

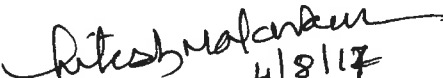
EDA/2016-17/717/NMCG-EC Meeting
National Mission for Clean Ganga
Ministry of Water Resources, River Development &
Ganga Rejuvenation

1st Floor,
Major Dhyan Chand National Stadium
India Gate, New Delhi-110002

Dated: 4th August, 2017

Sub: Minutes of 5th Executive Committee Meeting (EC) of NMCG held on 2nd August, 2017.

Please find enclosed the minutes of the 5th Executive Committee (EC) Meeting of NMCG held on 2nd August, 2017 at 03:00 PM in The conference Hall of NMCG, New Delhi for information and necessary action.


4/8/17

(Hitesh Kumar S. Makwana)
Executive Director (Projects)

To,

1. Shri Sandeep Dave, Joint Secretary, Department of Expenditure, Ministry of Finance, North Block, New Delhi- 110001
2. Shri Jitender Kumar, Adviser, NITI Aayog, Yojana Bhawan, Sansad Marg, New Delhi-110001
3. Principal Secretary (UD), Directorate of Urban Development (DUD), Uttarakhand, 43/6 Mata Mandir Road, Dharampur, Dehradun, Uttarakhand-248001.
4. Secretary (UD), Urban Development Department (UDD), 834, Bapu Bhawan, Lucknow- 226001
5. Principal Secretary (UD & Housing), Urban Development and Housing Department (UDHD), Vikas Bhawan, Bailey Road, Patna, Bihar-800015.
6. Principal Secretary (UD), Department of Municipal Affairs (DMA), Nagarayan, Sector-I, Block-DF-8, Bidhan Nagar, Kolkata-700064
7. Deputy Director General, NMCG
8. Executive Director (Finance), NMCG
9. Executive Director (Projects), NMCG
10. Executive Director (Technical), NMCG

Copy to:-

1. Project Director, SPMG Group 117 Indira Nagar Dehradun 248001 Uttarakhand
2. Project Director, SPMG Group (Secretary Urban Development), Government of Bihar, Vikash Bhawan, Bailey Road, Patna, Bihar – 800001
3. Project Director, SPMG Group 834, Bapu Bhawan Sachivalya, Lucknow, - 226001.
4. Project Director, SPMG Group Nagarayan Bhawan (6th Floor), DF-8, Sector-I, Salt Lake, Kolkata – 700064
5. PS to Director General, NMCG- for his kind information.

Minutes of 5th meeting of the Executive Committee (EC) of National Mission for Clean Ganga (NMCG) held on 2nd Aug 2017 in NMCG Office, Delhi

Executive Director (Administration) welcomed Director General, NMCG, members of the Executive Committee and all those present to the 5th Executive Committee meeting, he requested DG to give his opening remarks.

DG, NMCG welcoming the participants, laid stress on three aspects:

1. Quality of DPR: He stated that STP is a costly option for pollution abatement and NMCG now approves projects with O&M cost for 15 year which in most of the cases works out to be same as the capital cost. Hence, Executive Agencies should ensure that the DPR prepared are of the high standards. He asked the Executing Agencies to train their design cell and even offered the capacity building support from NMCG.
2. It was important that Tenders are finalized and contracted out quickly after the project was sanctioned. He said that there has been inordinate delay in finalization of tenders which defeated the purpose of sanctioning projects on priority basis.
3. DG emphasized house connection issue to be resolved as without house connectivity the assets created in form of STP could not deliver desired results and it was wastage of public money. DG also pointed out that routine Operation & Maintenance could not be taken same as upgradation and rehabilitation of the STP.

