

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
ORIGINAL APPLICATION NO. 367 OF 2022**

IN THE MATTER OF:

RAJENDRA PRASAD GUPTA APPLICANT

Versus

STATE OF U.P. & ORS. RESPONDENTS

INDEX

S. NO.	PARTICULARS	PAGE NO.
1.	Response affidavit on behalf of Respondent No. 12, U.P. Jal Nigam (Rural)	1-6
2.	ANNEXURE NO. 1: A true copy of the Government Order dated 03.02.2020	7-8
3.	ANNEXURE NO. 2: A true copy of the Government Order dated 11.08.2020 along with the Standard Operating Procedure for Bio/Phytoremediation of Drains	9-75
4.	ANNEXURE NO. 3: A true copy of the Government Order dated 21.10.2024	76-78
5.	ANNEXURE NO. 4: A true copy of the Action Plan submitted by the Respondent No. 12	79-82
6.	ANNEXURE NO. 5: A true copy of the results of sampling done by IIT-BHU on behalf of NMCG	83-86

7.	ANNEXURE NO. 6: A true copy of the letter dated 22.01.2025 issued by NMCG	87-98
8.	ANNEXURE NO. 7: A true copy of the letter dated 05.12.2024 issued by the State Government	99-101
9.	ANNEXURE NO. 8: A true copy of the Agenda Note for 60th Meeting of the Executive Committee (EC) of National Mission for Clean Ganga	102-134
10.	ANNEXURE NO. 9: A true copy of the information received from Jal Kal Department	135

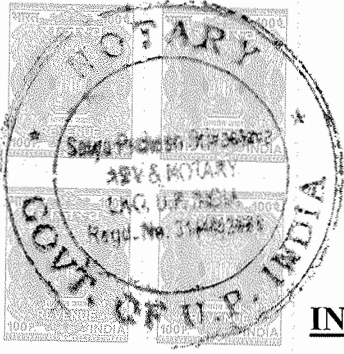
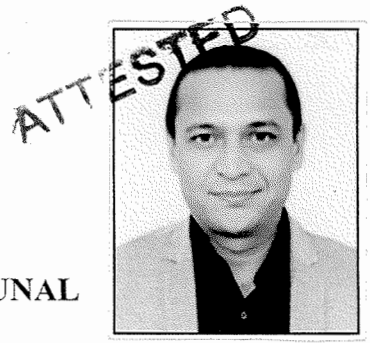
THROUGH

DATE: 17.02.2025

PLACE: NEW DELHI



**STHAVI ASTHANA
ADVOCATE FOR RESPONDENT NO. 12
C1/131 MOTI BAGH, SHANTI PATH,
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(M): 9711116034
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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
ORIGINAL APPLICATION NO. 367 OF 2022

IN THE MATTER OF:

RAJENDRA PRASAD GUPTA APPLICANT
Versus
STATE OF U.P. & ORS. RESPONDENTS

RESPONSE AFFIDAVIT ON BEHALF OF RESPONDENT NO. 12,
U.P. JAL NIGAM (RURAL)

Dr. Raj Shekhar, S/o Shri Siddayya, aged about 47 years, R/o G-1,
Block-B, CSI Tower, Vipin Khand, Gomti Nagar, Lucknow, Uttar
Pradesh, 226010 presently working as Managing Director, U.P. Jal Nigam
(Rural), Lucknow, do hereby solemnly affirm and state on oath as under:

1. That the deponent is currently posted as Managing Director, U.P. Jal Nigam (Rural), Lucknow and has been arrayed as Respondent No. 12, and is duly authorized to swear in this instant affidavit as such, he is well conversant with the facts and circumstances of the case deposed to hereinafter.
2. That the issue in the present case relates to discharge of domestic waste water and untreated industrial waste into River Ganga at Varanasi.

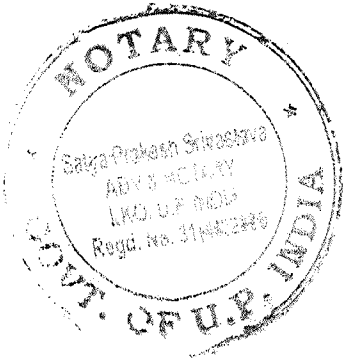
SWORN & VERIFIED
BEFORE ME

S.P. Sidi
Satya Prakash Srivastava
Advocate & Notary
Lucknow U.P. India

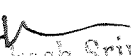
17/02/25

(डा० राज शेखर)
प्रबन्ध निदेशक
उ०प्र० जल निगम (ग्रामीण)

3. That the answering Respondent was impleaded as Respondent No. 12 vide order dated 16.10.2024 passed by this Hon'ble Tribunal in the captioned matter.
4. That the answering Respondent, U.P. Jal Nigam (Rural), is the working/ executing agency for the development of Sewage Treatment Plants. The answering Respondent is only responsible for the operation and maintenance of such STPs as may be assigned to it. At present, there are 7 STPs operational in Varanasi and the answering Respondent is responsible for the operation of 3 out of those, being 8 MLD STP at Bhagwanpur, 50 MLD STP at Ramana and 10 MLD STP at Ramnagar.
5. That it is submitted that cleaning of drains, as well as bioremediation/ phytoremediation and other sewage management works are the responsibility of the Varanasi Nagar Nigam. A true copy of the Government Order dated 03.02.2020 in this regard is annexed hereto and marked as **Annexure 1**. A true copy of the Government Order dated 11.08.2020 along with the Standard Operating Procedure for Bio/Phytoremediation of Drains is annexed hereto and marked as **Annexure 2**. A true copy of the Government Order dated 21.10.2024 in this regard is annexed hereto and marked as **Annexure 3**.



SWORN & VERIFIED
BEFORE ME

S.P.S. 
Satya Prakash Srivastava
Advocate & Notary
Lucknow U.P. India
17/02/25

(डा० राज शंकर)
प्रबन्ध निदेशक
उ०प्र० जल निगम (ग्रामीण)

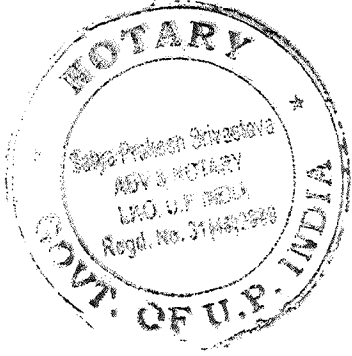
6. That the answering Respondent is the working agency for projects with regard to five drains in the Varanasi and Chandauli districts, being:

- a. Assi/ Nagwa drain (78 MLD discharge)
- b. Nakkha drain (5 MLD discharge)
- c. Durga/ Daniyal/ Lohta Drain (37 MLD discharge)
- d. Ganda drain (9.19 MLD discharge)
- e. Railway drain (22.82 MLD discharge)

7. That a compliance report by the answering Respondent was earlier placed on the record before this Hon'ble Tribunal through the Compliance Affidavit/ Report dated 14.10.2024 filed by the Respondent No. 8.

8. That in compliance with the order dated 16.10.2024, the answering Respondent has submitted Action Plan to UPPCB on 29.01.2025. A true copy of the Action Plan submitted by the Respondent No. 12 is annexed hereto and marked as **Annexure 4.**

9. That with regard to Assi/ Nagwa drain, 50 MLD discharge is being treated at 50 MLD Ramana STP and for the treatment of balance 28 MLD discharge, construction work of 55 MLD STP at Bhagwanpur is in progress, which is expected to be completed by 06.12.2025. It is submitted that the Ramana STP has a cushion of 10% and is



SWORN & VERIFIED
BEFORE ME

S.P.Sd
Satya Prakash Srivastava
Advocate & Notary
Lucknow U.P. India
17/02/25

(सं राज शेखर)
प्रबन्ध निदेशक
संप्र० जल निगम (प्रकीर्ण) 3

currently handling average flow of 53.50 MLD. As an interim measure, the National Mission for Clean Ganga has also approved project for treatment of excess quantity of flow through the drain by Advance Oxidation Process (AOP) and the AOP unit was functional from May 2024 at the confluence of River Ganga and the Assi drain. However, due to rise in level of River Ganga during monsoon in view of the flood, the said plant was temporarily dismantled. The AOP unit was re-installed in December-2024 and is currently operational. A true copy of the results of sampling done by IIT-BHU on behalf of NMCG is annexed hereto and marked as

Annexure 5.

10. That with regard to Nakkha drain, 2.5 MLD discharge is being treated at 50 MLD STP at Ramana and for the treatment of balance 2.5 MLD discharge, construction work of 55 MLD STP at Bhagwanpur is in progress, which is expected to be completed by 06.12.2025. It is submitted that until the new 55 MLD STP at Bhagwanpur is complete, conducting bioremediation works for the excess discharge is responsibility of the Varanasi Nagar Nigam.

11. That with regard to Ganda drain (9.19 MLD) and Railway drain (22.82 MLD), the answering Respondent is the working agency for the same in coordination with Nagar Palika Parishad, Pandit Deendayal Upadhyay Nagar Chandauli. These drains are proposed

SWORN & VERIFIED
BEFORE ME

S.P. Srivastava
Satya Prakash Srivastava
Advocate & Notary
Lucknow U.P. India

17/02/25

(डा० राज शंकर)
प्रबन्ध निदेशक
उ०प्र० जल निगम (4^{वीं} क्षेत्र)

to be treated through 45 MLD STP to be constructed at Village Rauna and approval for the same has been granted by NMCG on 22.01.2025. Timeline for completion of the same is 21 months after bidding period of approximately 6 months. The State government has sanctioned funds for land acquisition for the said project vide letter dated 05.12.2024. A true copy of the letter dated 22.01.2025 issued by NMCG is annexed hereto and marked as **Annexure 6.** A true copy of the letter dated 05.12.2024 issued by the State Government is annexed hereto and marked as **Annexure 7.**

12. That the answering Respondent is also the working agency for Durga/ Daniyal/ Lohta Drain (37 MLD) and a revised DPR for treatment of the same through proposed STP of capacity 60 MLD has been submitted. Meeting of Executive Committee of NMCG was held on 10.02.2025 wherein the said DPR was taken up and formal approval of the same is awaited. A true copy of the notice regarding 60th Meeting of the Executive Committee (EC) of National Mission for Clean Ganga is annexed hereto and marked as **Annexure 8.**

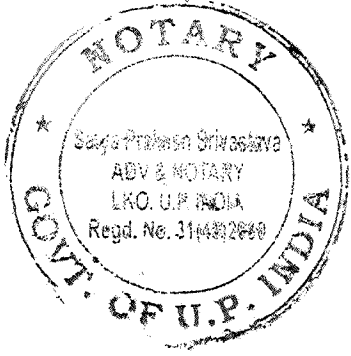
13. That Samne Ghat drain (1.17 MLD discharge) is fully tapped and diverted through gravity sewer pipe line in 50 MLD STP at Ramana. In the month of March 2024, overflow had occurred due to choking of the sewer line, which is maintained by Jal Kal

SWORN & VERIFIED
BEFORE ME

S.P. Srivastava
Satya Prakash Srivastava
Advocate & Notary
Lucknow U.P. India

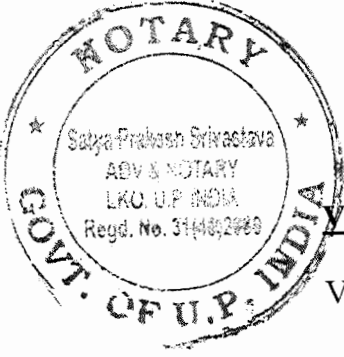
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(डा० राज शंकर)
प्रबन्ध निदेशक
5
उ०प्र० जल निगम (ग्रामीण)



Department of Nagar Nigam Varanasi. Jal Kal Department, Nagar Nigam Varanasi has conducted bioremediation and cleaning of the sewer line. Currently, no sewage is being discharged directly into River Ganga from this drain. A true copy of the information received from Jal Kal Department is annexed hereto and marked as **Annexure 9.**

14. That the above response of Respondent No. 12 is submitted before this Hon'ble Tribunal for its perusal and necessary consideration.



VERIFICATION

Verified at _____ on this ___ day of February 2025 that the contents of the above affidavit are true and correct to the best of my knowledge and belief and nothing material has been concealed therefrom.

(डा० राज शेखर)
DEPONENT
प्रबन्ध निदेशक,
उ०प्र० जल निगम (ग्रामीण)

(डा० राज शेखर)
DEPONENT
प्रबन्ध निदेशक,
उ०प्र० जल निगम (ग्रामीण)

SWORN & VERIFIED
BEFORE ME

S.P. Srivastava
Satya Prakash Srivastava
Advocate & Notary
Lucknow U.P. India

17/02/25

I know and identify the deponent
who has signed/put T.I. before me

प्रेषक,

मनोज कुमार सिंह
प्रमुख सचिव,
उत्तर प्रदेश, शासन।

सेवा में,

1. समस्त महापौर/नगर आयुक्त, नगर निगम 30प्र0।
2. समस्त अध्यक्ष/अधिकासी अधिकारी, नगर पालिका परिषद 30प्र0।
3. समस्त अध्यक्ष/अधिकासी अधिकारी, नगर पंचायत 30प्र0।

नगर विकास अनुभाग-9

लखनऊ दिनांक 03 फरवरी, 2020

विषय-प्रदेश की नदियों में गिरने वाले नालों के दूषित जल का बायोरेमेडिएशन विधि/फाइटोरेमेडिएशन या अन्य विधि से शोधन की कार्यवाही पर व्यय नगर निकाय स्तर पर निकाय निधि/अवस्थापना निधि/राज्य वित्त आयोग/14 वें वित्त आयोग से कराए जाने के संबंध में।

महोदय,

कृपया उपर्युक्त विषयक अवगत कराना है कि नगरीय निकायों को उपलब्ध वित्तीय स्रोतों यथा निकाय निधि/अवस्थापना निधि/राज्य वित्त आयोग एवं केन्द्रीय वित्त आयोग की धनराशि से अवस्थापना विकास के कार्य कराये जा सकते हैं। वित्त मंत्रालय, भारत सरकार द्वारा 14वें वित्त आयोग की धनराशि का उपयोग किये जाने के संबंध में निर्गत गाइडलाइन दिनांक-08.10.2015 के प्रस्तर-17 में उल्लिखित है कि:-

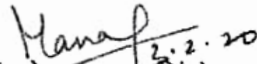
"The FFC has recommended Basic Grant to the Local bodies with the purpose of providing a measure of unconditional support to the Gram Panchayats (GPs) and Municipalities for delivering basic services. The Grants provided are intended to be used to support and strengthen the delivery of basic civic services including water supply, sanitation including septic management, sewage and solid waste management, storm water drainage, maintenance of community assets, maintenance of roads, footpaths, street-lighting, burial and cremation grounds and any other basic service within the functions assigned to them under relevant legislations. The FFC has not distinguished between O & M and capital expenditure within the components of basic services. However, it is advised that the cost of technical and administrative support towards O & M and capital expenditure should not exceed 10% of the allocation to a Gram Panchayat of Municipality under any circumstance and the expenditure can be incurred only by the local body concerned".

इसी प्रकार उपरोक्त योजनाओं की धनराशि से कराये जाने वाले अनुमन्य कार्यों में Sanitation, Septage, Sewage तथा Solid Waste Management के कार्य जिसमें नालों के शोधन संबंधी कार्य भी आच्छादित है, अनुमन्य है।

2. अतः इस संबंध में मुझे यह कहने का निदेश हुआ है कि किसी प्रकार के नगरीय सीवेज को बिना शोधन के प्रदेश की नदियों/वाटर बॉडी में प्रवाहित न करने के लिये तत्काल कार्यवाही सुनिश्चित की जाये। अतः नालों में सीवेज के दूषित जल का बायोरेमेडिएशन विधि/फाइटोरेमेडिएशन या अन्य विधि से शोधन की कार्यवाही कराये, इस मद में होने वाले व्यय का वहन नगर निकाय स्तर पर उपलब्ध निकाय निधि/अवस्थापना निधि/राज्य वित्त आयोग/14 वें वित्त आयोग की धनराशि से अनुमन्यता के दृष्टिगत किया जा सकता है।

कृपया उपर्युक्त निर्देशों का कड़ाई से अनुपालन सुनिश्चित करने का कष्ट करे।

भवदीय,


(मनोज कुमार सिंह)
प्रमुख सचिव।

संख्या एवं दिनांक तदैव:-

प्रतिलिपि- निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित :-

1. परियोजना निदेशक, राज्य स्वच्छ गंगा मिशन, उ०प्र०।
2. प्रबन्ध निदेशक, जल निगम उ०प्र० लखनऊ।
3. निदेशक, स्थानीय निकाय निदेशालय, उ०प्र० लखनऊ।
4. नगर विकास अनुभाग-5/गार्ड फाइल।

आज्ञा से,

(मनोज कुमार सिंह)
प्रमुख सचिव।

प्रेषक,

दीपक कुमार,
प्रमुख सचिव,
उत्तर प्रदेश शासन।

सेवा में,

- 1-समस्त मण्डलायुक्त, उत्तर प्रदेश।
- 2-समस्त जिलाधिकारी, उत्तर प्रदेश।
- 3-मा0 महापौर/नगर आयुक्त, समस्त नगर निगम, उत्तर प्रदेश
- 4-मा0 अध्यक्ष/अधिसासी अधिकारी-समस्त नगर पालिका परिषद/नगर पंचायत, उ0प्र0।

नगर विकास अनुभाग-5

लखनऊ: दिनांक: 11 अगस्त, 2020

विषय:- गंगा तथा सहायक नदियों में गिरने वाले प्रदूषित नालों को बायो/फाइटो रेमिडिएशन विधि से शोधित करने के संबंध में।

महोदय,

कृपया उपरोक्त विषय पर शासनादेश संख्या -475/नौ-5-2020-284सा/2019, दिनांक 31.01.2020 एवं शासनादेश संख्या-142/नौ-9-2019-89ज/201, दिनांक 03.02.2020 (छायाप्रति संलग्न) का संदर्भ ग्रहण करने का कष्ट करें।

2- नदी संरक्षण के उद्देश्य से मा0 राष्ट्रीय हरित न्यायधिकरण (एन.जी.टी.) द्वारा निर्गत आदेश में स्पष्ट किया गया है कि नगर के नालों द्वारा जनित अशोधित जल गंगा नदी अथवा उसकी सहायक नदियों में प्रवाहित हो रहा है तथा नदियों को प्रदूषित कर रहा है। मा0 राष्ट्रीय हरित न्यायधिकरण (एन.जी.टी.) द्वारा Writ petition OA-200/2014 दिनांक 07-08-2019 के सन्दर्भ में निम्नानुसार निर्देशित किया गया है :-

"Wherever the work has not commenced, it is necessary that no untreated sewage is discharged into the River Ganga. Bioremediation and/or phytoremediation or any other remediation measures may start as an interim measure positively from 01.11.2019, failing which the State may be liable to pay compensation of Rs. 5 Lakhs per month per drain to be deposited with the CPCB. This however, is not to be taken as an excuse to delay the installation of STPs. For delay of the work, the Chief Secretary must identify the officers responsible and assign specific responsibilities. Wherever there are violations, adverse entries in the ACRs must be made in respect of such identified officers. For delay in setting up of STPs and sewerage network beyond prescribed timelines, State may be liable to pay Rs. 10 Lakhs per month per STP and its network. It will be open to the State to recover the said amount from the erring officers/contractors."

