up, State Govt of Uttar Pradesh would ensure Prayagraj is developed as a model city for all cities on pollution abatement front with all the house service connections at Prayagraj to be completed before next Magh Mela – 2024.*

Agenda Item No. 47.2: River Front Development at Atal Ghat, Manjhi, Saran-Bihar

- DPR appraised by NIT- Patna
- Project Cost- **Rs. 9.97 Crores** (including 6 months O&M)
- River Front Development -100 X42 mtrs
- Completion time- 15 months (excluding bidding and awarding of project)
- Financial Effect- 100% central funding under NGP/non-EAP head of NMCG
- Executing Agency- BUIDCo
- Land to be provided by State Government

After detailed discussions, the proposal was recommended by Executive Committee of NMCG for according Administrative Approval & Expenditure Sanction (AA&ES) by the competent authority at an estimated cost of Rs 9.97 Cr. (including 6 months O&M) along with the compliance and observations of NMCG and TPA to be ensured by the Executing Agency at the time of finalization of Bid Document with the following conditions:

- (i) EC approved the development of following infrastructure under this proposed project:
 - a. Ghat (100m X 10m) and steps towards river (32 m)*
 - b. Control room (20 sqm)*
 - c. Changing room (20 sqm)*
 - d. Male, female and 'Divyangjan' toilet block (40 sqm) with decentralized S.T.P.*
 - e. Covered shed for shade- 2 no.s (230 sqm)*
 - f. Gate*
 - g. Landscape Work (195 sqm)**
- (ii) EC directed to use the permeable concrete in the ghat area if found suitable and within the sanctioned cost.*
- (iii) EC directed that the tender for the project must be floated and awarded to the contractor within 45 days from the issue of Administrative Approval & Expenditure Sanction.*

- (iv) *Suitable plantation and landscaping work would be undertaken.*
- (v) *O&M during 6 months is included in the sanctioned project scope. State Government must ensure proper O & M arrangement beyond that.*
- (vi) *Post completion of O&M period by executing agency, ULB should engage revenue generation mechanism in place for sustaining the O&M activities. The State must ensure the proper maintenance of the toilets beyond O&M period.*
- (vii) *Issues pertaining to land, consultations with local authorities and observations from the State would be addressed & resolved before tendering with necessary evidence of such consultations.*
- (viii) *BUIDCo is the State Nodal Monitoring Agency for the project.*
- (ix) *Before issuance of Tender drawings, approval from NMCG would be taken. NMCG would revert back its observation within 10 days of receipt of the drawings else submitted drawings shall be deemed approved.*
- (x) *Executing Agency shall obtain prior approval of NMCG before making any changes in the sanctioned scope.*
- (xi) *EC directed that strict compliance with time and cost must be ensured by Executing/Implementing Agency.*

Agenda Item No. 47.3: “Interception and Diversion (I&D) of drains and Sewage Treatment Plant works for Lakhisarai town in Bihar”

- DPR - Appraised by: IIT-Roorkee
- Project Cost Approved: **Rs 94.12 Crores** including O&M for 15 years and GST
- Land: NOC of the land for STP1 has been obtained and for STP2 NOC is under process & will be obtained prior to bidding
- Pollution Abatement of River Harora, tributary of river Ganga
- Project component:
 - ✓ Development of 2 STPs (STP-1: 10.91 MLD; and STP-2: 10.66 MLD) including necessary ancillary infrastructures, UV disinfection, SCADA and online monitoring system
 - ✓ Development of 2 wetlands for treatment of waste water to a tune of 2.5 MLD for treatment of local waste water (to be handled locally Phytorid), which is not going to any drain and creating local pondage. The cost of such local treatment is included in the cost abstract and O&M.
 - ✓ 3 nos. of nala tapping
 - ✓ Diversion sewers of 2116 m
 - ✓ Effluent channel Disposal of treated effluent through pipeline of 224m
 - ✓ 15 years Operation & Maintenance
 - ✓ Environment plan during construction and operation phase
- Time: 24 Months (including bidding and trial run)
- Financial Effect: 100% Central Sector
- Bidding Process: DBOT Mode
- Effluent Characteristics: As per the latest NGT’s direction on effluent standard