Agenda 1: "Interception Diversion and Treatment of Major Nalas for Abatement of Pollution of River Ganga in Chunar (District - Mirzapur) in Uttar Pradesh State, Under Namami Gange Program"

- DPR appraised by IIT-Roorkee
- Project Cost: **Rs2798.22** Lakhs including O & M for 15 years
- The land for SPS and STP is available with Chunar Palika Parishad and will be transferred to Executing agency post sanctioning of the project.
- Project Components:
 1. Drain Tapping - **8 Nos.**
 2. Drain In-situ Treatment- **02 No.**
 3. Septic Tanks for drains - **4 Nos.**
 4. Interceptor Trunk Sewer 200 - 450 mm dia - **1.16 Km**
 5. Sewage Treatment Plant - **1 No (2 MLD)**
 6. Sewage Pumping Station - **1 No.**
 7. Rising Mains (200 mm dia.) - **0.06 Km**
 8. Operation & Maintenance - **15 years for I&D and STP works**
- Completion Time: 23Months including bidding period
- Financial Effect: 100% Central Sector

- Bidding Process: Bidding will be done on Design Build Operate Transfer (DBOT) basis on constructed wetland technology

After detailed discussion EC resolved to approve the proposal for according Administrative Approval and Expenditure Sanction (AA&ES) for I/D and STP works at Chunar, Mirzapur for an estimated amount of Rs 2798.22 Lakhs (including cost of O & M for 15 years - Rs 1224.44 Lakhs) to be implemented on Design Build Operate Transfer (DBOT) basis. It was also resolved that the observations of NMCG, TPA should be complied by the State Government/ Executing Agency at the time of finalization of Bid document/ at the time of execution and during O & M. for the I/ D and STP works, O & M for 15 years after commissioning will form part of the project scope and in subsequent years, State Government/ ULB will ensure the O & M of I/ D system as per the norms. The project has been considered to be funded Component B – New Initiatives of Mission Namami Gange Program. The State Government should ensure the availability of land in their possession before awarding the works.

Since the project only involves I&D and STP works of very small capacity (2 MLD only) and clubbing with other towns is difficult due to remote location of the town, the project will be executed following DBOT mode instead of Hybrid annuity based PPP mode.

Agenda Item No.2: “Interception, Diversion & Sewage Treatment Plant Works”
For Barh town under Namami Gange

- DPR - Appraised by: NIT-Patna
- Project Cost: **Rs 58.26 Crore** including O&M for 15 years
- Project Components:
 - i. Construction 03 Nos. of nala tapping/ interception arrangements,
 - ii. 02 Nos. of Sewage Pumping Stations with E & M Works,
 - iii. Rising Main – 4444 m,
 - iv. Construction of 01 Nos. of STPs - 11 MLD,
 - v. Online flow & quality monitoring systems at inlet & outlet,
 - vi. 15 year Operation & Maintenance and Environment plan during construction and operation phase
- Land: To be provided by State Government
- Completion Time: 18 Months (including bidding)
- Financial Effect: 100% Central Sector
- Bidding Process: Design Build Operate and Transfer (DBOT) model

After detailed discussion, EC resolved to approve the proposal for according AA&ES for I&D and STP works in Barh town for an estimated amount of Rs58.26 Crore (including cost of O&M for 15 years - Rs37.65 Crore) to be implemented on DBOT mode. It was also resolved that the observations of NMCG, TPA should be complied by the State Government/ Executing Agency at the time of finalization of

Bid Document/at the time of execution and during O&M. For the I&D and STP works, O&M for 15 Years after commissioning will form part of the project scope and in subsequent years, State Govt./ULB will ensure the O&M of I&D system as per the norms. The project has been considered to be funded under Non-EAP component under National Ganga Plan (NGP). The State Govt. should ensure the availability of land in their possession before awarding the works.

Since the project only involves I&D and STP works of very small capacity (11 MLD only) and clubbing with other towns is difficult due to remote location of the town, the project will be executed following DBOT mode instead of Hybrid annuity based PPP mode.

Agenda Item No.3: “Kankarbagh Sewerage Network and STP Scheme for Patna, Bihar

- Development of a 150 Km Sewerage Network
- 2 Intermediate Pumping Station (IPS)-1 and IPS-2
- Development of 50 MLD capacity sewage treatment plant.
- RCC Effluent channel – 1.6 Km
- 15 year Operation & Maintenance
- Environment plan during construction and operation phase
- DPR - Appraised by: IIT-Roorkee
- Project Cost: Rs 578.89 Crore including O&M for 15 years
- Land: To be provided by State Government
- Completion Time: 42 Months (including bidding)
- Financial Effect: 100% Central Sector
- Bidding Process: STP on Hybrid Annuity mode and Network on Design Build Operate and Transfer (DBOT) mode.