3- उपरोक्त संदर्भित शासनादेश दिनांक 31.01.2020 द्वारा यह निर्देशित किया गया है कि जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम 1974 में प्राविधानित एवं मा0 एन0जी0टी0 के निर्देश के अनुपालन में तत्काल नालों पर बायोरेमेडिएशन विधि/फाइटो रेमेडिएशन या अन्य विधि से दूषित जल के शोधन की कार्यवाही नगर निकाय स्तर पर किया जाना है। इस कार्य को सम्पादित करने के लिए आवश्यक धनराशि को निकाय निधि/अवस्थापना निधि/राज्य वित्त आयोग/केन्द्रीय वित्त आयोग (14वां/15वां) से व्यय किया जा सकता है। 14वें वित्त आयोग के दिशा-निर्देश के बिन्दु संख्या-7 में निम्न प्राविधान है:-

"The Grants provided are intended to be used to support and strengthen the delivery of basic civic services including water supply, sanitation including septic management, sewage and solid waste management, storm water drainage, maintenance of community assets, maintenance of roads, footpaths,

street-lighting, burial and cremation grounds and any other basic service within the function assigned to them under relevant legislation. The FFC has not distinguished between O&M and capital expenditure within the components of basic services. However, it is advised that the cost of technical and administration support towards O&M and capital expenditure should not exceed 10% of the allocation to a Gram Panchayat or Municipality under any circumstance and the expenditure can be incurred only by the local body concerned".

- 4- गंगा तथा सहायक नदियों में गिरने वाले प्रदूषित नालों को बायो/फाइटो रेमिडियेशन विधि से शोधित करने के संबंध में एस.ओ.पी. एन.आई.टी. तथा ड्राफ्ट टेंडर प्रपत्र आपके सुलभ सन्दर्भ हेतु संलग्न है।
- 5- अतः इस संबंध में मुझे यह कहने का निदेश हुआ है कि गंगा तथा सहायक नदियों में गिरने वाले प्रदूषित नालों के दूषित जल को बायो/फाइटो रेमिडियेशन विधि से शोधित करने के संबंध में संलग्न एस.ओ.पी. एन.आई.टी. तथा ड्राफ्ट टेंडर प्रपत्र के आधार पर तत्काल अग्रेत्तर कार्यवाही सुनिश्चित करने का कष्ट करें।

भवदीय,

(दीपक कुमार)
प्रमुख सचिव

सख्या एवं दिनांक तदैव:-

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित:-

- 1- मिशन निदेशक, एसबीएम (नगरीय), नगरीय निकाय निदेशालय, उ०प्र० लखनऊ।
- 2- प्रबंध निदेशक, उ०प्र० जल निगम, लखनऊ।

आज्ञा से,

(अनुराग धादव)
सचिव

Standard Operating Procedure for Bio/Phytoremediation of Drains



UP Jal Nigam
Department of Urban Development

Version 1

1 Table of Contents

Table of Contents

1 Table of Contents 2

2 Title and Approval Page 3

3 Procedures 4

 3.1 Purpose 4

 3.2 Applicability/Scope 4

 3.3 Summary of Procedure 5

 3.4 Definitions 5

 3.4.1 Bioremediation 5

 3.4.2 Phytoremediation 5

 3.5 Personnel Qualifications/Responsibilities 6

 3.6 SOP Preparation 6

 3.6.1 Identification of Drains 7

 3.6.2 Water Quality Assessment 8

 3.6.3 Treatment of Drains 9

 3.6.4 Maintenance of Records 10

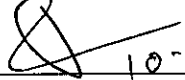
4 Records Management 10

5 Quality Assurance and Quality Control 10


6 Payments to the Agencies 10

7 Attachments 12

2 Title and Approval Page**Title :** Standard Operating Procedure for Bio/Phyto-remediation of Drains**Department:** UP Jal Nigam**Version No:** 1**Date:** , 2020**Approval Signatures****Executive Engineer(Ganga/Bioremediation) , UP Jal Nigam**

Signature:  10-8-2020 10.8.2020
 Name: Er. Ramesh Kumar Gupta Date
 Post: E.E. (Ganga/Bio)

S.E. (Ganga) , UP Jal Nigam

Signature:  10/08/2020 10.08.2020
 Name: Er. Satish Kumar Rai Date
 Post: S.E. (Ganga)

C.E. (PPRBD), UP Jal Nigam

Signature:  11-08-2020 11.08.2020
 Name: Er. Rajiv Nigam Date
 Post: C.E. (PPRBD)

3 Procedures

3.1 Purpose

This standard operating procedure (SOP) was created for the Department of Urban Development, GoUP staff to evaluate Bio/Phyto-remediation of Drains falling in various rivers of Uttar Pradesh. The objective is to treat the polluted drains to the extent of prescribed parameters as decided by SMCG/NMCG for discharging of drains in rivers.

3.2 Applicability/Scope

This SOP provides a process for determining the management and treatment requirements for drains causing pollution to rivers. The SOP deals primarily to the drains fulfilling following criteria :-

Sr. No.	Description	Criteria
1	Discharge	0.2 MLD to 10 MLD
2	BOD	≥40.0 mg/l

The drains fulfilling above criteria shall be taken up for treatment by Bio/Phyto-remediation. The treated effluent parameters for the drains will be as per NMCG guidelines circulated vide letter no. V-174/2014-15/414/NMCG. The parameters specifies in above letter are as below:-

Sr. No.	Parameters	Out flow reduction/ Values(at the end of trial period)	Out flow reduction/ Values(beyond trial period)
1	BOD _{3,27} (Biochemical Oxygen Demand)	≤30.0 mg/l Or 40% reduction in BOD load value from the initial reading(whichever is lower)	≤30.0 mg/l Or 70% reduction in BOD load value from the initial reading(whichever is lower)
2	COD(Chemical Oxygen Demand)	≤150.0 mg/l Or 40% reduction in COD load value from the initial reading(whichever is lower)	≤150.0 mg/l Or 70% reduction in COD load value from the initial reading(whichever is lower)
3	TSS(Total Suspended Solids)	≤100.0 mg/l Or 40% reduction in TSS load value from the initial reading (whichever is lower)	≤100.0 mg/l Or 70% reduction in TSS load value from the initial reading (whichever is lower)
4	PH	6.5-9	6.5-9

3.3 Summary of Procedure

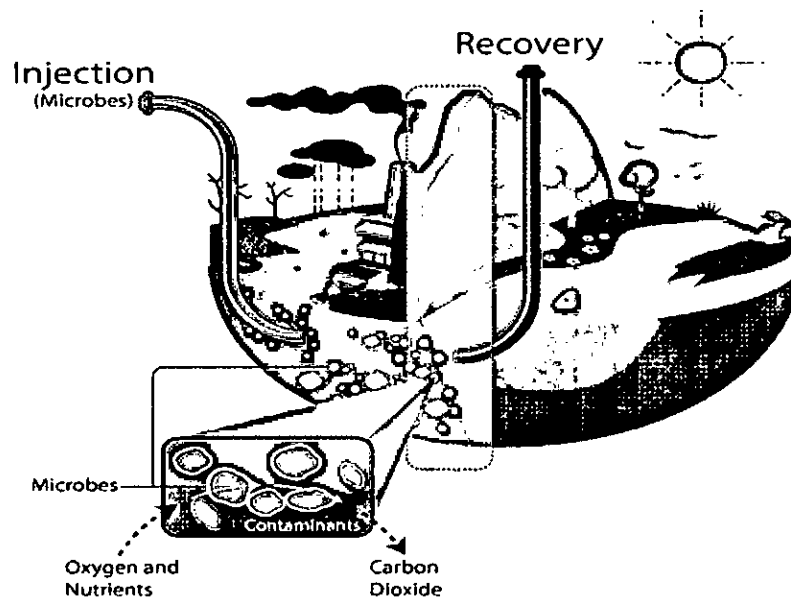
- a) Identification of Drains
- b) Treatment of Drains
- c) Testing of Samples
- d) Maintenance of records

3.4 Definitions

3.4.1 Bioremediation

Bioremediation is a process used to treat contaminated media, including water, soil and subsurface material, by altering environmental conditions to stimulate growth of microorganisms and degrade the target pollutants. In many cases, bioremediation is less expensive and more sustainable than other remediation alternatives. Biological treatment is a similar approach used to treat wastes including wastewater, industrial waste and solid waste.

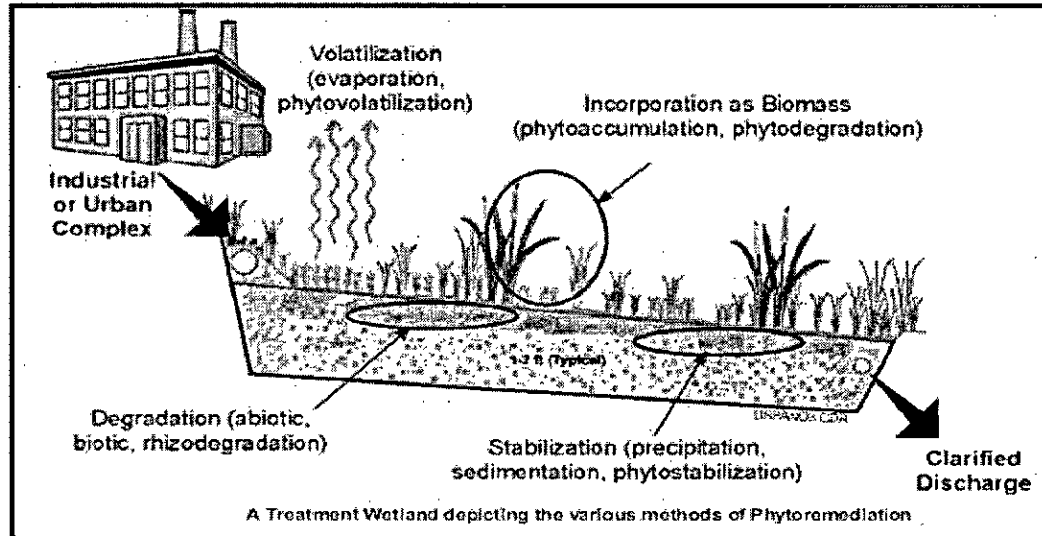
PROCESS OF BIOREMEDIATION



3.4.2 Phytoremediation

Phytoremediation refers to the technologies that use living plants to clean up soil, air, and water contaminated with hazardous contaminants. It is defined as

"the use of green plants and the associated microorganisms, along with proper soil amendments and agronomic techniques to either contain, remove or render toxic environmental contaminants harmless".



3.5 Personnel Qualifications/Responsibilities

Staff conducting evaluations of drains suitable for Bio/Phyto-remediation activities under this SOP must have experience in assessment and remediation for waste water and know the regulatory requirements for managing and treating waste water through Bio/Phyto-remediation.

3.6 SOP Preparation

Bioremediation is a process used to treat contaminated media, including water, soil and subsurface material, by altering environmental conditions to stimulate growth of microorganisms and degrade the target pollutants. In many cases, bioremediation is less expensive and more sustainable than other remediation alternatives. Biological treatment is a similar approach used to treat wastes including wastewater, industrial waste and solid waste.

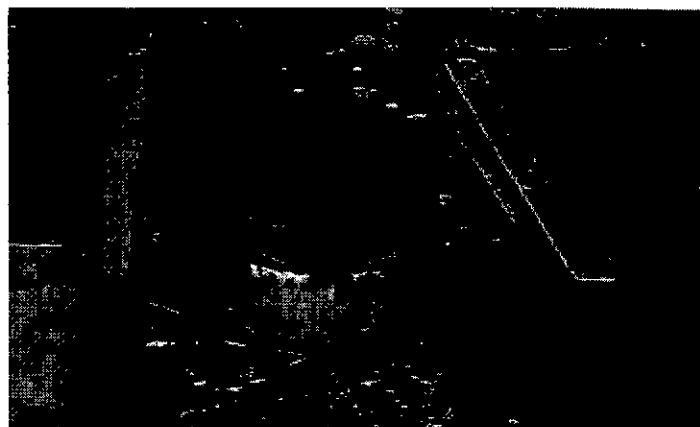
Most bioremediation processes involve oxidation-reduction reactions where either an electron acceptor (commonly oxygen) is added to stimulate oxidation of a reduced pollutant (e.g. hydrocarbons) or an electron donor (commonly an organic substrate) is added to reduce oxidized pollutants (nitrate, perchlorate, oxidized metals, chlorinated solvents, explosives and propellants). In both these approaches, additional nutrients, vitamins, minerals, and pH buffers may be added to optimize conditions for the microorganisms. In some cases, specialized microbial cultures are added (bioaugmentation) to further enhance biodegradation. Some examples of bioremediation related technologies are phytoremediation, mycoremediation, bioventing, bioleaching, landfarming, bio

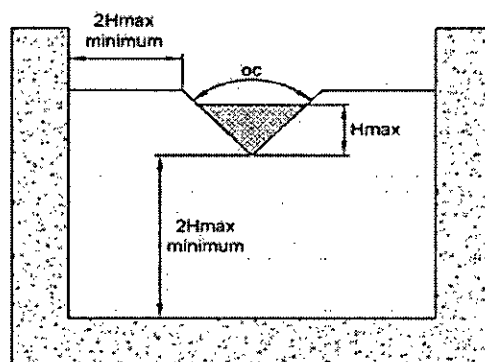
reactor, composting, bioaugmentation, rhizofiltration, and biostimulation.

The major procedures for treatment of drains shall be followed as below

3.6.1 Identification of Drains

- 1) Flow reported in the drain exhibit considerable seasonal variations, therefore, the flows measured by an appropriate and approved scientific technique (Viz V-Notch, Weir etc to be installed by agency) shall be adopted as flows in the drain. The same shall be used for management of the project including all payments towards treatment under the project.
- 2) For the purpose of flow assessment, following seasonal period shall be considered;
 - a. Pre- monsoon summer period (April – June)
 - b. Post-monsoon period (October – December)
 - c. Lean flow period (January – March)
- 3) Suitable flow measuring techniques viz., V-Notch, velocity area method or any other appropriate scientific technique as approved by the competent authority shall be adopted at flow monitoring locations specific to each project/drain. Necessary civil works without compromising the concern of back flooding, if any, will have to be undertaken by the agency.
- 4) **Flow Measurement** – flow shall be measured daily by the project proponent. A proper log book for the measured flow shall be maintained by the agency and pictures of the treatment process as well as flow measurement structure shall be taken at least three times a day (at 10:00 AM, 1:30 PM & 5:00 PM). The Third Party shall also take flow measurements reading while taking the water quality samples.
- 5) Measurement of discharge by 90° V-Noth method has been described below:





The depth of flow is measured over the lower tip of the V bottom and the discharge is:-

$$Q = 1.42 \times \text{Tan of angle of V-notch} \times H^{2.5}$$

As the angle is 90 degrees, the tangent is equal to 1 and hence, the equation simplifies to:-

$$Q = 1.42 \times H^{2.5}$$

Where Q is cum/sec and H is in meters

Note: Discharge measurements for identification purposes to be done at every two hours for 48 hours and then average should be taken of all the discharges to compute the discharge of the drains.

After confirming the discharge of the drain between 0.2 MLD to 10 MLD, it should be tested for BOD load to be equal to or greater than 40.0 mg/l for confirming the drain to be taken for Bio/Phyto-remediation.

3.6.2 Water Quality Assessment

Third Party Inspection (TPI) agency shall be assigned as per the location of the drain. The assigned TPI shall take samples as per following sampling frequency based upon flow in the drain. The sample collection and analysis charges with the prescribed frequency are also mentioned in the tables below. The charges are inclusive of sample collection as well as analysis charges based on the CPCB notified water analysis charges and are exclusive of any other charges.

Sr. No.	Project Stage	Sampling Frequency	Total samples	Sample collection and analysis charges (in Rs.)
1	Before Start of Demonstration/ Free trial	5 days, two location, daily sampling (5x2)	10	1960/- (For Analysis) + 1400/- (sample collection) = 26600/- for base line determination

2	During Demonstration/ Free trial(one month)	2 samples, two location, weekly (2x2x4 weeks)	16	1960/- (For Analysis) + 1400/- (sample collection) = 42560/-
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The frequency of sampling may be regulated based on the actual flow in the drain once the efficacy is established in the drain during the free trial period in the following manner:-

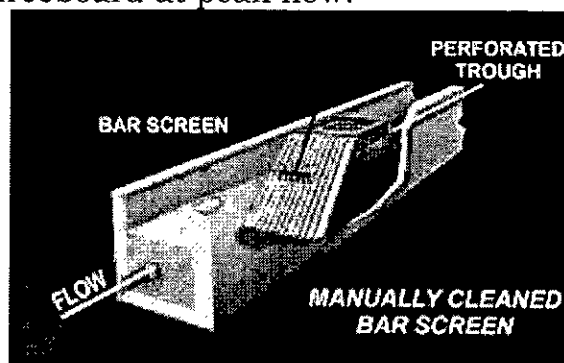
Sr. No.	Project Stage	Sampling Frequency	Total samples	Sample collection and analysis charges (in Rs.)
1	For 11 months of treatment once the efficacy of the demonstration is established and flow is less than or equal to 10 MLD	One sample at outlet (only), once in fifteen days (2 fortnights x 11 months)	22	1960/- (For Analysis) + 960/- (sample collection) = 64240/- for base line determination

The TPI shall collect samples in presence of technology provider or as approved by competent authority.

The cost of the sample collection and analysis has been calculated and mentioned in the tables above. However, transportation charges, Administrative charges and the taxes as applicable shall be payable separately on actual basis.

3.6.3 Treatment of Drains

- i. The drains taken up for treatment should be stream lined for about 5m upstream and downstream at the point of installation of V-notch for regular and correct measurements of discharge.
- ii. Construction of Bund at sections of drains for ponding and fixing of manual bar screens and its regular cleaning and maintenance.
- iii. The manual bar screen should have 20mm opening having bars of 10mm thickness. The height of the manual bar screen should be such that it should have 20cm freeboard at peak flow.



- iv. Supply of bacteria or other materials required as per technology with all T&P for Biological or other treatment of drains.
- v. Preparation of dosing or input material and its application at drains located at different places for treatment of drains.
- vi. Screenings and sludge removal along with it's safe disposal at specified locations within the municipal area up to maximum distance of 5Km.

3.6.4 Maintenance of Records

- i. Daily Discharge Measurements Book shall be maintained to record the discharges of the drains taken and to be signed daily by competent authority.
- ii. Daily Enzyme/Bacteria/chemical Dosing Book shall be maintained to record the quantity of enzyme/ bacteria/ chemical dosed daily and to be signed daily by competent authority.
- iii. Sample Analysis Book shall be maintained to record the analysis of influent and effluent parameters carried out weekly as in the test reports and to be signed by competent authority.

4 Records Management

All written determinations, photos, and other documents associated with site remediation activities will be entered into the site-specific project folder following program protocols. This SOP should be reviewed, updated, and approved in the same manner as the original document every 5 years or when procedures, protocols, or activities change, whichever occurs first.

5 Quality Assurance and Quality Control

To determine whether a proposed location is suitable to treat drains using Bio/Phyto-remediation, Staff will evaluate project planning documents according to applicable regulations as defined in the previous sections and published by Government and relevant agencies. All the determinations will go through senior technical review prior to finalization.