After detailed discussions, EC approved the project at a cost of Rs 94.12 Crore including GST (including cost of O&M for 15 years –Rs 35.19 Cr.) to be implemented in DBOT mode. It was also decided that the tender would be awarded within three months from the date of issue of AA&ES and total time for completion of the project including bidding and trial run will be 24 months.

It was also decided that the observations of NMCG, TPA would be complied with by the State Government/ Executing Agency prior to finalization of bid document/ at the time of execution and also during O & M period.

While the costs include estimated O&M costs for 15 years, the O&M arrangements will be reviewed after 7 years based on the measures of compliance by State Government/SMCG of various general & specific conditions stipulated in AA & ES including insurance of assets created, levy of user charges etc.

SPMG confirmed that after implementing this project, no untreated drains will fall in the river Harohar from the town.

The project involves implementation of I&D and STP works of significantly small capacities (10.91 & 10.66 MLD), therefore the project will be taken up under DBOT mode. During the discussion EC resolved to round off the capacity and accordingly capacity of these 2 STPs has been approved as 11 MLD each.

It was also resolved that a provision of Rs 2.88 Cr. has been kept for developing 2 wetland areas for treatment of local waste water to a capacity of 2.5 MLD which is currently not going to any drain and creating local pondage. Such project will be taken up by State government.

At present the NOC for STP1 land has been received. The remaining NOC for STP2 must be obtained immediately and a copy provided to NMCG before bidding and bids need to be invited on technology-neutral basis.

It was also decided that state government will pari-pasu implement the project for utilization of treated wastewater from the project for irrigation, industrial purpose as per state policy.

EC decided that installation of trash arresting rack and its regular O&M at the mouth of all drains shall be made.

Adequate provision for handling co-treatment of septage/feacal sludge shall be made in the STP facility and shall also be made part of bid document/ project proposal for implementation.

The project has been considered to be funded under National Ganga Plan - Non-EAP component. State must submit a revised DPR, before bidding, based on Third Party Agency's recommendations complete with detailed designs and hydraulic analysis.

It was also directed to install solar power plants in the STP and SPS premises in order to reduce the O&M cost to some extent.

Cost escalation due to change of land, change in location, additional scope post EC approval and any other factors attributable to State Government shall be borne by the State Government.

State Government would ensure the compliance of treated water quality as well as other environmental norms (such as compliance with prescribed noise level etc.) in STP area shall be assessed upfront and suitably addressed during the design stage.

Agenda Item No. 47.4: Agenda: “Pollution Inventorization, Assessment and Surveillance on River Ganga Basin (PIAS)” project executed by CPCB under Namami Gange programme

Proposal of: Central Pollution Control Board (CPCB) (Ministry of Environment, Forest and Climate Change)

Executing Agency: Central Pollution Control Board (CPCB) (Ministry of Environment, Forest and Climate Change)

DPR appraised by: Prof. Anubha Kaushik, Professor, University School of Environment Management, Guru Gobind Singh Indraprastha University, New Delhi

Project Name “Pollution Inventorization, Assessment and Surveillance on River Ganga Basin (PIAS)” project executed by CPCB under Namami Gange programme

Total Proposed Project Cost: Rs 114.42 crores (Rs One Hundred and Fourteen crores and Forty Two Lakhs only) in river Ganga main stem and tributaries and Rs 147.69 crores (Rs One Hundred and Forty Seven crores and Sixty Nine Lakhs) in River Ganga Basin including river Yamuna.

and Revised cost: Rs 113.85 crores (Rs One Hundred and Thirteen crores and Eighty Five Lakhs)