After detailed discussion, EC resolved to approve the proposal for according AA&ES for Sewerage Network and STP works in Kankarbagh zone Patna for an estimated amount of Rs 578.89 Crore (including cost of O&M for 15 years - 202.22 Crore). The STP will be implemented in Hybrid annuity Mode and the Sewerage Network to be implemented on DBOT mode. It was also resolved that the observations of NMCG, TPA and World Bank should be complied by the State Government/ Executing Agency at the time of finalization of Bid Document/at the time of execution and during O&M. For the Sewerage Network and STP works, O&M for 15 Years after commissioning will form part of the project scope and in subsequent years, State Govt./ULB will ensure the O&M of STP and Network system as per the norms. The project has been considered to be funded under EAP component under Namami Gange Programme. The State Govt. should ensure the availability of land in their possession and NOC of land for STP and IPS should be provided prior to bidding.

During the EC meeting it was desired that state government should economize the power cost by exploring other suitable alternatives.

The cost of sewer laying from sewer connecting chamber to individual house shall be borne by the State Govt./Patna Municipal Corporation/Individual.

Agenda Item No.04: "Development / Renovation of Ghats at Nabadwip Town" in West Bengal under Namami Gange

- DPR - Appraised by: IIT - Consortium
- Project Cost: Rs.3.13 Crore including O&M for 06 -Months
- Project Components:
- Development / Renovation of 01 -Ghat

➤ **Renovation of Boral Ferry / Bathing Ghat**

- Completion Time: 12 Months (including bidding)
- Financial Effect: 100% Central Sector
- Land to be provided by the State Govt.

After detailed discussion, EC approved the proposal for according AA&ES for Development / Renovation of Ghats at Nabadwip Town in West Bengal for an estimated amount of ₹3.13 Crore (including cost of O&M for 06 Months - ₹ 2.18Lacs), subject to that condition the observations of NMCG / TPA should be complied by the CPSU and state Govt. at the time of finalization of Bid Document. The project has been considered to be funded under National Ganga Plan (NGP).

Agenda Item No. 5: Establishment of Ganga Monitoring Centers (GMCs) in 5 Riparian States of R. Ganga under Namami Gange Programme

- Project prepared by: Technical Wing, NMCG
- Project Type: Institutional Building
- Project Cost: INR 46.69 Cr.(with the cost project for 3 years)
- Project Duration: Continuous / Ongoing (Project financial propositions done @ 3 years)
- Financial Effect: 100 % Central Sector
- Project Components:
 1. Identification and designation of GMC under Class A, B and C
 2. Establishment of GMC where such facilities doesn't exist (if required)
 3. Constitution of Expert Committee for Technical Advisory
 4. Remedial measures thereof, on basis of reports recieved from Class A, B and C

After detailed discussion, EC approved the proposal for according AA& ES for establishment of Ganga Monitoring Centers (GMCs) at an estimated amount of INR 46.69 Cr (with a cost projection for 3 years), with requisite flexibility in number of potential GMCs (if required).

Also, followings were mentioned:

- (A) Exploration of inclusion of IIT's and NIT's under GMC Class A organisations/ institutions.
- (B) The data / reports submitted by GMC A, B and C will include monitoring datasets for which institutional coupling with the Ganga Knowledge Center(GKC) shall be explored, in order to collect the data in a centralised manner at NMCG.

Agenda Item No.6: "Treatment of Danapur Cantt. Drain, Patna using bioremediation Under the head of "Research, Studies, Pilot & Training, Workshop, Seminar, Publication etc." as a part of overall Research and Development component".

- Project prepared by: M/s Enviro Bio Sciences Pvt. Ltd
- Project Type: Pilot project for In-Situ Bioremediation of Drain
- Project Cost: ₹ 73.00 Lakh
- Project Duration: 1 year (First Month will be trail period, after successful demonstration project will continue up to 12 months and payment will be made on monthly reimbursement basis)
- Financial Effect: 100 % Central Sector
- Project Components:
 1. In-Situ Bioremediation of Drain
 2. Continuous Project monitoring by recognised institute

After detailed discussion, EC approved the proposal for according AA&ES for "Treatment of Danapur Cantt. Drain, Patna using bioremediation Under the head of "Research, Studies, Pilot & Training, Workshop, Seminar, Publication etc." as a part of overall Research and Development component" for an estimated amount of ₹ 73.00 Lakh, subject to condition the observations of NMCG / Evaluation Committee should be complied by the M/s Enviro Bio Sciences Pvt. Ltd..The project has been considered to be funded under National Ganga Plan (NGP).