6 Payments to the Agencies

The various conditions of payments have been described below:-

- 6.1 Initial 30 days is free trial period, the agency shall be given work order for 11 months post free trial period only in case the efficacy of treatment is fulfilled as per the standards given below:-

Sr. No.	Parameters	Out flow reduction/ Values(at the end of trial period)	Out flow reduction/ Values(beyond trial period)
1	BOD _{3,27} (Biochemical Oxygen Demand)	≤30.0 mg/l Or 40% reduction in BOD load value from the initial reading(whichever is lower)	≤30.0 mg/l Or 70% reduction in BOD load value from the initial reading(whichever is lower)
2	COD(Chemical Oxygen Demand)	≤150.0 mg/l Or 40% reduction in COD load value from the initial reading(whichever is lower)	≤150.0 mg/l Or 70% reduction in COD load value from the initial reading(whichever is lower)
3	TSS(Total Suspended Solids)	≤100.0 mg/l Or 40% reduction in TSS load value from the initial reading (whichever is lower)	≤100.0 mg/l Or 70% reduction in TSS load value from the initial reading (whichever is lower)
4	PH	6.5-9	6.5-9

6.2 During the 11 months i.e. beyond free trial period, if any of the above parameters is beyond the limits mentioned in the table (as per column 4), the agency shall not be liable for any payment during the period of noncompliance of the standards.

6.3 Billing

- i. The project proponent shall raise monthly bills to the TPI by 7 of every month The bill to be verified/ certified by the TPI institution for correctness of flow and water quality standards and be submitted to ULB/Authority for payment.
- ii. To avoid any apprehension of manipulation intervening reach between Start point and end poin, TPI may, based on merit and field inputs, collect two or more number of samples any two or more random locations in between this reach with permission/directions of ULB/authority. Any abnormal observation from these samples shall be duly considered by TPI in its report to authority or its representative. ULB/Authority may appropriately consider such observations while release of payment.
- iii. Since during monsoon, natural flow is available in abundance so, the projects shall not carry out any intervention during the monsoon season i.e. 1st July to 30 September. Interventions, if any, during this period, shall only be carriedd out only after approval of representative of ULB/Authority.
- iv. The trial period, usually one month, is for the agency to prove the efficacy of its proposed technology. ULB/Authority shall not entertain any bills raised by the agency during the free demonstration period (i.e., trial period).

- v. Sampling Method:- Grab sampling or as approved by representative of ULB/Authority.
- vi. Sampling start date:- 5 days continuous sampling a minimum two locations (at least starting point and end point) shall be carried out by the TPI prior to start of demonstration to obtain the baseline data for all seasons. This exercise shall be carried out by TPI preferably within 15 days of start of respective season.
- vii. Agency shall ensure that any pollution load arising due to variation in discharge from industry (sugar or distillery or any other industry) is taken care to meet the acceptable quality parameters as per the protocol.
- viii. Scavenging and cleaning of drain area by ensuring the garbage, floating matter, debris and vegetation shall be cleaned from the drain and be transported to the nearest collection site of respective ULBs. The cleaning of accumulated solid waste shall be carried out regularly by the agency. Also the reports of solid waste collected etc shall be maintained by agency and communicated to ULB/Authority.
- ix. The Agency shall carry out Public awareness programme to educate the local residents about causes and ill effects pollution through involvement of local educational institutes and public figures. The agency shall share the reports of such events to ULB/Authority and TPI, with relevant pictures, on monthly basis.

7 Attachments

- a) NMCG order No. V-174/2014-15/414/NMCG .

Letter No. / /

Date:

E-Tender Notice

On behalf of ----- invites bids in electronics tendering for "Procurements of Scientific & Technical Services for Complete Supply, Fabrication, Erection, Installation & Successful Commissioning of In Situ Nallah Treatment by Bio Phyto-remediation technology in Drains of.....(River)..... in -----(Place)----- Uttar Pradesh having total discharge of MLD as tabulated here under." from the interested firms/manufacturer/technology providers having desired technical and financial capabilities. The details for submission of revised e-bids will be available in the tender document which will be available on the U.P. Govt's e-procurement website i.e. <https://etender.up.nic.in> from Bidder must have proven experience, high repute, sound technical and financial capabilities for the work specified as below:

S. No.	Name / Location of Drain	No's of Drains / Approximate Total Discharge	Cost of Tender Document (in Rs. incl. GST)	Earnest Money (in Lakh Rs.)	Date of start of download	Last Date for online upload	Date of Opening
1	2	3	4	5	6	7	8
Treatment of drains by Bio-remediation (bacteria or enzyme intervention) in drains of having total discharge of MLD.							
1	Drains having discharge greater than 0.2 MLD but less than or equal to 1.0 MLD	....	(As per Annexure "छ, ज") + 18% GST	2% of work Cost upto Rs. 5 Crore/ 1% or 10 lacs whichever is higher for works bove Rs. 5 Crore (Annexure ष )	.....	.....	.....
2	Drains having discharge greater than 01 MLD	....	(As per Annexure "छ, ज") + 18% GST	2% of work Cost upto Rs. 5 Crore/ 1% or 10 lacs whichever is higher for works bove Rs. 5 Crore (Annexure ष )	.....	.....	.....

IMPORTANT TERMS AND CONDITIONS:

1. Only e-bidding is accepted. Hence the tenderer has to apply through e-tendering process.
2. Separate bid will be accepted for each work given above in the table.
3. The tender fee shall have to be deposited through RTGS/Demand Draft (DD) in favour of payable at
4. EMD shall be paid through RTGS or in the form of FDR/Bank Guarantee in favour of "----- valid up to 180 days, and issued by any scheduled commercial bank. EMD in any other form shall not be accepted. No Interest shall be paid on Earnest Money.
5. The e-bids will be opened on in the office
6. For any other inquiries and details, contact
7. the right to accept or reject any or all the bids without assigning any reasons, what so ever. Any claim of the tenderer shall not be entertained in this regard.
8. The rates quoted in the e-tender shall be valid for 120 days from the date of submission of tender.
9. All the conditions in the tender document should be read carefully and be fulfilled essentially.
10. The quantum of work can vary on either side up to any extent.
11. The bidders are advised to inspect the site before quoting the rates.

12. Flow data of drains may change as per actual requirement/ condition.
13. If the need arises, any other drain other than those listed in may also required to be treated in the opinion of same shall be added in the scope of desirable firm as above.
14. In all the above packages, all the infrastructure and setup should be completed within 7 days from the date of issue of LOI and desired output parameters should be maintained within 30 days of commissioning. No request for extension of time shall be entertained.
15. The rates given/ to be quoted shall be inclusive of all other taxes/cess etc. but excluding GST as described in price schedule.
16. All TDS, I.T. Labour cess shall be deducted as applicable.
17. Lawyers/Members of Bar Council are not eligible to participate in the bidding process either individually or joint venture.

Endt. No.- / /

Date:

Letter No: -

Dated: -

E-Tender Notice for Publication in News Papers

On behalf of ----- e-tender notice are invited on two bid system for “**Procurements of Scientific & Technical Services for Complete Supply, Fabrication, Erection, Installation & Successful Commissioning of In Situ Nallah Treatment by Bio/Phyto-remediation technology in Drains(River)..... in -----(Place)----- having total discharge of MLD**”. Bid document shall be available at e-procurement website <http://etender.up.nic.in>. Interested Bidder/Contractor may view & download bid document and upload their proposal, duly filled, online as per schedule given below:-

- Date for-
- (i) Start date for bid document download :
 - (ii) Last date for online submission of proposal :
 - (iii) Opening of technical proposal :

पत्रांक:-

दिनांक

निविदा सूचना

“Procurements of Scientific & Technical Services for Complete Supply, Fabrication, Erection, Installation & Successful Commissioning of In Situ Nallah Treatment by Bio/Phyto-remediation technology in Drains of(River)..... in(Place)..... having total discharge of MLD”. के कार्य हेतु पुनरीक्षित 0ई-निविदा आमंत्रित की जाती है। ई-निविदा वेबसाइट <http://etender.up.nic.in> पर उपलब्ध होगी, जिसका विवरण निम्नवत् है:-

1. वेबसाइट से ई-निविदा . डाक्यूमेन्ट डाउनलोड प्रारम्भ की तिथि :
2. ई-निविदा आनलाइन जमा करने की अन्तिम तिथि :
3. टेक्निकल ई-निविदा आनलाइन खोलने की तिथि :

E-COMPETITIVE BIDDING

FOR

“PROCUREMENTS OF SCIENTIFIC & TECHNICAL SERVICES FOR COMPLETE SUPPLY, FABRICATION, ERECTION, INSTALLATION & SUCCESSFUL COMMISSIONING OF IN SITU NALLAH TREATMENT BY BIO-REMEDICATION TECHNOLOGY (BACTERIA OR ENZYME INTERVENTION) IN DRAINS OFHAVING TOTAL DISCHARGE OF MLD”

TECHNICAL AND FINANCIAL EVALUATION CUM TECHNICAL BID

**LAST DATE OF RECEIPT :
DATE OF OPENING OF PQ BID :**

.....
.....
.....

E-TENDER DOCUMENT
Technical & Financial Evaluation - cum - Technical Bid
(PRE - QUALIFICATION BID)

NAME OF WORK: "PROCUREMENTS OF SCIENTIFIC & TECHNICAL SERVICES FOR COMPLETE SUPPLY, FABRICATION ERECTION, INSTALLATION & SUCCESSFUL COMMISSIONING OF IN SITU NALLAH TREATMENT BY BIO-REMEDIATION TECHNOLOGY (BACTERIA OR ENZYME INTERVENTION) IN DRAINS OF HAVING TOTAL DISCHARGE OF MLD"

Cost of works put to tender	:	Rs.
Cost of Tender Document (Tender fee)	:	Rs.
Earnest Money	:	Rs.
Contract Period	:	Eight Months (220 days)
Validity of Bid (Tender)	:	120 Days
Validity of Earnest Money	:	180 Days
E-TENDER SCHEDULE		
Date & time of Release of E-Tender for download from E-Tendering portal (website)/Bid submission start date &time	:	.....
Pre Bid Meeting	:	.....
Last date/time of submission of E-Bid with scan copy of BC for cost of tender FDR of EMD on E-Tendering portal (website).	:	.....
Last date/ time of submission of original BC of e-tender fee & original FDR of EMD in physical form.	:	.....
Date/time of opening Pre-qualification part through E-Tender procurement solution	:	.....
Date/time of opening Price Bid through E-Tender procurement solution	:	.....

Place of submission of original EMD & cost of tender document & Place of opening of Pre-qualification Bids	:	.....
Reply to the bid queries	:	.....
Payments details	:	<p>1. Tender fee, Earnest money deposit, PAN Card shall be uploaded online.</p> <p>2. Tender Fee (Document fee) amounting to Rs. in favor in form of Demand Draft.</p> <p>Earnest Money Deposit Rs. in form of FDR or Bank Guarantee or RTGS in favour of ----- valid up to 180 shall be issued by any scheduled Commercial bank.</p>

Contents

1. Instructions to Bidders.....	6
2. Scope of work applicable -	7
2.1 Evaluation criteria of Bio-remediation	8
3. Pre Bid Site Inspection:.....	9
4. Cost of Bidding Document:.....	9
4.1 Clarification by Bidder:.....	9
4.2 Method of submitting the bid application:	9
4.3 Manner of submission of tender (Two Bid system)	10
4.4 Opening of tender	11
4.5 Examination of Bids and Determination of Responsiveness:	11
4.6 Award criteria.....	11
4.7 Notification of Award and signing of agreement.	11
5. PREQUALIFICATION REQUIREMENTS.....	13
5.1 Earnest Money and Tender Document Cost:.....	13
5.2 Documents required with the technical bid:.....	13
5.3 Technical capability:	14
5.4 Financial capability	15
5.5 Bid Capacity-.....	15
5.6 Disqualification-.....	15
5.7 Performance Security Deposit-	15
6. GENERAL CONDITIONS OF CONTRACT	17
6.1 DEFINITION:	17
6.2 PARTIES TO THE CONTRACT	17
6.3 CONSTITUTION OF BIDDERS	17
6.4 SUBLETTING	18
6.5 EXECUTION OF WORK: BIDDER'S RESPONSIBILITIES	18
6.6 LIABILITY FOR PERSONNEL	18
6.7 PERIOD OF CONTRACT.....	19
6.8 SECURITY DEPOSIT	19
6.9 LIABILITY OF BIDDER(S) FOR LOSSES ETC. SUFFERED BY THE EMPLOYER	20
6.10 BOOK EXAMINATION	20
6.11 PAYMENT.....	20
6.12 LAW GOVERNING THE CONTRACT/DISPUTE RESOLUTION	21
6.13 DUTIES AND RESPONSIBILITY OF THE BIDDER(S).....	21
6.14 SETTLEMENT OF DISPUTE AND ARBITRATION.....	21
6.15 FORCE MAJEURE.....	22
7. FORM.....	24
7.1 DECLARATION REGARDING GST.....	24
7.2 Solvency Certificate	25
7.3 Bidder Information Form	26

7.4	Technical Specification Compliance cum Deviation Statement Form.....	27
7.5	BID SECURITY FORM-	28
7.6	Bid-Securing Declaration Form	29
7.7	Format for Non-Disclosure Agreement.....	30
7.8	PERFORMANCE SECURITY FORM.....	35
7.9	RTGS/ECS FORMAT.....	36
7.10	No Relation Certificate.....	36
7.11	Undertaking.....	37
Annexure – I (Scope of Work).....		39
Annexure-II		42
Annexure – III (Schedule of Payment).....		44
Annexure - IV.....		45
Checklist of works to be filled by Bidder.....		46

1. Instructions to Bidders

On behalf of, hereby invites bids for the following work on turnkey basis from established independent contractors/ contracting firms from India who are having adequate capabilities and experience of similar nature work as required in the bid documents.

10 Procurements of Scientific & Technical Services for Complete Supply, Fabrication, Erection, Installation & Successful Commissioning of In Situ Nallah Treatment by Bio/Phyto-remediation technology in Drains of having total discharge of MLD.

11 ----- has been entrusted with the implementation of the scheme.

12 The Completion period of the works will be Months.

13 Bidders are advised to read bid documents carefully.

14 The tender documents for the works will be in English.

15 ----- intends to shortlist the Contractors / Firms who fulfill the minimum qualifying criteria. Financial bid of only those bidders shall be opened, who qualify the criteria.

16 Contractors who wish to bid for the works must have the technical know-how, standing experience and proven reputation in similar type of works including other associated work. They should be able to show satisfactory evidence of successful completion & satisfactory performance of such type of work.

17 Lawyers/ Members of the bar council are not eligible to participate in the bidding process either individually or Joint Venture.

18 The bidder must have experience with proven technology, high reputation technical and financial capability for the work, "Procurements of Scientific & Technical Services for Complete Supply, Fabrication, Erection, Installation & Successful Commissioning of In Situ Nallah Treatment by Bio/Phyto-remediation technology in Drains of having total discharge of MLD" categorized herein under:-

S. No.	Category	Description	No. of drains	Discharge (MLD)
1	Type A	Greater than 0.2 MLD but less than or equal to 1.0 MLD		
2	Type B	Greater than 1 MLD to less than/equal to 10 MLD		
Total				

19 Tender Cost for treatment of Drains ofhaving total discharge of MLD by Bio-remediation method – Rs. excluding Taxes.

1.10 Time Frame: - It shall be communicated through LOI issued to successful bidder.

Note: In case any bidder intends to bid for more than one package; he shall submit separate bids for each package.

2. Scope of work applicable -

The scope of work and details of the services to be provided by the Bidder which broadly includes, but is not limited to the followings, for the drains listed in Annexure-IV(Detailed list of Drains), are given below:-

S. No.	Work Description	Tentative number
1	Supply of bacteria or other materials required as per technology with all T&P for Biological or other treatment of drains including supply and installation of V-notch & regular measurement of discharge but exclude sample testing.	As per package
2	Preparation of dozing or input material and its application at drains located at different places during treatment period.	As per package
3	Construction of Bund at sections of drains for ponding and fixing of screens and its maintenance for treatment period.	job
4	Spreading of odour control remedies at selected locations	job
5	Sludge removal & its safe disposal at specified locations within the municipal area up to maximum distance of 5Km.	job
6	Solids/Floating material removal & its safe disposal at specified locations within the municipal area up to maximum distance of 5.0 Km.	job
7.	Weekly collection of composite sample and its testing for BOD, COD, TSS and Ph as per norms of CPCB.	job

Note:-

- i If the desired parameters are not achieved, reduced payment shall be made all deemed to be fit and appropriate in the opinion of competent authority. The payment shall be made as mentioned in Schedule of Payments.
- ii The deliverables will be on hiring basis and necessary systems/ equipments/ instruments/ manpower etc. will be supplied, transported, installed, operationalized, decommissioned and demobilized and / or shifted for its use at another location as specified by ----- during the period of Contract by bidder and will be the property of bidder after the contract period.
- iii Monthly testing of samples & performance monitoring shall be done by Third Party Inspection (TPI) appointed by ---- Cost of TPI shall be borne by and testing of samples and performance monitoring shall be done by ----- after every 15 days.
- iv Duration for treatment and O&M will months

- v. Drains on which treatment plan is proposed are listed in Annexure-IV. However as per actual site condition No. of drains may be changed in either ways.
- vi. The treated effluent parameters shall be demonstrated over 24 hour composite samples with a 98% plus compliance. In other words, not more than 2% samples can be off specifications, on a monthly basis (i.e., max. 1 no. sample in a month). A variance of up to 15% on individual grab samples shall be allowed. In other words, if any parameter of any grab sample is beyond 15% of the stipulated values, the sample shall be considered as "non-compliant". Only 10 grab samples with a variation within 15% of the stipulated values shall be permitted per month. All non-compliant samples will be treated as per tender condition for non-compliance and penalized accordingly.
- vii. Contractor is required to maintain guarantee parameters for treated effluent quality during O & M period. These quality parameters are subject to presumptions that actual pollutant (Pollutants like BOD, TSS, Nitrogen etc. in kg/day) load will not exceed design pollutant load (kg/day) per day for every parameter. However, individual pollutant concentration (mg/l) can exceed up to 10% of design parameters, and total sewage flow can exceed up to 10% design flow.
- viii. During treatment period will impose following penalties/ liquidated damages for not maintaining the guaranteed parameters, as described below:
- a. In case National Green Tribunal New Delhi/ Central Pollution Control Board/ Uttar Pradesh Pollution Control Board imposes any penalty, within contract period, for non-conformance of discharge parameters (BOD, COD, TSS and pH) for the drain under treatment, the amount of such penalty will be charged to the bidder.

2.1 Evaluation criteria of Bio-remediation

Evaluation criteria of Bio-remediation of drains during treatment period as under normal conditions (As per NMCG):

Sr. No.	Parameters	Out flow reduction/ Values(at the end of trial period)	Out flow reduction/ Values(beyond trial period)
1	BOD _{3,27} (Biochemical Oxygen Demand)	≤30.0 mg/l Or 40% reduction in BOD load value from the initial reading(whichever is lower)	≤30.0 mg/l Or 70% reduction in BOD load value from the initial reading(whichever is lower)
2	COD(Chemical Oxygen Demand)	≤150.0 mg/l Or 40% reduction in COD load value from the initial reading(whichever is lower)	≤150.0 mg/l Or 70% reduction in COD load value from the initial reading(whichever is lower)
3	TSS(Total Suspended Solids)	≤100.0 mg/l Or 40% reduction in TSS load value from the initial reading (whichever is lower)	≤100.0 mg/l Or 70% reduction in TSS load value from the initial reading (whichever is lower)
4	PH	6.5-9	6.5-9

3. Pre Bid Site Inspection:

The interested bidders are advised to visit the sites & towns prior to the bid submission and get themselves acquainted with the actual site conditions and may hold discussions with the -----
- if so required. However no travelling and any other cost / expense shall be payable for this purpose.

Where necessary, before submitting the Bid, the Bidder should inspect and examine the site and its surroundings and shall satisfy itself about form and nature of the Site, the quantities and nature of the work/service and materials necessary for the completion of the works/services, means of access to the site, the accommodation it may require, and in general, obtain all necessary information as to risk, contingencies and other circumstances which may influence or affect its tender. No extra charges consequent on any misunderstanding or otherwise shall be allowed.