Project implementation duration: 3 years (01.04.2023 to 01.04.2026)

Central Government Share: 100% central assistance

- The project envisages inventorisation, compliance verification and pollution load assessment from point sources such as industries and drains, inventorisation and performance evaluation of STPs and CETPs.
- Central Pollution Control Board (CPCB) made a detailed presentation on the outcome and achievement made under the “Pollution Inventorization, Assessment and Surveillance on Ganga River (PIAS)” and new PIAS proposal before the Executive Committee. The proposal along with its third party appraisal report for sanction of PIAS project under the administrative supervision of NMCG and technical and operational control of CPCB was considered.

- It was mentioned that the regulation and monitoring of various point & non-point sources of pollution is mandate of NMCG as per Authority notification. However, since this activity is vast and resources of NMCG are limited, therefore, NMCG has been partnering with CPCB in these activities.
- **After detailed discussions, EC decided to approve the above proposal as per agenda with cost of Rs 113.85 crores for a period of 3 years (2023-2026) under Head NGP- subhead Industrial Pollution subject to following conditions:**
- It was informed that the proposed activities are beyond the regular mandate of CPCB. Considering the high intensity monitoring and regulatory activities required by NMCG, facilitation of additional resource to CPCB is essential. NMCG is supporting CPCB in the required Ganga related monitoring activities i.e., monitoring of the pollution sources and river water quality under the ongoing sanctioned projects under the Namami Gange programme.
- The term & conditions of the AA&ES issued vide letter no. A-12012/9/2010-NRCD-II dt. 29 March 2011 and NMCG letter F.No. T-17/2017-18/202/NMCG/68 dated 02.11.2017 shall be applicable with suitable amendment arising due to MoWR, RD & GR notification dated 07th October 2016 and additional conditions communicated vide NMCG latest letter F.No. T-17/2017-18/202/NMCG-Part (4)/ dated 17.02.2023 while extending the project.
- The Namami Gange Cell (WQM I & II) created at CPCB, within the provisions of this proposal, and other ongoing projects – Strengthening of Environmental Regulator-CPCB (SER) and Water Quality Monitoring project (EAP) shall be under administrative control of NMCG and technical and operational control of CPCB.
- A completion report shall be submitted to NMCG on the achievement / outcome made during the period from the date of sanction till 31st March, 2023.
- The deliverables and outcomes of the project may be clearly recorded and how it has helped in strengthening the NMCG should be clearly mentioned.
- All the shortcomings or issues faced in PIAS I & II projects must be addressed in this new sanctioned PIAS project.
- The Namami Gange cell (WQM I & II) shall be exclusively used for work related to NMCG and there shall be no overlapping/ duplication of activities under this programme with other programme of CPCB.
- As discussed in previous Review meetings, 30 % of the scientific staff engaged in the schemes viz., PIAS, SER and WQM projects in Namami Gange Cell in CPCB would be permanently stationed at NMCG Office at Delhi under the supervision of Director General, NMCG. This would be further worked out and discussed with CPCB. The stationed officials shall regularly monitor, analyze and update the status of water quality data received from the real time sensors along with the data obtained from the manual water quality data and also try to correlate with the pollution assessment data of GPIs, STPs, CETPs and drains which are being monitored in SER and PIAS projects respectively along with consideration of other factors which may influence the water quality.
- Manpower working under PIAS, SER and WQM project shall work efficiently, ensure better evaluation and faster outcomes within the existing project.
- The cost of the project will be limited to the sanctioned project cost.