Agenda Item No.7: "Treatment of Nehru Drain, Allahabad using Bacto-clean product based bioremediation Under the head of "Research, Studies, Pilot & Training, Workshop, Seminar, Publication etc." as a part of overall Research and Development component"

- Project prepared by: M/s Greenway Technologies Pvt. Ltd.
- Project Type: Pilot project for In-Situ Bioremediation of Drain
- Project Cost: ₹ 90.81 Lakh
- Project Duration: 1 year (First Month will be trail period, after successful demonstration project will continue up to 12 months and payment will be made on monthly reimbursement basis)
- Financial Effect: 100 % Central Sector
- Project Components:
 1. In-Situ Bioremediation of Drain
 2. Continuous Project monitoring by recognised institute

After detailed discussion, EC approved the proposal for according AA&ES for “Treatment of Nehru Drain, Allahabad using Bacto-clean product based bioremediation Under the head of “Research, Studies, Pilot & Training, Workshop, Seminar, Publication etc.” as a part of overall Research and Development component” for an estimated amount of ₹ 90.81 Lakh, subject to condition the observations of NMCG / Evaluation Committee should be complied by the M/s Greenway Technologies Pvt. Ltd..The project has been considered to be funded under National Ganga Plan (NGP).

Agenda Item No.8: “Treatment of Permiya Nala, Kanpur using Nano-technology based bioremediation Under the head of “Research, Studies, Pilot & Training, Workshop, Seminar, Publication etc.” as a part of overall Research and Development component”

The proposal was discussed, it was pointed out by state representative that major contribution of flows in the drain is due to escape Ganga canal and actual sewage flows may be only around 5-10 MLD. This aspect may be investigated by technology proponent. The EC decided that proposal may be reviewed accordingly.

Agenda Item No.9: “Digha Sewerage Network and STP Scheme for Patna, Bihar

- Development of a 288 Km Sewerage Network
- Development of 100 MLD capacity sewage treatment plant.
- 2 Intermediate Pumping Station (IPS)-1 and IPS-2
- RCC Effluent channel – 0.5 Km
- 15 year Operation & Maintenance
- Environment plan during construction and operation phase
- DPR - Appraised by: IIT-Roorkee
- Project Cost: **Rs 824 Crore** including O&M for 15 years
- Land: To be provided by State Government
- Completion Time: 42 Months (including bidding)
- Financial Effect: 100% Central Sector
- Bidding Process: STP on Hybrid Annuity mode and Network on Design Build Operate and Transfer (DBOT) mode.

After detailed discussion, EC resolved to approve the proposal for according AA&ES for Sewerage Network and STP works in Digha zone Patna for an estimated amount of Rs 824 Crore (including cost of O&M for 15 years –261 Crore). The STP will be implemented in Hybrid annuity Mode and the Sewerage Network to be implemented on DBOT mode. It was also resolved that the observations of NMCG, TPA and World Bank should be complied by the State Government/ Executing Agency at the time of finalization of Bid Document/at the time of execution and during O&M. For the Sewerage Network and STP works, O&M for 15 Years after commissioning will form part of the project scope and in subsequent years, State Govt./ULB will ensure the O&M of STP and Network system as per the norms. The project has been considered to be funded under EAP component under Namami Gange Programme. The State Govt. should ensure the availability of land in their possession and NOC of land for STP and IPS should be provided prior to bidding.

During the EC meeting it was desired that state government should economize the power cost by exploring other suitable alternatives.

The cost of sewer laying from sewer connecting chamber to individual house shall be borne by State Govt./Patna Municipal Corporation/Individual.