4. Cost of Bidding Document:

The bidder shall bear all costs associated with the preparation and submission of its bids.
----- shall in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

4.1 Clarification by Bidder:

Intending Bidder will be allowed to seek clarification in specifications, Conditions of Contract, etc. in writing to ----- within 48 hours before the opening of bid, ----- will communicate such clarifications to the entire intending Bidder who have purchased or downloaded the tender document from the ----- in writing before submission of tender. All such communication like addendum, amendment and clarifications shall form part of the tender documents.

4.2 Method of submitting the bid application:

- i. The tender is in two bid system.
- ii. If the bidder is an individual, the application shall be signed by him above his full type written name and current address.
- iii. If the bidder is a proprietary firm, the application shall be signed by the proprietor above his full typewritten name and the full name of his firm with its current address.
- iv. If the bidder is a firm in partnership, the application shall be signed by all the partners of the firm above their full typewritten names and current addresses, or alternatively, by a partner holding power of attorney for the firm. In the later case a certified copy of the partnership deed and current address of all the partners of the firm shall accompany the application.
- v. If the bidder is limited company or a corporation, the application shall be signed by a duly authorized person holding power of attorney for signing the application accompanied by a copy of the power of attorney. The bidder shall also furnish a copy of the Memorandum of Articles of Association duly attested by a Public Notary.
- vi. At any time prior to the Submission Deadline, the -----, may, for any reason, whether at its own initiative, or in response to a clarification requested by a prospective Bidder, amend the Bidding Documents by addendum. These shall be made available only on the -----'s website. All relevant information like minutes of pre-bid meeting and response to the bidder's query shall only be available in the website of -----

- vii. It is bidder's responsibility who purchase or download the tender document to contact with -----, and check regularly on the -----'s website before submission of its Bid. All these addendum, amendment and clarification shall be deemed to be part of the tender document and it will be assumed that the information contained therein has been taken into account by the Bidder in its Bid. The earnest money also liable to forfeited if bidder fail to furnish the information given in addendum, amendment and clarification in its Bid.
- viii. In order to afford prospective Bidders reasonable time in which to take the amendment into account while preparing their Bids, the -----, may, at its discretion, extend the Submission Deadline. Details of time extension, if any will be provided in the website of -----.
- ix. Tenders which do not comply with this instruction shall be summarily rejected.
- x. The bid shall be accompanied by earnest money as mentioned in NIT of respective package by way of Demand Draft in favour of -----payable at All credentials, documents and copies of certificate/information called for shall be submitted as per tender document with the bid.
- xi. Necessary clarification if any required by -----shall be furnished by the bidder within the time given by -----, for the same. The -----, is at liberty to verify any or all documents submitted by the bidder, even by referring to third parties.
- xii. It should be clearly understood by the bidder that no further opportunity shall be given to them to modify or withdraw any stipulation at any stages of the contract.
- xiii. The tender form shall be filled in by the bidder clearly, neatly and accurately. Any alteration, erasers or over-writing will render the tender invalid. Alteration neatly carried out and attested over the full signature of bidder, however, is permitted in exceptional circumstance but not as a matter of right.

4.3 Manner of submission of tender (Two Bid system)

Tenders shall be submitted in TWO SEPARATE ENVELOPES on U.P. Govt's e-procurement website i.e. <https://ctender.up.nic.in>. One envelope shall contain the technical documents & documents related to eligibility criteria duly super-scribed as "technical Bid". Second envelope shall contain the price details duly super-scribed as "Price Bid". Technical and Financial bid will be opened on the same day.

The two envelopes to be uploaded shall contain the following:

Envelope No. 1 (Technical Bid):

- a. EMD
- b. Tender fee.
- c. All documents required as per Eligibility Criteria (to be submitted in the same chronological order as asked in the Criteria)
- d. All required annexure to be filled and submitted as asked in the tender document.
- e. Work Plan/Methodology

Envelope No. 2 (Price/ Financial Bid):

This envelope shall only contain the Price (Financial) Bid. The price bid shall be filled as per original enclosed schedule and in which the bidder participation requiring shall typed or written in indelible ink in words and figures at appropriate places.

Rates

Rate shall be quoted inclusive of all taxes except GST. GST will be paid separately as applicable. Tenderer should quotes their rates after passing on benefits of input tax credit in favor of -----, in quoted rates.

4.4 Opening of tender

The tender i.e. technical bid will be opened in the Office of -----The bidder will be at liberty to be present either in person or through an authorized representative at the time of opening of the tenders.

At the stipulated time of opening, Envelope No.1 shall be opened first. The offers from those bidders who are unable to unconditionally accept tender conditions or who fail to deposit the required E.M.D and Valid documentary proof of eligibility criteria will be rejected and Envelope No 2 containing tender documents shall not be opened.

The price bid of only those bidders will be opened whose technical bid are found to be acceptable as per the evaluation criteria for technical bids.

In the event of more than one bidder becomes L1, the Competent Authority, reserves the right to select one of the L1 bidders based upon various norms like quality of work experience, number of years in operation and other credentials like work completion certificate of any Central Government / State Government Undertaking /Organization.

4.5 Examination of Bids and Determination of Responsiveness:

- i For evaluation / examination of technical & price bids, an independent selection committee will be formed and the price bids will be opened only in respect of eligible and technical qualified bidders in accordance with the eligibility and evaluation criteria. Information relating to examination, clarification, evaluation and comparison of bids and recommendations for the award of a contract shall not be disclosed to bidders or any other persons, not initially concerned with such process until the award to the successful bidder has been announced. Any effort by a bidder to influence the Employer -----processing of bids or award decisions may result in the rejection of the bidder's bid.
- ii A substantially responsive bid is one that conforms to all the terms and conditions and specifications of the bidding document without material deviation or reservation. A material deviation or reservation is one which affects in any substantial way the scope, quality, or performance of the work inconsistent with the bidding documents.
- iii Employer's rights or the bidder's obligations under the contract, or whose rectification would affect unfairly the competitive position of other bidders presenting substantially responsive bids.
- iv If a bid is not substantially responsive, it will be rejected by the Employer and may not subsequently be made responsive by correction or withdrawal and the non-conforming deviations or reservations.

4.6 Award criteria

The employer shall award the contract to the Bidder whose Bid has been determined to be responsive to the bidding documents and who has offered the lowest evaluated Bid Price.

4.7 Notification of Award and signing of agreement.

- i The bidder whose bid has been accepted will be notified of the award by the employer prior to expiration of the Bid validity period. This letter of acceptance will state the sum that the employer will pay the bidder in consideration of the execution and completion of the works by the bidder.
- ii The notice of tender and any other communication circulated to the tender shall form part of

406

the contract document. The successful bidder on acceptance of his tender by accepting authority shall within 15 days of date of the Award Letter of the work sign the contract agreement consisting of Notice Inviting tenders, General conditions of the contract as issued at the time of invitation of tender and acceptance thereof together with any correspondence there to.

- iii The contract agreement shall be executed on a non-judicial stamp paper of Rs. 100/- and the cost of the same shall be borne by the bidder.
- iv The pre bid meeting is proposed at

5. PREQUALIFICATION REQUIREMENTS

5.1 Earnest Money and Tender Document Cost:

- i The cost of tender document will have to be submitted in the form of Demand Draft only in favor of -----payable at Lucknow and Earnest Money shall have to be deposited in the form of RTGS/FDR/BG issued from any scheduled commercial Bank. No Interest shall be payable on Earnest Money. The validity of FDR/BG shall be 180 days & should be in favour of -----
- ii The earnest money shall be liable to forfeiture if the Bidder after submitting his tender modifies his offer or the terms & conditions thereof in any manner, even if ----- has not suffered any loss, during the validity period of this tender enquiry. It being understood that the tender documents have been made available to him and he is being permitted to tender in consideration of his agreement to this stipulation. The earnest money is also liable to be forfeited in the event of bidder fails to furnish the requisite security deposit by the due date without prejudice to any other rights and remedies of the -----, under contract and law.
- iii The earnest money will be returned to all unsuccessful bidders without interest as soon as practicable, after decision on tenders. The earnest money to the successful bidder will be returned after furnishing of security deposit. No interest shall be payable on the amount of earnest money in any case.

5.2 Documents required with the technical bid:

- i Self-attested scanned copies of the documents mentioned in Technical capability and Financial capability are to be uploaded with the bid, failing which the tender will be rejected.
- ii The bidder shall sign on each page of tender document for acceptance of all terms and conditions.

5.3 Technical capability:

Applicable for Type-A; Type-B packages.(as per flag-ए)

S.No	Criteria	Documents to be submitted
1	<p>The Bidder should have experience of Bio/Phyto-remediation work contract, including testing and commissioning successfully in last 10 years as on date of publication of NIT,</p> <p>1. Experience of having successfully completed similar works as mentioned below during the last 10 years as on date of publication of NIT:</p> <p>A) One similar works capacity of each not less than the volume equal to 60% of --MLD.</p> <p style="text-align: center;">or</p> <p>B) Two similar works capacity of each not less than the volume equal to 40% of -- MLD.</p> <p style="text-align: center;">or</p> <p>C) Three similar works capacity of each not less than the volume equal to 30% of --MLD.</p> <p>Similar work means, in-situ treatment of flowing wastewater in open drains/Rivers/sewers by Bioremediation process. The Certificates of work experience should be issued by an officer of not below the rank of Executive Engineer/Project Manager or equivalent from any of central Govt. department/State Govt. department/Central Autonomous Bodies/State Autonomous Bodies/Central Public Sector under taking/state Public Sector under taking /City Development Authority/Municipal corporation of city/ formed under any Act by Central/State Govt. & Published in central/state Gazette. Private work experience shall not be considered.</p> <p>1. The experience cited could include experience of Bidder's ultimate parent or ultimate parent's current subsidiary.</p> <p>2. The Bidder may be a firm/contractor/manufacturer or technology provider.</p>	Contracts/ Work Orders for experience cited and Certificate of successful completion of the event.
2	<p>The bidder should upload complete technology, work schedule, procedure along with complete information about biological product with authenticated certificate which prove that product should eco-friendly, non-hazardous, nontoxic and safe for human as well as aquatics. Product certificate should be issued by IITR, PCB or any similar Govt. laboratories in India. Missing of product certificate, financial bid shall not be opened or bid should discard.</p>	
3	<p>The Bidder should be either an existing Firm registered in UPJN or company registered in India under the Company Act, 1956.</p>	
4	<p>Bidder may be a single entity or a Consortium of a maximum of 4 (four) members with one lead member having equity more than 51%</p>	

5.4 Financial capability

Financial capability condition is applicable corresponding to the respective package:-

- 5.4.1 In case of a consortium, it shall comply with the following:
- a. Turnover criteria to be met by Lead Member.
 - b. Number of members in a Consortium should be limited to 4 (four).
- 5.4.2 In case of a Technology provider, it shall comply with the following:
- c. Turnover criteria to be met by Lead Member.
 - d. Technical criteria shall be met by Technology provider, who will guarantee the successful completion of treatment and project as a whole.
 - e. In case of manufacturers affidavit to guarantee the work done will be required from the manufacturers and also meet the technical criteria.
- 5.4.3 The bidders will be assessed on technical and financial capabilities.

5.5 Bid Capacity-

Not to be evaluated.

5.6 Disqualification-

5.6.1 Even though the bidders meet the above qualifying criteria, they are subjected to be disqualified if they have:

- (a) Made misleading or false representations in the forms, statements, affidavits and attachments submitted in proof of the qualification requirements; and/or
- (b) Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.
- (c) Participated in the previous bidding for the same work and had quoted unreasonably high or low bid prices and could not furnish rational justification for it to the Employer.

5.6.2 Each bidder must produce:

- (a) The current income-tax clearance certificate or copy of income tax return of last 3 years.
- (b) The Bidder has a GST registration certificate.
- (c) The proof that the firm is registered with Provident Fund Authorities.
- (d) Last 5 years audited balance sheet.
- (e) Registration of the Firm for Labour welfare cess and the Firm shall have to produce at the time of signing the contract registration of its labours also for labour welfare cess without which firm may be denied any payment of work as per labour laws of the state.

5.7 Performance Security Deposit-

- i The successful bidder shall furnish within 2 weeks of the acceptance of his tender a Performance Security Deposit of 10% of Contract price for respective package as BG/FDR issued from any scheduled commercial Bank in favour of,,.....
- ii The Security Deposit shall be furnished in favour of the -----as mentioned in LOI.

410

- iii. The Security Deposit furnished by the bidder shall be subject to the terms & conditions given in the Annexure of this tender and -----will not be liable for payment of any interest on the security deposit or any depreciation of value of the equipment/ material/machinery etc. employed.
- iv. If the successful bidder had previously held any contract in ----- and furnished security deposit, the same shall not be adjusted against this tender and a fresh security deposit will be required to be furnished.
- v. Alternately on request of the contractor/firm, 5% of the performance guarantee will be accepted at the time of signing of contract and rest 5% may be deducted from the initial running bill in a single deduction or at the rate of minimum 10% of the gross bill amount of running bill. However, in any case whole amount of balance performance guarantee shall be deducted within one year.
- vi. Additional performance security have to be deposited by the contractor/firm in case of quoting rates below SOR as per the directions laid by prevailing U.P. Government orders issued by the U.P. Public Works Department.

6. GENERAL CONDITIONS OF CONTRACT

6.1 DEFINITION:

- (a) The terms 'Contract' shall mean and include the invitation to tender incorporating also the instruction to bidder, the tender, its annexure, appendixes, schedules, acceptance of tender and such general and special conditions as may be added to it.
- (b) The terms ----- wherever occurs shall mean -----and will include its General Manager/Superintending Engineer and its successor or successors and assignees of controlling office of related zone.
- (c) The terms ----- shall mean its ----- and its successor or successors and assignees.
- (d) The term "Bidder" shall mean and include the person or person, firm or company with whom the contract has been placed including their heirs, executors, administrators, successors and their permitted assignees, as the case maybe.
- (e) The term 'Contract Rates' shall mean the rate of payment accepted by the -----, for and on behalf of -----.
- (f) The term "Employer" shall mean -----

6.2 PARTIES TO THE CONTRACT

- a) Bidding process will be carried out from Office of the ----- After completion of bidding process i.e. after finalization of successful bidder, it shall be handed over to authorized ----- will authorize the Engineer-in- Charge (EIC) for issue of LOI, contract management and execution of work. The parties to the contract are successful bidder (herein after called 'Contractor') and -----, represented by the --- and/or any other person authorized to act on behalf of the -----The person signing the tender or any other document (s) forming part of the tender on behalf of any other person or a firm shall be deemed to warrant that he has authority to bind such other person or the firm, as the case may be in such matter pertaining to the contract, if, one enquiry, it is found that the person concerned has no such authority. -----, may without prejudice to other civil, criminal remedies, terminate the contract and hold the signatory liable for all cost and damages.

6.3 CONSTITUTION OF BIDDERS

- (g) "The tenders shall be entertained from the parties having all statutory registration with the appropriate authorities" Bidder shall at the time of submission of tender declare whether they are sole proprietary concern or registered Partnership Firm of Private Limited Company or a Public Limited Company incorporated in India or Hindu Undivided Firm. The Composition of the partnership, names of Directors or companies and name of the Karta of Hindu Undivided Family shall be indicated. The bidders shall also nominate person in whose hands the active Management and control of the work relating to the contract during the tenure of the contract would lie. The person so nominated shall be deemed to have power of attorney form the bidder(s) in respect of the bidder and whose acts shall be binding on the bidder(s).
- (h) The contactor shall well acquaint and study carefully and get clarified site conditions, surroundings, approaches, working conditions, the materials, machines, equipments, specifications, schedule of quantities, frequencies of different operations and conditions of the tender documents and to get clarifications and explanations, if

required, from the Officer in Charge to fully appreciate the scope of work before quoting his rates.

- (i) The bidders shall not make any change in the constitution of the firm during the currency of the contract, without the prior approval of the ----- . The bidders shall notify, to the ----- about the death/resignation of any of the partner(s)/director(s) immediately on the occurrence of such an event. On receipt of such notice the ----- shall have the right to terminate the contract at its discretion.

6.4 SUBLETTING

The bidder(s) shall not sublet transfer or assign the contract or any part thereof without the prior written approval of the ----- In the event of the bidders contravening this condition the ----- is entitled to terminate the contract and to get the balance items under the contract extended at the risk and cost of the bidder and the bidder(s) shall be liable for any loss or damage which the ----- may sustain in consequence or arising out of such replacing of the contract.

6.5 EXECUTION OF WORK: BIDDER'S RESPONSIBILITIES

- (a) The bidder shall ensure quality work in a planned and time bound manner. Any substandard material/ work set beyond out tolerance limits shall be summarily rejected by the competent authority.
- (b) The work shall be carried out in the manner complying in all respects with the requirements of relevant byelaws of the local body under the jurisdiction of which the work is to be executed or as directed by the competent authority and nothing extra shall be paid on this account.
- (c) The bidder shall comply with proper and legal orders and directions of the local or public authority or Municipality and abide by their rules and regulations and pay all fees and charges, which he may be liable.
- (d) The bidder shall dump garbage/ malba/ wastage at specified /demarcated/notified site/ground by the local municipal authorities (ULB) on his own cost and responsibility and shall not stack building material / malba on road or on the land owned by any other authority, as the case may be. It will be the responsibility of the bidder in consultation with ULB/----- to identify the dumping site/ground and to get permission from the concerned local authority/corporation on his own responsibilities and expenses.
- (e) No assistance of any kind shall be made available by the department for the purchase of equipment, plants, machinery, materials of any kind or any other items required to be carried out in execution of work. Payment will be made in Indian currency only for the executed work.
- (f) Work shall be carried out on all days including Sundays and Holidays. The bidder shall attend complaints received in connection with the services immediately.
- (g) The bidder shall provide one four wheeler and two motorcycles in good working conditions for inspection of site by ----- staff.

6.6 LIABILITY FOR PERSONNEL

- (j) All persons employed by the bidder(s) shall be engaged by them/him as his/their own employees in all respects and the responsibilities/obligations under contract Labour (R&R) Act 1970, the Indian Factory Act the Workmen compensation Act 'Employees Provident Fund Act' and under minimum wages Act and various other statutory enactments shall be that of the bidder.
- (k) The bidder shall indemnify the ----- against all the claims whatsoever in respect of the said personnel and workmen compensation act, EPF Act, ESI Act, or any other statutory/Provisions or otherwise in respect of any damage, penalty, compensation, interest, fines payable in consequence of any accident or injury sustained by any worker of the Bidder. The bidder shall Co-ordinate with ESI authorities to get the family

treatment card for his staff.

413

- (l) The bidder shall also make available such returns/records for inspection by authorized by ----- . The bidder shall maintain necessary record and registers like wages book and wage slip, etc. register of unpaid wages and register of fines and deductions.
- (m) The bidder shall regularly liquidate any financial liability under the contract towards fulfilling statutory obligations stipulated in different labour Act/rules/instructions/ circulars etc. applicable to the contract and submit proof of having fulfilled the same.

6.7 PERIOD OF CONTRACT

The Contract shall remain in force for all purpose for a period of 5 months from the date of award of contract, which may be further extended upto 8 months based on further guidelines and approval from SMCG/NMCG and satisfactory performance, cost implication and mutually agreed terms and conditions. -----, reserves right to terminate the contract at any time during its currency without assigning any reason there of by giving 7 days' notice in writing to the bidder(s) at their last known place of residence/business and the bidders shall not be entitled to any compensation by reason of such termination. The action of -----under this clause shall be final conclusive and binding on the bidders and shall not be called in question. However, if treatment is found to be in effective, contract shall be terminated immediately and work shall be awarded to a debitale agency chosen by competent authority.