- There shall not be any change in scope of approved project/ activities without prior approval of NMCG.
- CPCB would ensure the optimized and uniform cost of components for all the institutes in the TPIs inspection for GPIs inspection and recipient drains.
- The monthly/ quarterly progress report for the previous month/quarter shall be submitted within 15th of next month/ quarter regularly to NMCG. The Physical and financial progress reports should clearly indicate the activities/components (as per the AA&ES) under the project and targets for the quarter and targeted progress achieved along with the component wise financial targets for each quarter and targeted financial progress achieved up to the end of the quarter along with the percent physical and financial progress.
- The deliverables and outcomes of the project in the proper form vis-a-vis the funds sanctioned during the period including their contribution in strengthening towards mandate of NMCG may be clearly brought out in regular reports. Accordingly, the summary of the deliverables and outcomes/achievements should be adequately mentioned in the proposal submitted for seeking extension or fresh assignment limit in order to enable the Competent Authority to take a proper view of the outcomes of the project
- Direction of Hon'ble Minister related to intensive surveillance monitoring of tributaries of Ganga, in particular, Yamuna and Hindon, including sources of its pollution, compliance of industries needs to be carried out on priority in a time bound manner under the scheme. Although, this is primarily the mandate of CPCB, it is being further supplemented by NMCG through the Namami Gange programme. So the monitoring of GPIs, STPs, CETPs and drains may be carried out in the Yamuna basin on priority basis utilizing the existing manpower resources and if required, additional manpower can be pooled by CPCB itself.
- CPCB has been executing this project for past many years. CPCB together with NMCG should analyse the generated data/reports and arrive at protocols and policy interventions such that the outcomes from the project make its impact more effective across the entire river system.
- An oversight mechanism would be put in place to bring in an improvement in implementation of various activities envisaged in the project. The entire progress will be monitored by DG, NMCG/Executive Director (Technical), NMCG to ensure that the positive results or change is visible at the ground level.
- The salary structure of the manpower and related issues such as manpower requirements shall be dealt and finalized separately. A presentation of the manpower audit carried out by ASCI shall be made in NMCG before finalizing the manpower audit report
- The office expenses and workshop and training costs are not considered under the PIAS project as their provisions are already given in SER project.
- An IOT based portal may be developed and all the existing and historical inspections/monitoring reports should be uploaded in the upcoming War Room at NMCG.
- Use of IT and dashboard as well as these skills may ensure that manpower requirements are optimized and leads to saving on the cost of manpower requirements.

- The assignment limit of the three projects under the Namami Gange programme viz. PIAS, SER and WQM to be sanctioned to CPCB annually.
- The report of the polluted stretches would be published by CPCB annually based on the latest data.

a. Summary of the activities, frequency, estimated cost approved is tabulated below:

Sl. No.	Key components - CPCB	Frequency	Estimated Cost		Remarks
			(in Lakhs)		
1	Pollution Inventorization and Assessment			7761.51	
	Annual Updation of Inventory	Yearly	3.00		As proposed
	GPI inspection by TPA & Report Preparation	Yearly	5392.11		As proposed
	Annual Inspection of GPIs – By CPCB	Yearly	192.00		As proposed
	Drain Monitoring by TPA	Monthly	1440.00		As proposed
	Drain Monitoring by CPCB	Half-Yearly	360.00		As proposed
	STP Monitoring by CPCB	Tri-annually	360.00		As proposed
	CETP Monitoring by CPCB	Tri-annually	14.40		As proposed
2	Office expenses			00.00	Removed as provision given in SER project
	Consumables, stationary, other office expenses		00.00		
3	Laboratory charges (as per activity)			1356.00	As proposed
4	Manpower			2267.03	To be finalised separately
5	Workshop and Training			00.00	Removed as provision given in SER project
6	Total Cost			11384.54	Say Rs 113.85 Cr

Agenda Item No. 47.5: Cancellation of AA&ES for the project ‘Establishment of Ganga Monitoring Centres’ under Namami Gange programme

Shri Brijesh Sikka, Senior Consultant, NMCG informed that the project “Establishment of Ganga Monitoring Centres (GMCs)” was sanctioned in August, 2017 under the Namami Gange programme at an estimated cost of Rs.46.69 crore with 3-year project duration.