Agenda Item No.10: “Pollution Abatement & Rehabilitation of Tolly’s Nullah (Adi Ganga), Kolkata (Interception & Diversion with PS and STP) in West Bengal State under Namami Gange Program”

- DPR appraised by Jamia Millia Islamia University
- Land: to be provided by State Government
- Sewer Lines [NP-4] 250 mm dia.—2500 mm dia.: 72592 M
- DI [K-9] pipeline (Force main) 200 mm dia.—1000 mm dia.: 9599 M
- uPVC pipeline 160 mm dia. : 32010 M
- Pumping/Lifting Stations: 19 Nos
- Sewage Treatment Plant: 4 Nos
 - a. 5.7 MLD Capacity - 1 No.
 - b. 15.3 MLD Capacity - 1 No
 - c. 5.06 MLD Capacity -1 No
- Project Cost: Rs 29226.24 Lacs. including O & M for 15 years
 - d. 50 MLD Capacity -1No [Cleaning and minor repair is considered]
- Project Components:
 - Operation & Maintenance -15 years of S&D, PS and STP works
 - Completion Time: 30 Months including bidding period
 - Financial Effect: 100% Central Sector
 - Bidding Process: Hybrid Annuity Based PPP model

The proposed cost recommended for Tolly Nalla project was Rs 29226.24 Lacs for sewerage infrastructure component. However PD, SPMG West Bengal

emphasised to consider the dredging and fencing of Nalla as project component because this Nalla got silted over time. It was also discussed whether dredging is mandate of NMCG? TPA Agency and experts of IIT were of the views that dredging of Tolly Nalla is must to increase the carrying capacity of channel and to rejuvenate the Nalla. After detailed discussion EC resolved to approve the proposal for according AA&ES for I&D and STP works at Kolkata for an estimated amount of Rs 30712.24 Lacs including dredging component with O & M of sewerage infrastructure for 15 years. Sewerage infrastructure component is to be implemented on Hybrid Annuity based PPP mode. Fencing work of Nalla component may be funded by State Govt./ Kolkata Municipal Corporation. It was also resolved that the observations of NMCG, TPA and World Bank should be complied by the State Governments/Executing Agency at the time of finalization of Bid documents/ at the time of execution and during O & M. O & M for 15 years after commissioning will form part of the project scope and in subsequent years, State Governments ULB will ensure the O & M of I& D system as per the norms. The project has been considered to be funded under EAP (World Bank funded) subject to the NOC received from World Bank for this project; otherwise the funding will be from National Ganga Plan (NGP). The State Government should ensure the availability of land in their possession before awarding the works

Agenda Item No.11: "Pollution Abatement Works for River Ganga at Howrah (Interception & Diversion with STP) in West Bengal State under Namami Gange Program"

- DPR appraised by Jamia Millia Islamia University
- Project Cost: Rs 18522.27 Lacs. including O & M for 15 years
- Land: to be provided by State Government
- Project Components:
- Sewer network including raising of manholes.
- Sewage Treatment Plant 65.00 MLD Capacity - 1 No
- Pumping structures (repair & renovation) – 5 nos [4 nos. LS and 1 no MPS].
- Road restoration – 2234.88 sq.mt
- Cost of transformer for LS & MPS.
- Diversion structure- 3 nos. Desilting of existing sewer – 1322.04 cum
- Operation & maintenance for 15 years
- Completion Time: 30 Months including bidding period
- Financial Effect: 100% Central Sector
- Bidding Process: Hybrid Annuity Based PPP model

After detailed discussion EC resolved to approve the proposal for according AA&ES for I&D and STP works at Kolkata for an estimated amount of Rs 18522.27 Lacs. (Including cost of O & M for 15 years —Rs 9300 Lacs) to be implemented on Hybrid Annuity based PPP mode. It was also resolved that the observations of NMCG, TPA and World Bank should be complied by the State Governments/Executing Agency at the time of finalization of Bid documents at

the time of execution and during O & M. O & M for 15 years after commissioning will form part of the project scope and in subsequent years, State Governments ULB will ensure the O & M of I& D system as per the norms. The project has been considered to be funded under EAP Component (World Bank funded) subject to the NOC received from World Bank for this project; otherwise the funding will be from National Ganga Plan (NGP). The State Government should ensure the availability of land in their possession before awarding the works.