6.8 SECURITY DEPOSIT

- (n) The bidder(s) shall furnish within fifteen days from the acceptance of their tender, security deposit as prescribed in the invitation to tender failing which the contract shall be liable to cancellation at the risk and cost of the bidder(s) and the EMD will be forfeited and subject to such other remedies, as may be open to action by -----under the terms of the contract
- (o) The Security Deposit shall be furnished as mentioned in LOI.
- (p) The -----, shall not be liable for payment of any interest on the security deposit or by depreciation of any equipment /machinery etc. employed for the execution of work.
- (q) The Security Deposit will be refunded to the bidder(s) without interest on due and satisfactory performance of the services and on completion of all obligations by the bidder(s) under the terms of the contract and on submission of a 'No Demand Certificate' subject to such deduction from the security, as may be necessary for making the -----, claims against the contract.
- (r) In the event of termination of the contract, -----, shall have the right to forfeit the entire or part of the amount of security deposit lodged by the bidder(s) or to deduct appropriate sum due to be claimed for any damages, losses, charges, expenses or cost that may be suffered or incurred by the -----.
- (s) The decision of the -----, in respect of such damages, losses, charges, costs, or expenses shall be final and binding on the bidder(s).
- (t) If during the term of this Contract the Bidder is in default of the due and faithful performance of its obligations under this Contract, or any other outstanding dues by the ways of fines, penalties and recovery of any other amounts due to it, the -----, shall, without prejudice to its other rights and remedies hereunder or at the Applicable Law, be entitled to call in, retain and appropriate the Performance Security. Nothing herein mentioned shall debar the -----, from recovering from Bidder by a suit or any other means any such losses, damages, costs, charges and expenses as aforesaid, in case the same shall exceed the amount of the Performance Security.
- (u) Whenever the security deposit falls short of the specified amount the bidder(s) shall make good the deficit so that the total amount of security deposit, shall not at any time be less than the specified amount.

6.9 LIABILITY OF BIDDER(S) FOR LOSSES ETC. SUFFERED BY THE EMPLOYER

- (a) The bidder(s) shall be liable for all costs, damages, expenses suffered or incurred by the -----, due to the bidder's negligence and the unworkmanship like performance of any service under his contract or breach of any terms thereof or their failure to carry out the work with a view to avoid incurrance of damages etc. and for all damages or losses occurred to the -----or in particular to any property or plant belonging to the ----- . due to any act whether negligent or otherwise of the bidder(s) themselves or their employees. The bidder(s) shall also be liable for the interest at commercial lending rate on costs/damages/expenses. The decision of the -----, regarding such failure of the bidder(s) and their liability for the losses, etc. suffered by the -----, shall be final and binding on the bidder(s).
- (b) The ----- is entitled to claim for any damages, losses, charges, costs, or expenses suffered or incurred by them due to bidder(s) negligence's and unworkmen like performance of services under the contract or breach of any terms thereof and adjust the same from the bills of the bidder directly. The total sum claimed shall be deducted from, any sum then due or which at any time hereafter may become due to the bidder(s) under this or any other contract with the ----- . In the event of the sum which may be due from the -----, as aforesaid being insufficient, the balance of the total sum claimed and recoverable from the bidder(s). Should this sum also be not sufficient to cover the full amount claimed by the -----, the bidder shall pay to the ----- on demand the remaining balance of the aforesaid sum claimed. The -----will be the sole judge determining after taking into consideration all the relevant circumstances, the quantum value of loss and also in regard to the liability of bidder(s) for such loss the amount to be recovered from them. The decision of the ----- in this regard shall be final and binding on the bidder(s).
- (c) SET-OFF
- Any sum of money due and payable to the bidder(s) (including security deposit returnable to them) under this contract may be appropriated by the ----- and set off against any claim of the ----- for the payment of any sum of money arising out of or under any other contract made by the bidder(s) with the -----

6.10 BOOK EXAMINATION

The bidder(s) shall, whenever required produce or cause to produce for examination by the ----- or any other officer authorized by him on behalf any cost or other accounts book of accounts, vouchers, receipts, letters, memorandums or writings or any copy of or extract from any such document and also furnish information and returns, verified in such manner as may be required by the statutory compliance/payment made to EPF/minimum wages etc., renewed license any or all such documents desired by ----- . The decision of -----, on the question of relevancy of any document, information or return shall be final and binding on the bidder(s). The bidder(s) shall produce the required document, information and returns as at such time and place, as may be directed by the -----or any other officer authorized in this regard.

6.11 PAYMENT

- (a) No advance payment will be made to the agency.
- (b) Monthly data report for the quantity and quality of the pollution load treated and output of flows has to be submitted to the office signed by the representative from -----and agency, based on human machine interface, for payment to the agency.
- (c) The bidder shall submit all his/their bill along with specified test reports by the seventh of following month to ----- payment of which will be made through Account Payee Cheque to the bidder(s) within 15 days after receipt of the bill with completed detail of the

work performed.

6.12 LAW GOVERNING THE CONTRACT/DISPUTE RESOLUTION

The contract will be governed by the Laws of India, for time being in force as amended from time to time. Any disputes arising out of this contract will be settled first by amicable settlement. The matter shall be referred -----whose decision shall be final and binding to both the parties. In case of arbitration, it shall be fairly tried in the court of Law of competent jurisdiction. The courts in the District where the Engineer-in Charge office is situated shall have exclusive jurisdiction to adjudicate the disputes arising under the contract.

6.13 DUTIES AND RESPONSIBILITY OF THE BIDDER(S)

- (a) The bidder(s) shall carry out all items of services assigned or entrusted to him/them by --- of -----, or any other officer acting on his behalf and shall abide by all instructions issued to him/them from time to time by the said officer. They shall render the services to the satisfaction of the --- ----- or any other officer acting on his behalf together with ancillary and incidental duties, service and operations as may be indicated by the said officer(s) and are not inconsistent with the terms & conditions of the contract. The bidder shall always be bound to act with responsible delegacy and in a business-like manner and to use such skill as expected of men or ordinary prudence in the conduct of their activities.
- (b) The bidder shall engage adequate workers and other competitor staff for the nature of work to be performed to the satisfaction of the -----or any other officer acting on his behalf. The bidder shall be responsible for the good conduct of their employees and shall compensate the ----- for losses arising from neglect, carelessness, want of skill or misconduct of themselves, their servant or agents or representatives, The -----shall have the right to ask for the dismissal of any employee of bidders who in his opinion is hampering the smooth execution of the work and his decision regarding losses caused by neglect and misconduct etc. of the bidders, their servant and agents of representative shall be final and binding on the bidder.
- (c) The bidders shall advise the ----- and officers authorized to act on his behalf the name of one or more responsible representative(s) authorized to act on their behalf in day to day working of the conduct. It shall be duty of such representative(s) to call at the office of the -----or an officer acting on his behalf, every day and generally to remain in touch with them to report the progress and generally to take instructions in the matter.
- (d) The bidders shall strictly abide by Laws, Rules & Regulations.
- (e) The bidder shall provide verifiable proof that EPF/ESI has been deposited in respect of particular workers, working under the Bidder who are working in -----, along with the EPF/ESI number issued by concerned authorities. A copy of ESI card also is deposited with -----within one month period even in case of change of worker, failing which payment will not be released subsequently for the aforesaid period, without prejudice to the other actions.
- (f) If the party fails to comply with the statutory/legal requirement, as stipulated in the terms & conditions of the tender within two months from the award of contract, contract is liable to be terminated with one month's notice and security deposit be forfeited and in his place, second lowest/third lowest will be kept as back up to immediately to replace the terminated agency.

6.14 SETTLEMENT OF DISPUTE AND ARBITRATION

- (a) All disputes and differences arising out of or in connection with the contract and works of any nature assigned under the same (whether during the progress of the works or after their completion), determination, abandonment or breach of the contract shall be referred to a team of three men arbitrator appointed by the -----The arbitrators shall elect an umpire among them. In case of conflicting findings by the arbitrators, the decision of the umpire shall be final and binding. It will not be an objection to any such appointment that

the arbitrators are the government servants and had any interest in the -----or the contract entered into directly or indirectly. In all cases, the arbitrators shall state the decision in writing and if amount of claims in dispute is Rs. 50,000/- and above, the arbitrators shall give reasons for award. The Venue of the arbitrator shall be Lucknow.

- (b) Subject as aforesaid the provisions of the Arbitration and conciliation act 1996 or any statutory modification or amendment thereof and the rules made there under for the time being in force shall apply to the arbitration proceeding under the clause.
- (c) The party invoking the arbitration shall specify the dispute to be referred to the arbitrator under this clause together with the amount or amounts claimed in respect of each such dispute within a period of 90 days from the occurrence of the disputes.
- (d) If the bidder's do not make any demand for arbitration in respect of any claims in writing within 90 days of receiving the intimation from the -----, that final bill is ready for payment, the claim of the bidder's will be deemed to have been waived and absolutely barred and the -----, will be discharged and released all liabilities under the contract in respect of these claims.
- (e) The decision of the employer or any other authorized officer in this regards, regarding the quantum of reduction as well as justification thereof in respect of rates for sub-standard work which may be decided will be final and would not be open to arbitration. Provided always that no compensation shall be payable for any loss in always that no compensation shall be payable for any loss in consequence of hostilities or war-like operation (a) unless the bidder had taken all such precautions as are deemed necessary by the Engineers In Charge (----- nominated Officer) (b) for any materials etc. not on the site of work or for any tools and plant, machinery, scaffolding temporary buildings and other things not intended for the work.
- (f) In the event of the bidder having to carry out defects as pointed out, he shall be allowed such extension of time for its completion as is considered reasonable by the employer compliance within such time as the employer may prescribe in that behalf and in the event of the bidder failing to effect such compliance within the time prescribed by the employer then the employer shall without prejudice to his other rights be entitled to withhold from the amount payable to the bidder any amount payable to the workmen under any such laws, regulations or rules and to make payment thereof to the workmen. The employer shall also have in that event the right to terminate the contract with immediate effect and to exercise powers reserved to their employer under the contract as a result of termination.

6.15 FORCE MAJEURE

- 1.1. Neither Party is responsible for any failure to perform its obligations under the Contract; to the extent it is prevented or delayed in performing those obligations by an event of Force Majeure.
- 1.2. An event of Force Majeure is an event or circumstance which is beyond the control and without the fault or negligence of the party affected ("Affected Party") and which by the exercise of reasonable diligence the Affected Party was unable to be prevented and which is not caused or contributed by the Affected Party, provided that event or circumstance is limited to the following:
 - (a) Act of terrorism;
 - (b) Riot, war, invasion, act of foreign enemies, hostilities (whether war be declared or not), civil war, rebellion, revolution, insurrection of military or usurped power;
 - (c) ionizing radiation or contamination, radio activity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel, radioactive toxic explosive or other hazardous properties of any explosive assembly or nuclear component;
 - (d) Earthquakes, flood, fire, hurricanes, typhoons or other physical natural disaster, but

excluding weather conditions regardless of severity; and

- (e) freight embargoes, strikes at national or state-wide level or industrial disputes at a national or state-wide level in any country where Works are performed, and which affect an essential portion of the Works but excluding any industrial dispute which is specific to the performance of the Works or the Contract.

For the avoidance of doubt, inclement weather, third party breach, delay in supply of materials (other than due to a nationwide transporters' strike) or commercial hardship shall not constitute a Force Majeure event.

- 1.3. Where there is an event of Force Majeure, the Affected Party must notify the other Party in writing as soon as possible and in any event within 3 days of becoming aware of or the date it ought to have become aware of the occurrence of an event of Force Majeure, giving full particulars of the event of Force Majeure and the reasons for the event of Force Majeure preventing the Affected Party from, or delaying the Affected Party in performing its obligations under the Contract. The Affected Party must use its reasonable efforts to mitigate the effect of the event of Force Majeure upon the performance of its obligations under the Contract and notify the other party of the measures being taken to mitigate the effect(s) of the event of Force Majeure.
- 1.4. Upon completion of the event of Force Majeure, the Affected Party shall, as soon as reasonably practicable, recommence the performance of its obligations under the Contract. Where the Affected Party is the Bidder, the Bidder must provide an amended Works Program rescheduling the Works to minimize the effects of the prevention or delay caused by the event of Force Majeure.
- 1.5. An event of Force Majeure does not relieve a party from liability for an obligation which arose before the occurrence of that event, nor does that event affect the obligation to pay money in a timely manner which matured prior to the occurrence of that event.
- 1.6. The Bidder has no entitlement and Consultant/ Owner has no liability for:
- (a) any costs, losses, expenses, damages or the payment of any part of the Contract Price during an event of Force Majeure; and
- (b) any delay costs in any way incurred by the Bidder due to an event of Force Majeure.
- 1.7. If an event of Force Majeure occurs and its effect continues for a period of 180 (one hundred eighty days or more in a continuous period of 365 (three hundred sixty five) days after notice has been given under this Clause, either Party may terminate the Contract by issuing a written notice of 30 (thirty) days to the other Party.

In the event that the Parties are unable to agree in good faith about the existence or occurrence of a Force Majeure event, such dispute shall be finally settled in accordance with the dispute resolution provided herein; provided however that the burden of proof as to the occurrence or existence of such Force Majeure event shall be upon the Party claiming relief on account of such Force Majeure event.

Signature of Bidder

7. FORM

FORM: A-1

7.1 DECLARATION REGARDING GST

(To be typed on Bidder's Letter Pad)
To be kept in separate envelope (Volume-II)

I/We have submitted bid for "Procurements of Scientific & Technical Services for Complete Supply, Fabrication, Erection, Installation & Successful Commissioning of In Situ Nallah Treatment by Bioremediation technology in Drains of having total discharge of MLD."

It is to intimate that current applicable rates of GST on the work mentioned in the price schedule is Percent(%).

Note: TDS on GST will be deducted at the rate applicable at the time of payment.

(Signature of Authorized Signatory &
Seal of the Bidder)

No:-.....

Date:-.....

7.2 Solvency Certificate**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that to the best of our knowledge and information M/S
 Sri _____ address _____
 A customer of our bank are/is respectable and can be considered solvent to the extent of
 Rs. _____ (Rupees _____).
 This is also certified that this limit is free for specifically this work (Name of Work) and is
 not mortgaged anywhere. This certificate is issued without any guarantee or responsibility
 on the bank or any of the officers.

(Signature)

Of the bank Authority

Name of Bank & Seal

Note:-

1. Solvency Certificate issued only by a Nationalized bank, IDBI, ICICI, AXIS and HDFC Bank shall be Accepted.
2. In case of partnership Firm, certificate to include names of all partners as recorded with the Bank.
3. Solvency Certificates should be signed, Dated and stamped by an authorized signatory of the Bank, else they shall be summarily rejected.
4. Certificate issued more than 365 days prior to last date of bid submission shall not be accepted.

7.3 Bidder Information Form

a) [The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted. This should be done of the letter head of the firm] Date: [insert date (as day, month and year) of Bid Submission] Tender No.: [insert number from Invitation for bids]

1. Bidder's Legal Name [insert Bidder's legal name]
2. In case of JV, legal name of each party: [insert legal name of each party in JV]
3. Bidder's actual or intended Country of Registration: [insert actual or intended Country of Registration]
4. Bidder's Year of Registration: [insert Bidder's year of registration]
5. Bidder's Legal Address in Country of Registration: [insert Bidder's legal address in country of registration]
6. Bidder's Authorized Representative Information Name: [insert Authorized Representative's name] Address: [insert Authorized Representative's Address] Telephone/Fax numbers: [insert Authorized Representative's telephone/fax numbers] Email Address: [insert Authorized Representative's email address]
7. Attached are copies of original documents of: [check the box(es) of the attached original documents] Articles of Incorporation or Registration of firm named in 1, above.

Signature and Seal of the

Service Provider /Bidder.....

Place:

Date:

7.4 Technical Specification Compliance cum Deviation Statement Form

Technical compliance against -----Tender No. _____

S.No.	Technical Specifications	Vendor quoted Specifications	In case of compliance, supporting printed technical literature mentioning page no. Column & line has to be highlighted	Deviations to Specifications, if any	Reasons for deviations	Special Remarks, if any
1	2	3	4	5	6	7

Signature and Seal of the
Service Provider/Bidder.....

Place :

Date :

7.5 BID SECURITY FORM-

For EMD in shape of a BANK GUARANTEE

Whereas _____ (hereinafter called the "tenderer") has submitted their offer

Dated _____ for the supply of _____
 (hereinafter called the "tenderer") Against the _____ purchaser's tender enquiry

No. _____ KNOW ALL MEN by

These presents that WE _____ of _____ having our registered office at _____

_____ are bound unto ----- (hereinafter called the "Purchaser") In the

sum of _____ For which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents.

Sealed with the Common Seal of the said Bank this _____ day of _____ 20_____.

THE CONDITIONS OF THIS OBLIGATION ARE:

(1) If the tenderer withdraws or amends, impairs or derogates from the Tender in any respect within the period of validity of this tender.

(2) If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity

- a) fails to furnish the Performance Security for the due Performance of the contract.
- b) Fails or refuses to accept/execute the contract.

WE undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force upto and including 45 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the authorized officer of the Bank)
 Name and designation of the officer
 Seal, name & address of the Bank / Branch

7.6 Bid-Securing Declaration Form

-----Tender/ Enquiry No. Date:

Bidder Quotation No. &Date : _____

To,

I/we, the undersigned, declare that:

I/we understand that, according to your conditions, bids must be supported by a Bid Securing Declaration. I/we accept that I/we may be disqualified from bidding for any contract with you for a period of one year from the date of notification if am / we are in a breach of any obligation under the bid conditions, because I /we:

- (a) have withdrawn / modified / amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; (Minimum period of bid validity shall be 120 days)
- OR
- (b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity
 - (i) Fail or refuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security (if any given in Tender / Enquiry), in accordance with the Instructions to Bidders.

I/we understand this Bid Securing Declaration shall cease to be valid if I am / we are not the successful Bidder, upon the earlier of (I) the receipt of your notification of the name of the successful Bidder; or (II) thirty days after the expiration of the validity of my / our Bid.

Signed: (Insert signature of person whose name and capacity are shown) in the capacity of (insert legal capacity of person signing the Bid Securing Declaration)

Name: (insert complete name of person signing Bid Securing Declaration)
Duly authorized to sign the bid for an on behalf of: (insert complete name of Bidder)

Dated on _____ day of _____ (insert date of signing)

Corporate Seal (Where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

7.7 Format for Non-Disclosure Agreement

Between -----having its registered ----- through the ---- or any other officer
authorized on behalf of ----- having its ----- And the bidder Named,
 City.....

This Confidentiality and Non-Disclosure Agreement is entered into on the Day of.....
 Month in the Year

Between

-----having its registered office at ----- through the ---- or any other officer
authorized on behalf of ----- having its office at at -----And

“Name of the bidder”, having their registered office at Company Address (Hereinafter referred to as “bidder's Name”, which expression shall whenever the context so requires or admits, mean and include their heirs/ successors, respective executors, administrators, legal representatives and/or permitted assigns) -----and “Bidder Name” are individually referred to as “Party” and jointly as “Parties” Whereas

(A) -----requires Scientific & Technical Services for Complete Supply, Fabrication, Erection, Installation & Successful Commissioning of In Situ Nallah Treatment by Bioremediation technology in -- Drains of -----which will treat the flowing sewage in the drain without changing the geometry of drain. Further the drain/nallah will be kept intact with respect to its location, shape and structure. Physical units like sedimentation, silt trap, screens are to be installed to remove the suspended solids. Biological units like anoxic chamber, Biomats, Phytotrap and Floraft are also to be installed. Solar based aeration is to be used to improve the DO in drain, helping in reduction of BOD and COD.