Thereafter, the process for taking-up the project was started, included obtaining proposals from various national institutes, defining the modality for the study/ investigations on which project parameters are based for initiating the activity of GMC in the form of draft MoU with various identified institutes, receiving proposals for technical and financial moderation, etc. However, despite considerable efforts, the project failed to take off due to various reasons. No expenditure has been incurred on the project so far.

After deliberations & internal meeting chaired by DG, NMCG, it was agreed that the sanctioned project be closed and a new project proposal formulated in consultation with CPCB for involving identified local schools, colleges and other ground level organizations in surveillance/monitoring activities Thus, with the concurrence of Finance Wing and approval of DG, NMCG, the AA&ES for the project has been cancelled and the requisite O.M. issued on 13th January, 2023.

The above was placed for kind information of EC and duly noted.

Agenda No 47.6: Proposal for Survey, Investigation & DPR preparation for rejuvenation & conservation of Shahdara drain with nature-based treatment- Soil Bio-Technology.

The proposal for survey, investigation and DPR preparation for the treatment of Shahdara drain using CAMUS SBT technology was discussed in the EC meeting at an estimated cost of 119.18 lakhs (including 18% GST) for a period of 3 months.

Major Components of the proposal are as follows:

1. Survey and mapping

- **Drone Survey (28 Km x 0.5 Km either side)**
 - The drone survey shall be carried out all along drain with corridor up to 1.0 km with 0.5 km either side with a very high resolution drone camera, and Ground sampling distance (GSD) of minimum 10 cm.
- **Bathymetric Survey**
 - The bathymetry data shall be collected representing the Drain in equal spaced interval using Double frequency Echo Sounder. It also includes the spot sounding/Topographic Spot leveling.

- **Field Survey/ Data Collection (C/S Sections & L-Sections) (Total Station & DGPS)**

- The Topographic survey shall be carried out all along both side of drain with corridor up to 15 meter either side from drain.

2. **Investigations:**

- **Inlet Drain Discharge**

- The flow measurement of drain flow shall be measured all along the drain and various representative locations with flow meters.

- **Water Quality**

- The water quality sampling shall be done at regular interval or inlets and any changes in the visibility and color of the drain. The proper sampling methods shall be required to be used for the samples.

- **Soil/ Sludge Properties**

- The geotechnical investigation for the soil and sludge at regular interval for any change in the topography for the sludge analysis and sludge assessment shall be carried out.

3. **DPR preparation:** Detailed Project report including Design, Bill of Quantity and Estimate for the project shall be prepared.

4. **Engagements:** Prof. H.S. Shankar from IIT Bombay, who has developed this technology shall be the consultant for the project for three months.

The proposal was placed before Executive Committee (EC) for according the approval to proposed Survey, Investigations & DPR Preparation for Rejuvenation & Conservation of Shahdara Drain With Nature-Based Treatment - Soil Bio-Technology (SBT) under Namami Gange Program at an estimated cost of ₹1.19 Crore. The project shall help in abating the pollution in Shahdara Drain.

After detailed discussions, Executive Committee (EC) decided to approve the proposal for according administrative approval and expenditure sanction (AA&ES) for Survey, Investigations & DPR Preparation for Rejuvenation & Conservation of Shahdara Drain with Nature-Based Treatment - Soil Bio-Technology (SBT) Under Namami Gange for an estimated amount of ₹1.06 Crore (component wise details are in the table below) under NGP-Non EAP funding, subject to the following conditions:

- Survey, mapping and Field Investigation of the Shahdara drain shall be carried out by NABCONS.*
- NABCONS shall ensure that field activities are carried out strictly following the timelines and technical specifications proposed.*
- DPR will be prepared in house under supervision of the NMCG team by engaging a consultant.*