(Herein referred to as “Technology” for which the present agreement of Confidentiality and Non-disclosure is executed.)

(B) The Parties intend to provide each other with certain information pertaining to their operations and the Parties are in the process of discussing certain matters with a view to concluding a business agreement (“the potential agreement”), which discussions have required and will require the disclosure to one another of information of a proprietary, secret and confidential nature. Whether or not the Parties conclude the potential agreement will not affect the validity of this Agreement.

(C) The Parties wish to record the terms and conditions upon which they shall disclose the Confidential Information to each other, which terms and conditions shall constitute a binding and enforceable Agreement between the Parties and their agents.

NOW THEREFORE in consideration of the foregoing and the respective covenants and Agreements set forth in this Agreement, the sufficiency and adequacy of which is hereby acknowledged, and intending to legally bound hereby, the Parties agree as follows:

1. Disclosing and Receiving Parties

The Party disclosing the Confidential Information shall be known as the “Disclosing Party” and the Party receiving the Confidential Information shall be known as the “Receiving Party.”

2. The Confidential Information

“Confidential Information” shall, for the purpose of this Agreement include, without limitation, any technical, commercial, financial information, know-how, trade secrets, processes, machinery, designs, drawings, technical specifications, and data in whatever form,

disclosed to or assessed by the Receiving Party during the course of its relationship with the Disclosing Party.

3. Disclosure of Confidential Information

3.1 The Disclosing Party shall disclose the Confidential Information to the Receiving Party only to the extent deemed necessary or desirable by the Disclosing Party in its discretion.

3.2 The Receiving Party acknowledges that the Confidential Information is a valuable, special and unique asset proprietary to the Disclosing Party.

3.3 The Receiving Party agrees that it will not, during or after the course of their relationship and/or the term of this Agreement as described in Clause 9, disclose the Confidential Information to any third Party for any reason or purpose whatsoever without the prior consent of -----for Transfer of Technology, save in accordance with the provisions of this Agreement. For avoidance of doubt, in this Agreement "Third Party" means any Party other than the Receiving and Disclosing Parties (their holding and subsidiary companies or agents who shall be deemed to be bound by the provisions of this Agreement).

3.4 The Receiving Party agrees not to utilize, exploit or in any other manner whatsoever use the Confidential Information disclosed pursuant to the provisions of this Agreement for any purpose whatsoever without the prior written consent of the other/the Disclosing Party.

4. Title

All Confidential Information disclosed by the Disclosing Party to the Receiving Party is acknowledged by the Receiving Party:

4.1 To be proprietary to the Disclosing Party; and

4.2 Not to confer any rights on the Receiving Party of whatever nature in the Confidential Information.

5. Restrictions on disclosure and use of the Confidential Information

The Receiving Party undertakes not to use the Confidential Information for any purpose other than:

5.1 That for which it is disclosed as specifically directed by the Disclosing Party; and

5.2 In accordance with the provisions of this Agreement.

6. Standard of Care

Both Parties agree that they shall protect the Confidential Information disclosed pursuant to the provisions of this Agreement using the same standard of care that each Party applies to safeguard its own proprietary, secret or Confidential Information and that the Confidential Information shall be stored and handled in such a way as to prevent any unauthorised disclosure thereof.

7. Return of material containing or pertaining to the Confidential Information

7.1 Either Party may, at any time, request the other to return any material and/or data in whatever form containing, pertaining to or relating to Confidential Information disclosed pursuant to the terms of this Agreement and may, in addition request the other to furnish a written statement to the effect that, upon such return, the Receiving Party has not retained in its possession, or under its control, either directly or indirectly, any such material and/or data.

7.2 As an alternative to the return of the material and/or contemplated in Clause 7.1 above, the Receiving Party shall, at the instance of the Disclosing Party, destroy such material and/or and furnish the Disclosing Party with a written statement to the effect that all such material has been destroyed.

7.3 The Receiving Party shall comply with any request by the Disclosing Party in terms of this clause, within 7 (seven) days of receipt of any such request.

8. Excluded Confidential Information

The obligations of the Receiving Party pursuant to the provisions of this Agreement shall not apply to any Confidential Information that:

- 81 Is known to, or in the possession of the Receiving Party prior to disclosure thereof by the Disclosing Party.
- 82 Is or has become publicly known, otherwise than as a result of a breach of this Agreement by the Receiving Party.
- 83 Is developed independently of the Disclosing Party by the Receiving Party in circumstances that do not amount to a breach of the provisions of this Agreement.
- 84 Is disclosed by the Receiving Party to satisfy an order of a court of competent jurisdiction or to comply with the provisions of any law or regulation in force from time to time; provided that in these circumstances, the Receiving Party shall advise the Disclosing Party to take whatever steps it deems necessary to protect its interests in this regard and provided further that the Receiving Party will disclose only that portion of the Confidential Information which it is legally required to disclose and the Receiving Party will use its reasonable endeavors to protect the confidentiality of such Confidential Information to the greatest extent possible in the circumstances
- 85 Is received from a Third Party in circumstances that do not result in a breach of the provisions of this Agreement.

9. Term of Agreement

91 This Agreement shall be effective on and from the date of signature of the last signing Party and shall be effective for a period of .months (the“Term”). Mutat is mutandis.

92 In the event that the Parties extend the “Term” by mutual and written agreement, then the provisions of this Agreement shall endure for a further period ofmonths

10. Breach

In the event that the Receiving Party should breach the provisions of this Agreement and fail to remedy such breach within seven (7) days from date of a written notice to do so, then the Disclosing Party shall be entitled to invoke all remedies available to it in law including, but not limited to, the institution of urgent interim proceedings and/ or an action for damages.

11. Enforcement

The failure by the Disclosing Party to enforce or to require the performance at any time of any of the provisions of this Agreement shall not be construed to be a waiver of such provision, and shall not affect either the validity of this Agreement or any part thereof or the right of the Disclosing Party to enforce the provisions of this Agreement.

12. Headings

The headings of the clauses of this Agreement are used for convenience only and shall not effect the meaning or construction of the contents of this Agreement.

13. Representations and Warranties

Each Party represents that it has authority to enter into this Agreement and to do all things necessary to procure the fulfillment of its obligations in terms of this Agreement.

14. Entire Agreement

This Agreement contains the entire Agreement of the Parties with respect to the subject matter of this Agreement and supersedes all prior Agreements between the Parties, whether written or oral, with respect to the subject matter of this Agreement.

15. Assignment

This Agreement shall not be assigned by the company to any person, save and except with the prior consent of -----in writing, and that the -----shall be entitled to decline consent without assigning any reason.

16. Dispute Resolution

In event of any dispute or difference between the Parties hereto, such disputes and differences shall be resolved amicably by mutual consultation. If such resolution is not possible, then, the unresolved dispute and difference shall be referred to arbitration of the Sole Arbitrator to be appointed by the -----to the dispute, the decision of sole arbitrator shall be final and binding on both parties. The venue of arbitration shall be at Lucknow, India and the arbitration proceedings shall take place under the Indian Arbitration Act, 1996.

17. Governing law

This Agreement and the relationship of the Parties in connection with the subject matter of this Agreement and each other shall be governed and determined in accordance with the laws of the Republic of India.

18. Force Majeure

Neither Party shall be responsible or liable to the other Party for any failure to perform any of its covenant or obligations hereunder if such failure results from Force Majeure, i.e., unforeseeable events or circumstances, any acts of God and beyond the reasonable control of such Party. The Party failing to perform as a result of an event of Force Majeure shall no later than Fifteen (15) days from the occurrence of Force Majeure notify in writing to the other Party of such event of Force Majeure and shall take all action that is reasonably possible to remove such event of Force Majeure.

19. Postal addresses

19.1 Any written notice in connection with this Agreement shall be addressed:

19.1.1 In the case of -----, India 19.1.2 In the case of The Bidder's Address: Company Address.....

19.2 A Party may change that Party's address, provided it gives a 30 (thirty) days prior notice in writing to the other Party.

19.3 If any notice is to be sent by mail, it shall be sent by prepaid registered mail and shall then be deemed until and unless the contrary is proved, to have been received 20 (twenty) days after the date of posting.

19.4 If any notice is sent by telefax, it will be deemed, until and unless the contrary is proved, to have been received on the date recorded on the transmission slip.

19.5 If any notice is delivered by hand, it will be deemed to have been received on proof of the date of delivery.

20. Severability

In the event of any one or more of the provisions of this Agreement being held for any reason to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision of this Agreement, and this Agreement shall be construed as if such invalid, illegal or unenforceable provision was not a part of this Agreement, and the Agreement shall be carried out as nearly as possible in accordance with its original terms and intent.

21. Amendments

No amendment/ modification/ alternation of any of the terms of this Agreement shall be valid till it is reduced to writing and duly signed by the Parties. Any amendment shall be subject to final approval by the -----

IN WITNESS HEREOF, the parties have set their hands to it on the Day,
Month and
Year.....

Signed For and on behalf of -----

For and on behalf of "Bidder's

Name"

Signature _____

Signature _____

Name _____
Designati _____
on _____

Name _____
Designati _____
on _____

Seal 1

Seal 2

Witness : (Name and Address)

Witness : (Name and Address)

**7.8 PERFORMANCE SECURITY FORM
MODEL BANK GUARANTEE FORMAT FOR PERFORMANCE SECURITY**

To,
The Governor of Uttar Pradesh

WHEREAS (name and address of the supplier) (hereinafter called "the supplier") has undertaken, in pursuance of contract no.....dated..... to supply (description of goods and services) (here in after called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of (amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification

This guarantee shall be valid until the day of, 20....

(Signature of the authorized officer of the Bank)

Name and designation of the officer
Seal, name & address of the Bank / Branch

7.9 RTGS/ECS FORMAT

Dear Sir,

Sub: E-Payments vide RTGS/ECS in P.F.M.S Account.

I/We request and authorize you to effect E-payment vide P.F.M.S account as per the details given below:

Title of Account of the Bank :

Account type :

Bank Account Number :

Name & address of Bank :

Bank contact person's names :

Bank Tele Number with STD code :

Bank Branch MICR Code :

Bank Branch RTGS/IFSC
code :

Bank Branch NEFT/IFSC
code :

(If applicable)

Email address of Firm :

Name of the authorized
signatory :

Contact Person's name &
Mobile/ :

Telephone nos. of Firm

I/We confirm the I/we will accept the credit of RTGS/ECS amounts in our account.

Thanking you,

For

We confirm that we are able for receiving RTGS/ECS credits and we further confirm that the account number of _____, the signature of the authorized signatory and the MICR and IFSC Codes of our branch mentioned above are correct.

Bank's Verification (Manager's/

Officers signature under Bank Stamp)

7.10 No Relation Certificate

(To be typed on Company's Letter Head)

I/we, the undersigned hereby declare that neither me/us nor any of my/our relative/employee /management members/Directors is/are directly or indirectly involved in -----in its work or functionalities in any manner whatsoever.

Signature and Seal of the

Service Provider /Bidder.....

Place:

Date:

TENDER FORM FOR: "Procurements of Scientific & Technical Services for Complete Supply, Fabrication, Erection, Installation & Successful Commissioning of In Situ Nallah Treatment by Bioremediation technology in --- Drains of -----
 ---- having total discharge of ----- MLD."

To,

.....

Dear Sir,

1. In respect to the tender dated _____ I/We herewith submit herewith tender form for the Procurements of Scientific & Technical Services for Complete Supply, Fabrication, Erection, Installation & Successful Commissioning of In Situ Nallah Treatment by Bioremediation technology in Drains of having total discharge of MLD.
2. I/We have thoroughly examined and understood terms and conditions of the tender mentioned and I/we agree to abide by them in full. **I/we have visited the proposed site and fully studied, analyzed and completely understood its location, topography and all the relevant factors having direct or indirect bearing on the scope of work to be carried out and the quote is offered keeping in view the same.**
3. I/We offer to undertake Procurements of Scientific & Technical Services for In Situ Nallah Treatment by Bioremediation Technology of ----- in Drains of having total discharge of MLD. It is agreed that no additional charges other than those mentioned in Commercial Bid would be payable to me/us.
4. I/We accept that the rate offered shall remain valid for a period of 120 days from the date of opening of tender. I/We further agreed that if the date up to which the offer will remain opened be declared as holiday for office then offer will remain open for acceptance till next working day.
5. I/We shall be bound by communication of acceptance of the offer dispatch within prescribed time.
6. I/We accept that the rights to accept or reject whole or part of the tender without assigning any reason is reserved with the, -----The decision of the, -----will be final and shall be binding on me/us.
7. I/We hereby declare that all the Terms & Conditions made in this Tender form towards Procurements of Scientific & Technical Services as per Tender Documents. It is agreed that no additional charges other than those mentioned in Commercial Bid would be payable to me/us are binding on me/us. I/We shall be bound by the act to my/our authorized representative Shri. _____ whose signature is appended here to in the place specified for the purpose and of any other person who in future may be appointed by me/us in his place to carry all the business of this concern/agency/firm.

(The Intimation of the change will be informed to the -----The following documents duly filled in and signed are enclosed along with the tender. The photocopy of the Tender Document containing Technical Specification of the required specialized services & terms and conditions is retained by me/us for my/our information and record.

8. No Relation Declaration Certificate in the annexed tendered format.
9. Non Disclosure Agreement in the prescribed format on Rs. 100/- Non-judicial stamp paper duly signed and stamped by the bidder

Yours Faithfully

Place:

Date:

Signature of the Supplier

Capacity in which signing _____

Name and Address of the firm/supplier/Bidder _____

Encl: List of documents (Check List)

- 1) Tender Form
- 2) GST Registration Certificate/Income Tax Return Certificate.
- 3) Copy of the Company Profile.
- 4) Purchase / Work Order copy of similar type of job
- 5) Technical Specifications Compliance Cum-Deviation Statement Form B
- 6) Documents establishing S&T Service Providers' eligibility and conformity to bidding documents as mentioned in Annexure I -II.
- 7) Documents establishing S&T Service Providers' eligibility and conformity to bidding documents as mentioned in Annexure I -II.
- 8) Price Bid / Financial Bid (Price Schedule Form)
- 9) No Relation Declaration Certificate in the annexed tendered format
- 10) Earnest Money Deposit (EMD)/Bid Security of Rs. ---/- or Form C-2(Bid-Securing Declaration Form) annexed to this document.

Signature of the Authorized Representative

Signature _____ Date: _____

Name _____

Address _____

Annexure – I (Scope of Work)

- I. Precise statement of Objectives/Scope of Work: Procurements of Scientific & Technical Services for Complete Supply, Fabrication, Erection, Installation & Successful Commissioning of In Situ Nallah Treatment by Bioremediation technology (bacteria or enzyme intervention) in Drains of having total discharge of MLD.

S. No.	Category	Description	No. of drains	Discharge (MLD)
1	Type A	Greater than 0.2 MLD to less than/equal to 1 MLD		
2	Type B	Greater than 1.0 MLD to less than/equal to 10 MLD		
Total				

- II. Outline of the tasks to be carried out as per the following:

The scope of work and details of the services to be provided by the Bidder which broadly includes, but is not limited to, the followings are given below:-

S. No.	Work Description	Tentative number
1	Supply of bacteria or other materials required as per technology with all T&P for Biological or other treatment of drains including supply and installation of V-notch & regular measurement of discharge but exclude sample testing.	As per package
2	Preparation of dozing or input material and its application at drains located at different places during treatment period.	As per package
3	Construction of Bund at sections of drains for ponding and fixing of screens and its maintenance for treatment period.	job
4	Spreading of odour control remedies at selected locations	job
5	Sludge removal & its safe disposal at specified locations within the municipal area up to maximum distance of 5 Km.	job
6	Solids/Floating material removal & its safe disposal at specified locations within the municipal area up to maximum distance of 5.0 Km.	job
7.	Weekly collection of composite sample and its testing for BOD, COD, TSS, DO, Ph as per norms of CPCB.	job

Performance and Optimization of in-situ nallah treatment: -

Sr. No.	Parameters	Out flow reduction/ Values(at the end of trial period)	Out flow reduction/ Values(beyond trial period)
1	BOD _{3,27} (Biochemical Oxygen Demand)	≤30.0 mg/l Or 40% reduction in BOD load value from the initial reading(whichever is lower)	≤30.0 mg/l Or 70% reduction in BOD load value from the initial reading(whichever is lower)
2	COD(Chemical Oxygen Demand)	≤150.0 mg/l Or 40% reduction in COD load value from the initial reading(whichever is lower)	≤150.0 mg/l Or 70% reduction in COD load value from the initial reading(whichever is lower)
3	TSS(Total Suspended Solids)	≤100.0 mg/l Or 40% reduction in TSS load value from the initial reading (whichever is lower)	≤100.0 mg/l Or 70% reduction in TSS load value from the initial reading (whichever is lower)
4	PH	6.5-9	6.5-9

Important Note: Prospective Bidder should visit the proposed site before submitting the offer and completely apprise, analyze and ascertain itself of the Location, Topography etc. and all the relevant factors having direct or indirect bearing on the Scope of Work/ S&T services to be carried out before the submission of offer. No queries regarding the same shall be entertained at the later stage

III. Eligibility/quality requirement/qualifying criteria to be met by S&T Service Provider / Consultant. (e.g. Experience and Technical Capacity):-

- Registered company having GST & PAN Registration.
- The firm should have carried out / completed work for sewage treatment / waste water management/ Nallah Treatment through biological/ wetland/ physicochemical method setc.
- The firm should possess license / tie up / collaboration with institutes like IITs / NITs / Govt Funded Universities / Govt undertakings and/or CSIR for technologies in the field of wastewater/ sewage / Nallah treatment systems.
- Preference will be given to the work experience in in-situ treatment if sufficient numbers of qualified bidders are available in course of bidding.

IV. Schedule for completion of tasks as per the schedule of requirement:-

- Visit of nallah and assessment of nallah stretch (before Pre Bid Conference & submission of Bid).
- Topographical survey of nallah and cleaning. (At the time of visit of site).
- Installation and fabrication of in-situ nallah treatment units as per the requirements of -----
-- (within 7 days from the date of acceptance of award letter).
- Commissioning of in-situ nallah treatment (within 150 days from the date of acceptance of awardletter). The time can be extended upto 30 June 2020.
- Optimizing of the treatment unit if needed as per the requirements of -----, 30 days from the date of commissioning.

V. The support or inputs to be provided by -----to facilitate the consultancy / specialized S&T Services:-

- -----will coordinate the survey and supervision.
- -----will provide the design & drawing of the treatment chain if necessary.
- -----will provide permission to install and fabricate in-situ nallah treatment.
- -----will evaluate the performance and testing of the plant.

VI. The final output that will be required from the successful bidder / service provider for-

- Supply, Fabrication, Erection, Installation & Commissioning of in-situ nallah treatment technology as per scope of work of this tender documents.
- Performance and Optimization of the technology as per --- requirement.

VII. Estimated duration required for completion of the work and submission of reports / results-

Within 150 days from the date of acceptance of the S&T services work order.

VIII. Bidder should have P.F.M.S account, the details of P.F.M.S. account shall be given by bidder through RTGS/ECS form.(Form-F)

Annexure-II

Essential Terms & Conditions for outsourcing of Scientific & Technical Services

1. This outsourcing of S&T service provided to -----by the S&T Service Provider Agency / Consultant shall not be on partnership or shall not be contracted as any partnership for any R&D activities / event of -----The beneficiary of the report and its result generated / paper published out of these S&T service shall be -----only.
2. The benefit -----
3. Relevant law prevailing in India for S&T services shall be applicable and irrevocable on the S&T Service Provider Agency /Consultant.
4. S&T Service Provider shall be wholly responsible for any loss / damage of equipment or instruments provided by -----for monitoring and shall be recovered from Service Provider. Moreover S&T Service Provider shall also be responsible for field unit / collection of samples from the field and report must be submitted within stipulated time frame.
5. S&T Service Provider Agency / Consultant should furnish an understanding that the ordered S&T services shall be provided / completed within stipulated period from the date of receipt of S&T order.
6. S&T Service Provider Agency / Consultant shall use optimum endeavors to carry out services with reasonable risk, responsibility, skill, and care. Any injury, risk, loss, damage to the persons engaged by the service providers shall be responsibility of the service provider only.
7. S&T Service Provider Agency / Consultant shall be held responsible for delay in field survey and data as well as submission of ordered report / results to -----
8. Report / Data/ results should be provided to -----in hard copy as well as in accessible electronic medium duly authenticated.
9. S&T Service Provider Agency / Consultant should not infringe or breach any law prevailing in India and shall be liable for fraud or illegal activities if found in disclosing or publishing analysis, result/ or data to other sources.
10. Intellectual Property Rights for sample survey or report generation / submission / publication shall of -----only.
11. S&T Service Provider Agency / Consultant shall not ask in any case for escalation or increase in the rates quoted during contract period. No extra amount other than quoted in the price bid shall be paid by -----to S & T Service Provider.
12. S&T Service Provider Agency / Consultant should keep all samples, analysis, data and report confidential and should not disclose to any third / outside party.
13. Payment shall be made after completion of work as mentioned in the Schedule of Payments of the tender after due certification by -----Engineer of the invoice raised.
14. For Non-completion of work within given time by the -----, an extension of the delivery period will be granted upon written request from Service Provider. However subject to imposition of penalty clause. -----shall not make any payment for the additional period required for completion of task.

15. IT/TDS will be deducted as per applicable rates.
16. The Service Provider must have GST Registration.
17. This contract shall be terminated at any time without assigning any reason by giving one month notice.

Annexure – III (Schedule of Payment)

1. Initial 30 days is free trial period, the agency shall be given work order for 11 months post free trial period only in case the efficacy of treatment is fulfilled as per the standards given below:-

Sr. No.	Parameters	Out flow reduction/ Values(at the end of trial period)	Out flow reduction/ Values(beyond trial period)
1	BOD _{3,27} (Biochemical Oxygen Demand)	≤30.0 mg/l Or 40% reduction in BOD load value from the initial reading(whichever is lower)	≤30.0 mg/l Or 70% reduction in BOD load value from the initial reading(whichever is lower)
2	COD(Chemical Oxygen Demand)	≤150.0 mg/l Or 40% reduction in COD load value from the initial reading(whichever is lower)	≤150.0 mg/l Or 70% reduction in COD load value from the initial reading(whichever is lower)
3	TSS(Total Suspended Solids)	≤100.0 mg/l Or 40% reduction in TSS load value from the initial reading (whichever is lower)	≤100.0 mg/l Or 70% reduction in TSS load value from the initial reading (whichever is lower)
4	PH	6.5-9	6.5-9

2. During the 11 months i.e. beyond free trial period, if any of the above parameters is beyond the limits mentioned in the table (as per column 4), the agency shall not be liable for any payment during the period of noncompliance of the standards.

Annexure - IV

**INFORMATION ON BID CAPACITY
 DETAILS OF WORKS WHICH ARE IN PROGRESS/AWARDED
 AS ON THE DATE OF SUBMITTING THIS APPLICATION**

S.No	Name of Work/Place and State	Brief Scope of Work	Contract No. and Date	Name and address of employer	Value of Contract (Rs. In lacs)	Stipulated date of start and completion	Value of works remaining to be completed (Rs. In lacs)	Upto date physical Progress in %age	Anticipated date of completion

Certified that all the works (with any organisation and all categories/types) which have either been awarded to us or are in progress on the date of bid submission have been included in the details given above and no work has been left out.

**Signature & seal of
Bidder**

Checklist of works to be filled by Bidder

Name of Work -

Estimated Cost - Rs. lacs

Name of the Firm -

S.No	Description	Details to be filled by the Firm	Documents details on Page No.
TECHNICAL CAPABILITY			
1	Work Experience of having successfully completed similar works as mentioned below during the last ten years ending on the tender date:-		
1A	One similar works capacity of each not less than the volume equal to 60% of MLD i.e. MLD	(a) MLD	
1B	Two similar works capacity of each not less than the volume equal to 40% of MLD i.e. MLD each.	(a) MLD + (b) MLD	
1C	Three similar works capacity of each not less than the volume equal to 30% of MLD i.e. MLD each.	(a) MLD + (b) MLD + (c) MLD	
FINANCIAL CAPABILITY			
2	Financial Experience of having successfully completed works as mentioned below during the last ten years ending on the tender date:-		
2A	One similar works capacity of each not less than the amount equal to 60% of the tender cost (Rs.) i.e. not less than Rs. lacs.	(a) Rs.	
2B	Two similar works capacity of each not less than the amount equal to 40% of the tender cost (Rs. ....lacs) i.e. not less than Rs. lacs each.	(a) Rs. + (b) Rs.	
2C	Three similar works capacity of each not less than the amount equal to 30% of the tender cost (Rs. lacs) i.e. not less than Rs. lacs each.	(a) Rs. + (b) Rs. + (c) Rs.	

S.No	Description	Details to be filled by the Firm	Documents details on Page No.
3	The bidder should have average annual financial turnover not less than 30% of the estimated cost of tender (not less than 50 lacs for the last two years), during the immediate last three years consecutive financial year. (30% of tender cost i.e. Rs. Lacs)		
a	2018/19	Rs	
b	2017/18	Rs	
c	2016/17	Rs	
4	The Bidder should have a positive net worth on the date of bidding.		
5	The solvency amount of the bidder should be equal to 40% or more of the estimated cost of the work i.e Rs..... Lacs.	Rs.	
6	Tender Fee (Document fee) shall be in favor of "....." in form of Demand Draft. (Give Bank details and amount)		
7	EMD shall be in form of FDR or Bank Guarantee in favour of "....." valid up to 180 days, shall be issued by any scheduled commercial bank bank. (Give bank details and amount)		

S.No	Description	Details to be filled by the Firm	Documents details on Page No.
8	Financial capability condition In case of a consortium		
8A	Turnover criteria to be met by Consortium by adding their turnovers.		
8B	Number of members in a Consortium should be limited to 4 (four) with the lead partner having equity more than 51% (Give name and address)		
10	Authority Letter of the works carried out by Bio-remediation Technique by the patent holder in favour of Tenderer/Bidder firm/ consortium.	Issued From - Valid upto -	

Note: 1. Please fill in the details on the given table with appropriate documents and certify the table also.

2. Similar Works Means - Bioremediation treatment of flowing waste water in open drains/rivers.

CERTIFIED BY THE FIRM/CONSORTIUM

(NAME AND SEAL WITH DATE)

प्रेषक,

कल्याण बनर्जी,
संयुक्त सचिव,
उत्तर प्रदेश शासन

सेवा मे,

नगर आयुक्त,
नगर निगम,
वाराणसी।

नगर विकास अनुभाग-5

लखनऊ: दिनांक: 21 अक्टूबर, 2024

विषय:- वाराणसी नगर में गंगा एवं वरुणा नदी में गिरने वाले अनटैप्ड नालों के सीवेज शोधन (बायोरेमीडिएशन) का कार्य कराये जाने के संबंध में।

महोदय,

कृपया उपरोक्त विषयक अपने पत्र संख्या-775/11/ज0क0न0नि0 दिनांक 09.10.2024 (प्रति संलग्न) का संदर्भ ग्रहण करने का कष्ट करें, जिसके माध्यम से अवगत कराया गया है कि महाप्रबन्धक, जलकल विभाग नगर निगम, वाराणसी के पत्र संख्या-690/11/ज0क0न0नि0 दिनांक 24.09.2024 (प्रति संलग्न) प्रेषित करते हुए विषयगत कार्य उत्तर प्रदेश जल निगम (नगरीय) द्वारा कराये जाने हेतु अधिशासी अभियन्ता, निर्माण खण्ड-प्रथम, उ0प्र0 जल निगम (नगरीय), वाराणसी को निर्देशित किया गया है।

2- उल्लेखनीय है कि शासनादेश संख्या-142/नौ-9-2019-89ज/2001 दिनांक 03.02.2020 (प्रति संलग्न) एवं शासनादेश संख्या-3146/नौ-5-2020-284-सा/2019 दिनांक 11.08.2020 (प्रति संलग्न) द्वारा गंगा तथा सहायक नदियों में गिरने वाले प्रदूषित नालों के दूषित जल को बायोरेमिडिएशन/फाइटोरेमिडिएशन विधि से शोधित करने के संबंध में विस्तृत दिशा-निर्देश निर्गत किये गये हैं। उक्त के अनुपालन में जलकल विभाग, वाराणसी नगर निगम के स्तर से कार्यवाही किये जाने हेतु पत्र संख्या-2366/कार्य-07/145 दिनांक 28.09.2024 (प्रति संलग्न) उत्तर प्रदेश जल निगम (नगरीय) द्वारा अनुरोध किया गया था।

उपरोक्त के संबंध में अवगत कराना है कि:-

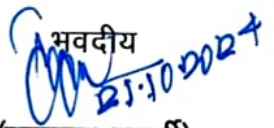
1. गंगा नदी एवं वरुणा नदी में गिरने वाले ड्रेनेज के बायोरेमीडिएशन के संबंध में शासनादेश संख्या 142/नौ-9-2019-89ज/2001 दिनांक 03.02.2020 एवं शासनादेश संख्या 3146/नौ-5-2020-284-सा/2019 दिनांक 11.08.2020 द्वारा गंगा नदी तथा सहायक नदियों में गिरने वाले नालों के प्रदूषित जल के शोधन हेतु सीवेज ट्रीटमेंट प्लांट के निर्माण होने तक बायोरेमीडिएशन विधि/फाइटोरेमीडिएशन विधि या अन्य विधि से शोधन हेतु समस्त निकायों को निर्देश निर्गत किये गये हैं। शासनादेश संख्या 3146/नौ-5-2020-284-सा/2019 दिनांक 11.08.2020 द्वारा समस्त निकायों को गंगा तथा सहायक नदियों में गिरने वाले प्रदूषित जल को बायो-रेमीडिएशन/फाइटो रेमीडिएशन विधि या अन्य विधि से शोधित करने के संबंध में एस0ओ0पी0,

एन0आई0टी0 एवं ड्राफ्ट टेंडर प्रपत्र संलग्न करते हुए निविदा प्रपत्र के आधार पर अग्रेतर कार्यवाही हेतु निर्देश दिये गये हैं।

2. महाप्रबन्धक, जलकल विभाग नगर निगम, वाराणसी के पत्र संख्या-690/II /ज0क0न0नि0 दिनांक 24.09.2024 द्वारा अवगत कराया गया है कि पूर्व में जलकल विभाग द्वारा अस्सी नदी (झेन) का बायो-रेमीडिएशन जल कल विभाग द्वारा कराया जा रहा था।
3. वर्तमान में प्रदेश की अन्य नगरीय निकायों में गंगा तथा सहायक नदियों में गिरने वाले प्रदूषित नालों के दूषित जल को बायो-रेमीडिएशन/फाइटो रेमीडिएशन विधि से निस्तारण संबंधित निकायों द्वारा स्वयं से कराया जा रहा है।
4. शासन के अधिसूचना संख्या-800/79-वि-1-21-क-29-21 लखनऊ दिनांक 24.08.2021 (प्रति संलग्न) द्वारा उ0प्र0 द्वारा प्रकाशित उ0प्र0 जल तथा सीवर व्यवस्था (संशोधन) विधेयक 2021 में की गयी व्यवस्था के अनुसार नगरीय क्षेत्र में राज्य सरकार के निर्देशों के अनुसार जल सम्भरण, सीवर व्यवस्था और मल निस्तारण के लिए योजना तैयार करना आदि उ0प्र0 जल निगम (नगरीय) के उत्तरदायित्व में आता है।
5. गंगा तथा उसके सहायक नदियों में गिरने वाले प्रदूषित नालों के दूषित जल के बायो-रेमीडिएशन का कार्य रिकरिंग ऑपरेशन के अन्तर्गत आता है और इस हेतु उ0प्र0 जल निगम (नगरीय) के पास अतिरिक्त मानव संसाधन नहीं है।

3- इस संबंध में मुझे यह कहने का निदेश हुआ है कि कृपया उक्त शासनादेश दिनांक 03.02.2020 एवं शासनादेश दिनांक 11.08.2020 द्वारा गंगा नदी तथा सहायक नदियों में गिरने वाले नालों के प्रदूषित जल के शोधन हेतु सीवेज ट्रीटमेंट प्लान्ट के निर्माण होने तक बायोरेमीडिएशन विधि/फाइटोरेमीडिएशन विधि या अन्य विधि से शोधन हेतु समस्त निकायों को निर्गत निर्देशों के क्रम में शासनादेश दिनांक 11.08.2020 के साथ संलग्न एस0ओ0पी0, एन0आई0टी0 एवं ड्राफ्ट टेंडर प्रपत्र मयसंलग्नक संलग्न करते हुए गंगा तथा सहायक नदियों में गिरने वाले प्रदूषित जल को बायो-रेमीडिएशन/फाइटो रेमीडिएशन विधि या अन्य विधि से शोधित करने के संबंध में अपने स्तर से प्राथमिकता के आधार पर कार्यवाही कराने का कष्ट करें, जिससे कि मा0 एन0जी0टी0 के आदेशों का पालन हो सके एवं किसी भी प्रकार के अर्थदण्ड से बचा जा सके।

संलग्नक:-उरोक्तानुसार।

भवदीय

 (कल्याण बनर्जी)
 संयुक्त सचिव

पृ0सं0 एवं दिनांक

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. आयुक्त, वाराणसी मण्डल, वाराणसी।
2. प्रबन्ध निदेशक, उ0प्र0 जल निगम (नगरीय), लखनऊ।
3. जिलाधिकारी, वाराणसी।
4. मुख्य अभियन्ता (प्रया0क्षे0), उ0प्र0 जल निगम (नगरीय), प्रयागराज।
5. अधीक्षण अभियन्ता, निर्माण मण्डल, उ0प्र0 जल निगम (नगरीय), वाराणसी।
6. अपर नगर आयुक्त/प्रभारी अधिकारी, नगर निगम, वाराणसी।
7. महाप्रबन्धक, जलकल विभाग, नगर निगम, वाराणसी।
8. अधिशासी अभियन्ता, निर्माण खण्ड-प्रथम, उ0प्र0 जल निगम (नगरीय), वाराणसी।
9. क्षेत्रीय अधिकारी, उ0प्र0 प्रदूषण नियन्त्रण इकाई, वाराणसी।

आज्ञा से
21.10.2024
(कल्याण बनर्जी)
संयुक्त सचिव



उत्तर प्रदेश जल निगम (ग्रामीण)

कार्यालय परियोजना प्रबन्धक गंगा प्रदूषण नियंत्रण इकाई,
भगवानपुर, वाराणसी-221005

पत्रांक
सेवा में

121 / 2024 जी० श्री० / 02

दिनांक 29/01/2025

✓ क्षेत्रीय अधिकारी,
उ०प्र० प्रदूषण नियंत्रण बोर्ड,
वाराणसी।

विषय:- मा० राष्ट्रीय हरित अधिकरण नई दिल्ली में योजित ओरिजनल एप्लीकेशन नं० 367/2022 राजेन्द्र प्रसाद गुप्ता बनाम स्टेट ऑफ यू०पी० एवं अन्य में पारित आदेश दिनांक 16.10.2024 के अनुपालन के संबंध में।

महोदय,

उपरोक्त विषयक मा० राष्ट्रीय हरित अधिकरण नई दिल्ली में योजित ओरिजनल एप्लीकेशन नं० 367/2022 राजेन्द्र प्रसाद गुप्ता बनाम स्टेट ऑफ यू०पी० एवं अन्य में पारित आदेश दिनांक 16.10.2024 के अनुपालन में उ०प्र० जल निगम (नगरीय) एवं उ०प्र० जल निगम (ग्रामीण) की संयुक्त आख्या संलग्न कर अग्रेतर कार्यवाही हेतु प्रेषित है।

संलग्नक- उपरोक्तानुसार।

भवदीय,

(आशीष कुमार सिंह)
परियोजना प्रबन्धक

पृष्ठांकन संख्या एवं दिनांक उपरोक्तानुसार।

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. महाप्रबन्धक, जलकल विभाग, नगर निगम, वाराणसी।
2. अधीक्षण अभियन्ता, मण्डल कार्यालय, उ०प्र० जल निगम (ग्रामीण), वाराणसी।
3. अधिशासी अभियन्ता, निर्माण खण्ड-प्रथम, उ०प्र० जल निगम (नगरीय), वाराणसी।

परियोजना प्रबन्धक

Detail of Drains in Varanasi
in
Compliance of Hon'ble NGT, New Delhi Order dated 16-10-2024
in
OA no. 367/2022 Rajendra Prasad Gupta Vs State of U.P. & Ors.


Sl. No.	Name of Drain	Tapped/ Partially tapped/ untapped	Discharge (MLD)	Final disposal (River)	Concerned Department	Working agency	Details of Project & Budgetary allocation	Timeline for Completion	Interim Measures for Partially Tapped or Untapped drain	Remarks
1	2	3	4	5	6	7	8	9	10	11
1	Balua Ghat Drain	Tapped	0.13	Ganga River						Tapped to 10 MLD STP Ramnagar
2	Shakti Ghat Drain	Tapped	0.4							
3	Saloti Ghat Drain	Tapped	0.34							
4	Hanuman Ghat Drain	Tapped	0.09							
5	Rambag Ghat Drain	Tapped	8.2							
6	Asi/ Nagwa Drain	Partially Tapped	78	Ganga River	Namami Gange & Rural Water Supply Department	UPJN(Rural)	* Construction of 55 MLD STP at Bhagwanpur * Fund Allotted	Dec-25	NMCG has approved project for onsite treatment of Assi Drain through Advance Oxidation Process till construction of STP is completed.	Partially tapped to 50 MLD STP Ramana
7	Nakkha Drain	Partially Tapped	5	Ganga River						
8	Samne Ghat, Drain	Tapped	1.17	Ganga River						Tapped to 50 MLD STP Ramana
9	Shivala Drain	Tapped	5	Ganga River						Tapped to 80 MLD STP Dinapur
10	Harshchandra Drain	Tapped	2.5	Ganga River						
11	Mansarovar Drain	Tapped	4.5	Ganga River						
12	Pandev Ghat Drain	Tapped	30	Ganga River						
13	Dr. R. P. Ghat Drain	Tapped		Ganga River						
14	Meer Ghat Drain	Tapped		Ganga River						
15	Lalra Ghat Drain	Tapped	4.5	Ganga River						
16	Jalasen Ghat Drain	Tapped		Ganga River						
17	Manikamika Ghat Drain	Tapped		Ganga River						
18	Sankatha Ghat Drain	Tapped		Ganga River						
19	Mehta Ghat Drain	Tapped		Ganga River						
20	Ram Ghat Drain	Tapped	1.5	Ganga River						
21	Panchganga Ghat Drain	Tapped		Ganga River						
22	Brahma Ghat Drain	Tapped		Ganga River						
23	Lal Ghat Drain	Tapped		Ganga River						
24	Trilochan Ghat Drain	Tapped	4.5	Ganga River						
25	Telva Drain	Tapped	2.8	Ganga River						
26	Bhainsasur Drain	Tapped	0.4	Ganga River						
27	Rajghat Drain (small)	Tapped	0.2	Ganga River						
28	Rajghat Drain/Rajghat Outfall/Khirkiya	Tapped	0	Ganga River						
29	Sujabad Drain (Gharwani Mata Mandir Drain & Shayar Mata Mandir Drain)	Untapped	4.5	Ganga River	Urban Development Department	UPJN(Urban)	* Construction of 07 MLD STP with sewer network and house connections at Sujabad * Fund Allotted	May-26		
30	Phulwariya Drain	Tapped	7.6	Varuna River						Tapped to 140 MLD STP Deenapur
31	Sadar Bazar Drain	Tapped	2	Varuna River						Tapped to 140 MLD STP Deenapur By UP Irrigation Department
32	Raja Bazar Drain	Tapped	0.1	Varuna River						
33	Nakkhi Ghat Drain	Tapped	0.1	Varuna River						
34	Narokhar Drain	Partially Tapped	7.5	Varuna River						Partially tapped to 120 MLD STP Goithaha. Present ally effluent of this STP also flow in this drains because of which complete tapping is not Possible. Project for Separate effluent line is submitted to NMCG for approval.