Table: Cost Estimates and timeline of the project

S. No.	Main Component	Type of Work	Time Line	Approved Cost (Rs. In Lakhs)
1	Survey	Drone Survey (28 Km x 0.5 Km either side)	2 Month	13
		Bathy Metric Survey (28 LKm)		11
		Field Survey/ Data Collection (C/S Sections & L-Sections)(Total Station & DGPS)		8
2	Investigation	Inlet Drain Discharge & Water Quality		10
		Soil/ Sludge Properties		7
3	DPR	Report, Design, BOQ & Estimate	1 Month	34
4	Engagements	Prof. HS Shankar (IIT, Bombay)	3 Month	7
				90 + 18% GST =106.2 Lakhs

Table Agenda Item: Revised cost estimate & financial implication for the pilot/demonstration project ‘Treatment of Panipat Drain using bio-remediation’ w.r.t GST and increased flow related issues

Shri Brijesh Sikka, Senior Consultant, NMCG gave a detailed presentation on the pilot/demonstration project ‘Treatment of Panipat Drain using bio-remediation’, which was sanctioned on 18th February, 2022 at an estimated cost of Rs.2.49 crore. The project was awarded to M/s Organica Biotech Private Limited. SRM University was appointed by NMCG as Third Party Agency (TPA) for assessing the performance of the project. After 1 month of free successful demonstration/trial period and establishing the efficacy of the innovative technology, Work Order was issued for carrying out the work for 11 months. Work was done by the agency from 4th May, 2022 to 30th June, 2022, after which it was stopped due to monsoon season.

The Committee was informed that the AA&ES issued for the project was silent on whether the treatment cost of Rs.1678/MLD is inclusive or exclusive of GST. The AA&ES also mentions that payment shall be based on pro-rata basis against per MLD quantity of flow measured and treated in the drain. But it also mentions that cost escalation, if any, on any expenditure head shall be borne by the agency. Both these statements are contrary to each other.

Against the bill submitted by the agency for the work done so far, NMCG so far has made a payment of Rs 36.71 lakhs (including GST of Rs.3.93 lakhs) considering treatment cost inclusive of GST and restricting the maximum flow to 40 MLD. However,

the agency has represented that GST be paid over & above the treatment cost of Rs.1678/MLD and as the flow in the drain is much higher, the payment should be made for actual flows in the drain in May & June, 2022 and average flow of 60 MLD should be considered for future.

ED (Technical) informed that all bioremediation proposals were put up for to a Technical Committee consisting of Prof. Vinod Tare, IIT Kanpur/ Prof. SP Gautam, ex-Chairman, CPCB, Director-NEERI and Member Secretary-CPCB for their evaluation and the treatment costs quoted by various agencies/approved by the Committee were exclusive of GST. ED (Finance) also stated that GST at applicable rate should be paid over & above the treatment cost as this is a statutory levy payable to the Government.

On a query raised by JS&FA, Ministry of Jal Shakti, it was informed that while processing the proposal, the total project cost of Rs 2.49 crore was considered for 12 months. However, while issuing the AA&ES, the same cost has been incorrectly sanctioned for 11 months. The correct sanctioned cost should be Rs.2.2485 crore. It was confirmed that SRM University has assessed the project performance and given their consent/approval of the performance data for the work done in May & June, 2022.

The EC was apprised of the two scenarios, with *Option-1* where the project cost gets revised from Rs. 2.49 crore to Rs. 2.63 crore (Rs.2,62,98,958/-) inclusive of GST for average flow of 40 MLD, and *Option-2* where the project cost gets revised from Rs. 2.49 crore to Rs 3.945 crore (Rs.3,94,48,438/-) inclusive of GST and taking average flow of 60 MLD.

Decision:

After detailed deliberations, it was decided that the pilot/demonstration project of Panipat Drain must not be continued further and closed immediately. The balance dues of the agency may be processed for payment taking into account payment of GST as per applicable rates over & above the treatment cost as well as actual flows in the drain for May and June, 2022. This approach may also be followed for any other bioremediation projects with similar issues.

The meeting ended with vote of thanks to the Chair.