परियोजना प्रबन्धक
गंगा प्रदूषण नियंत्रण इकाई
उ.प. जल निगम (उ.प. नगरपालिका)

22/01/2025

Executive Engineer,
Construction Division-1,
U. P. Jal Nigam (Urban)
Varanasi

35	Sarang Talab Drain	Tapped	1.5	Varuna River						Tapped to 140 MLD STP Deenapur By UP Irrigation Department
36	Nai Basti	Tapped	3	Varuna River						
37	Teliya Bag Drain	Tapped	18	Varuna River						
38	Central Jail Drain	Tapped	6.5	Varuna River						
39	Ordely Bazar Drain	Tapped	7	Varuna River						
40	Chamrautha Drain	Tapped	1.5	Varuna River						
41	Khajury Colony Drain	Tapped	1.5	Varuna River						
42	Banaras Drain No.-5	Tapped	1	Varuna River						
43	Hukulgani Drain	Tapped	2.5	Varuna River						
44	Durga/Daniyal/ Lohta Drain	Untapped	37	Varuna River	Namami Gange & Rural Water Supply Department	UPJN(Rural)				DPR of I&D and Treatment works for Durga Drain (Sewerage District-IV), Varanasi, Amounting to Rs. 348.86 Cr is submitted to NMCG. TPA is in process.


 Executive Engineer,
 Construction Division-I,
 U. P. Jal Nigam (Urban)
 Varanasi


 22/01/2025
 परियोजना प्रबन्धक
 नंगा प्रदूषण नियंत्रण इकाई
 उ०प्र० जल निगम (ग्रामीण), वाराणसी

Detail of Drains in Chandauli (Pt. DDU Nagar)
in
Compliance of Hon'ble NGT, New Delhi Order dated 16-10-2024
in
OA no. 367/2022 Rajendra Prasad Gupta Vs State of U.P. & Ors.

Sl. No.	Name of Drain	Tapped/ Partially tapped/ untapped	Discharge (MLD)	Final disposal (River)	Concerned Department	Working agency	Details of Project & Budgetary allocation	Timeline for Completion	Interim Measures for Partially Tapped or Untapped drain	Remarks
1	2	3	4	5	6	7	8	9	10	11
1	Railway Nala	Untapped	22.82	Ganga River	Namami Gange & Rural Water Supply Department	UPJN(R)	Construction of 45 MLD STP at Vill. Rauna. Approval of Project granted by NMCG on 22-01-2025	21 months after Bidding period of appx. 06 months		AAE&S issued on 22-01-2025
2	Ganda Nala	Untapped	9.19	Ganga River						

22/01/2025
परियोजना प्रबन्धक
गंगा प्रदूषण नियंत्रण इकाई
उ०प्र० जल निगम (ग्रामीण), वाराणसी

451 ANNEXURE 5

Analysis of Assi River (26/12/2024)

Sample	pH	EC ($\mu\text{S/cm}$)	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Coliform (MPN index per 100 ml)
Inlet	6.74 \pm	1350 \pm 20.25	386 \pm	160 \pm	503 \pm 14.34	5.4 \times 10 ⁶
	0.10		12.35	4.64		
Outlet	7.23 \pm	824 \pm 15.65	54 \pm	25 \pm	71 \pm 1.49	860
	0.08		1.40	0.35		

Analysis of Assi River (03/01/2025)

Sample	pH	EC ($\mu\text{S/cm}$)	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Coliform (MPN index per 100 ml)
Inlet	7.86 \pm	1240 \pm 38.44	252 \pm	176 \pm	478 \pm	3.5 \times 10 ⁶
	0.16		9.07	5.90			12.24
Outlet	7.53 \pm	725 \pm 17.85	35 \pm	20 \pm	75 \pm 2.05	780
	0.18		0.56	0.40		

Analysis of Assi River (10/01/2025)

Sample	pH	EC ($\mu\text{S/cm}$)	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Coliform (MPN index per 100 ml)
Inlet	6.30 \pm	1320 \pm 20.5	286 \pm	195 \pm	432 \pm 11.3	7.3 \times 10 ⁶
	0.1		5.03	4.38		
Outlet	7.24 \pm	720 \pm 12.9	45 \pm	32 \pm	88 \pm 1.49	840
	0.15		1.65	1.13		

Rajeev Pratap Singh
01/2/25

Dr. Rajeev Pratap Singh
Associate Professor
Institute of Environment & Sustainable Development
Banaras Hindu University
Varanasi-221005

Analysis of Assi River (12/01/2025)

Sample	pH	EC ($\mu\text{S/cm}$)	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Coliform (MPN index per 100 ml)
Inlet	6.82 \pm 0.12	1470 \pm 26.9	326 \pm 6.84	260 \pm 4.86	572 \pm 12.26	9.2 \times 10 ⁶
Outlet	7.25 \pm 0.13	740 \pm 15.06	81 \pm 1.45	40 \pm 0.82	96 \pm 2.15	810

Analysis of Assi River (20/01/2024)

Sample	pH	EC ($\mu\text{S/cm}$)	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Coliform (MPN index per 100 ml)
Inlet	7.2 \pm 0.17	1300 \pm 30	247 \pm 6.17	184 \pm 5.7	480 \pm 13.8	9.4 \times 10 ⁶
Outlet	7.4 \pm 0.14	760 \pm 19	38 \pm 1.68	32 \pm 0.92	86 \pm 2.6	780

Analysis of Assi River (27/01/2024)

Sample	pH	EC ($\mu\text{S/cm}$)	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Coliform (MPN index per 100 ml)
Inlet	6.9 \pm 0.	1400 \pm 36.7	300 \pm 5.4	195 \pm 4.68	493 \pm 10.74	7.4 \times 10 ⁶
Outlet	7.3 \pm 0.16	840 \pm 21.84	55 \pm 1.6	36 \pm 1.16	83 \pm 2.5	850

RPSL
OTT/2/25

Dr. Rajeev Pratap Singh
Associate Professor
Institute of Environment & Sustainable Development
Banaras Hindu University
Varanasi-221005

Analysis of Assi River (20/01/2025)

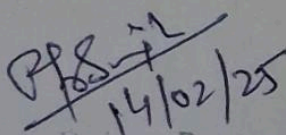
Sample	pH	EC ($\mu\text{S/cm}$)	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Coliform (MPN index per 100 ml)
Inlet	7.2 \pm 0.17	1300 \pm 30	247 \pm 6.17	184 \pm 5.7	480 \pm 13.8	9.4 $\times 10^6$
Outlet	7.4 \pm 0.14	760 \pm 19	38 \pm 1.68	32 \pm 0.92	86 \pm 2.6	780

Analysis of Assi River (27/01/2025)

Sample	pH	EC ($\mu\text{S/cm}$)	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Coliform (MPN index per 100 ml)
Inlet	6.9 \pm 0.3	1400 \pm 36.7	300 \pm 5.4	195 \pm 4.68	493 \pm 10.74	7.4 $\times 10^6$
Outlet	7.3 \pm 0.16	840 \pm 21.84	55 \pm 1.6	36 \pm 1.16	83 \pm 2.5	850

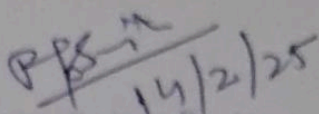
Analysis of Assi River (03/02/2025)

Sample	pH	EC ($\mu\text{S/cm}$)	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Coliform (MPN index per 100 ml)
Inlet	6.03 \pm 0.10	1360 \pm 32.5	370 \pm 6.67	200 \pm 4.4	486 \pm 12.15	4.9 $\times 10^6$
Outlet	7.02 \pm 0.13	725 \pm 15.57	45 \pm 1.08	28 \pm 0.86	74 \pm 2.14	600


 Dr. Rajeev Pratap Singh
 Associate Professor
 Institute of Environment & Sustainable Development
 Banaras Hindu University
 Varanasi-221005

Analysis of Assi River (10/02/2025)

Sample	pH	EC ($\mu\text{S}/\text{cm}$)	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Coliform (MPN index per 100 ml)
Inlet	6.21 \pm 0.20	1240 \pm 35.4	294 \pm 6.17	150 \pm 3.6	340 \pm 10.8	5.9×10^6
Outlet	7.61 \pm 0.09	691 \pm 14.2	42 \pm 1.05	32 \pm 0.54	86 \pm 1.6	710


 14/2/25
 Dr. Rajeev Pratap
 Associate Professor
 Institute of Environment & Sustainable Development
 Banaras Hindu University
 Varanasi-221005

No. Pr-12012/14/2021- TECH1 NMCG
 भारत सरकार, जल शक्ति मंत्रालय
 जल संसाधन, नदी विकास एवं गंगा संरक्षण विभाग
 राष्ट्रीय स्वच्छ गंगा मिशन

प्रथम तल, मेजर ध्यानचंद नेशनल स्टेडियम,
 इंडिया गेट, नई दिल्ली-1
 दिनांक: 22nd January 2025

सेवा में,

The Project Director (UP-SMCG),
 State Mission for Clean Ganga – Uttar Pradesh
 6, Rana Pratap Marg, Uttar Pradesh Jal Nigam Head Quarter
 Hazratganj, Lucknow – 226001

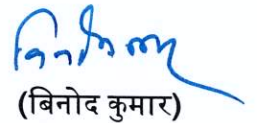
Sub: Administrative Approval and Expenditure Sanction for “Interception & Diversion and STP works at Pt. Deen Dayal Upadhyay Nagar, Chandauli, Uttar Pradesh” under Namami Gange Mission – II, with 100% central sector support at an estimated cost of Rs. 262.78 Crore (Rupees Two Hundred Sixty-Two Crore and Seventy-Eight Lakh only).

महोदय,

I am directed to convey the grant of Administrative Approval and Expenditure Sanction for the project on “Interception & Diversion and STP works at Pt. Deen Dayal Upadhyay Nagar, Chandauli, Uttar Pradesh” under National Ganga Plan (NGP) – Non-EAP budget head of Namami Gange Mission – II, with 100% central sector support at an estimated cost of **Rs. 262.78 Crore (Rupees Two Hundred Sixty-Two Crore and Seventy-Eight Lakh only), inclusive of 15-year O&M and GST**, to be implemented on **Hybrid Annuity based PPP Model (HAM)** with the following major components:

- a. Construction of 45 MLD STP, including sludge digester
 - b. Construction of 43 MLD Main Pumping Station at Railway Nala
 - c. Construction of 17 MLD SPS at Ganda Nala
 - d. Rising Main – 60 m (From Railway Nala SPS to STP) and 3750 m (From Ganda Nala SPS to STP)
 - e. I&D of 2 drains namely Railway Nala (22.82 MLD) and Ganda Nala (9.19 MLD)
 - f. Treated effluent disposal line– 60 m
 - g. 15 years of Operation & Maintenance including the Manpower, chemicals, other maintenance, Power, and Fuel charges
 - h. ESAMP, Public outreach and GAAP
2. The summary of cost is given at **Annexure-I**.
 3. Administrative Approval and Expenditure Sanction for the project is granted subject to General & Technical conditions as per **Annexure-II**, Specific conditions and directions of EC as per **Annexure-III** and Financial conditions as per **Annexure-IV**.

4. The period of completion of the project is 21-months (18-month construction + 3-month trial & commissioning) from the date of start of the project (excluding expected bidding period of 6 months). The procurement of goods and services shall be made strictly as per the 'NGRBA programme framework' and various other guidelines of NMCG. The detailed schedule of the project implementation is given in **Annexure-V**.
5. UPSMCG and EA (Uttar Pradesh Jal Nigam – Rural) may ensure that there are no overlaps with the works being undertaken by the State Government and may obtain necessary permissions/ clearances, including possession of required land parcels for the project before awarding the contract.
6. Any cost escalation over and above the sanctioned cost attributable to Uttar Pradesh Government, including due to delay in land acquisition, change in scope post-project approval etc., will be borne by the State Government concerned.
7. The grantee institution i.e. State Mission for Clean Ganga (SMCG) Uttar Pradesh is a registered society of the State Government constituted with the objective of effective implementation of the Namami Gange Programme activities at the State level, and the State is responsible in the long term for the conservation and health of the state's stretch of the river Ganga.
8. The sanctioned cost of the project will be borne from the 'National Ganga Plan – Non EAP budget head of Namami Gange Mission – II and expenditure incurred will be booked under the component "Nirmal Ganga – Infrastructure Development and Asset Creation – Pollution Abatement Management - Sewerage Infrastructure - Sewage Treatment Plants (STP) - HAM projects". The NMCG/Government of India reserves the right to withdraw the sanction at any stage, if it is convinced that the fund has not been properly utilized or appropriate progress is not being made.
9. In case of violation of any of the conditions of the grant or in case of closure or dissolution of the grantee organization, the Government shall take possession of all the assets of the organization acquired out of the Government grants and use them in any manner deemed appropriate or to recover from the organization the value of such assets at its discretion.
10. This AA&ES is issued based on the appraisal and sanction of the Executive Committee vide its 59th meeting held on 30th December 2024 as well as the approval of Director General – National Mission for Clean Ganga vide e-office Note#73 dated 21.01.2025 and concurrence of ED (Finance), NMCG vide eoffice Note#71 dated 21.01.2025.


(बिनोद कुमार)

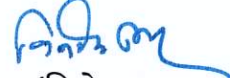
निदेशक (परियोजनाएँ), एनएमसीजी

जानकारी एवं आवश्यक कार्यवाही हेतु प्रतिलिपि:

- 1) The Chief Secretary, Government of Uttar Pradesh, Lucknow-226001.
- 2) The Managing Director, Uttar Pradesh Jal Nigam – Rural, 6, Rana Pratap Marg, Lucknow - 226001
- 3) The District Magistrate/ Chairman, District Ganga Committee, Varanasi, Uttar Pradesh.
- 4) The Municipal Commissioner, Varanasi Nagar Nigam, Sigra, Varanasi, Uttar Pradesh, 221001.
- 5) The Executive Officer, Nagar Palika Parishad, Chandauli

जानकारी हेतु प्रतिलिपि:

- 1) PS to Hon'ble Minister – Jal Shakti, Shram Shakti Bhawan, N. Delhi-110001
- 2) PPS to Secretary, DoWR, RD & GR, Shram Shakti Bhawan, New Delhi-110001
- 3) PS to DG / ED(Projects) / ED(Finance) / ED(Technical) / ED (Admin.), NMCG, New Delhi
- 4) Dr. Nadeem Khalil, Professor (Env. Engg.) and Member Secretary SPV – CPIMC (Env.), General Section O/o Registrar, Aligarh Muslim University, Aligarh - 202001
- 5) Sanction Folder/Guard File/MIS Division, NMCG


(बिनोद कुमार)

निदेशक (परियोजनाएँ), एनएमसीजी

22.01.2025

Annexure - I

Summary of cost for the project proposal of "I&D and STP works at Pt. Deen Dayal Upadhyay Nagar, Chandauli, Uttar Pradesh"

(Amount in Rs. Lakh)

S No.	Items	Quantities	Approved Cost	Remarks
A	Basic Capital Cost			
A.1	MPS and allied works (SPS, Bar Screen chambers & Bye-pass sewer) - 43 MLD	1 No	700	
A.2	SPS at Ganda Nala & allied works - 17 MLD	1 No	425	
A.3	I&D works including strengthening	2 No.	81.59	
A.4	Rising Main from SPS to STP	500 mm, 3750 m	700	
A.5	Rising Main from MPS to STP	800 mm, 60 m	36.22	
A.6	STP - 45 MLD	1 No	6750	The STP cost is inclusive of sludge digester cost.
A.7	Treated Effluent line	1200 mm, 60 m	7.9	
A.8	Miscellaneous Work (Retaining wall, Boundary Wall, Water supply at STP)	LS	300	
A.9	DG Set, Automation, Cable & HT Panel		500	
Sub Total (A) : Basic Capital Cost			9500.71	
B	Centage (applicable on basic capital cost)			
B.1	Cost of project preparation @ 4% (maximum) of basic capital cost		380.03	A maximum of 4% each of AA&ES basic capital cost/ awarded capital cost (whichever is lower) is admissible towards (a) DPR preparation and (b) supervision fees. However, payments for DPR preparation and supervision fees to Executing Agencies (EAs)/ Consultants are to be made as per actuals based on the scrutiny of supporting documents furnished by them for such claims (Reference: NMCG circular No. No. G-35/10/2020 -BUDGET NMCG dated 19.01.2023)
B.2	Cost of project supervision @ 4% (maximum) of basic capital cost		380.03	
Sub Total B - Centage			760.06	
C	O&M cost for 1 st 15 years, excluding power charges		3800.28	Costs towards Manpower, Maintenance, Chemicals etc.
D	Power charges for 1 st 15 years		9167	To be reimbursed on an actual basis
E	Other components (GST applicable)			

S No.	Items	Quantities	Approved Cost	Remarks
E.1	Communication & Public Outreach		8.39	Provision is indicative. Payment will be as per actuals within the ceiling indicated.
E.2	Governance and Accountability Plan (GAPP)		12.21	Provision is indicative. Payment will be as per actuals within the ceiling indicated.
E.3	Environmental Mitigation and Monitoring Cost (ESAMP)		3.68	The cost provisions relate to interventions on noise control, dust bins and good environment condition etc. and are the responsibility of the contractor.
E.4	Project Design and Vetting Cost		50.00	Indicative provision. Payment will be as per actuals based on design and drawing details.
Sub Total – E – Other Components			74.28	
F	Statutory Duties			
F.1	Labor cess	1% of basic capital cost	95.01	
Sub Total F			95.01	
G	GST			
G.1	GST on A+B+F	18%	1860.31	
G.2	GST on O&M cost excluding power (C)	18%	684.05	Power costs are excluded as these are to be reimbursed as per actuals.
Sub Total G - GST			2544.36	
Total Cost of project (A+B+C+D+E+F+G) excluding Project Engineer cost			25941.70	
H	Project Engineer's cost			
H.1	Provision for Project Engineer's cost (3% of Basic Capital cost + GST)		336.33	Indicative amount. Payment will be as per the contract with the selected agency.
Sub Total H - PE Cost			336.33	
Total Cost of project (A+B+C+D+E+F+G+H) including Project Engineer cost			26278.03	

The requisite land parcels and power connections need to be provided by the State Government from the State fund / budget.

The project will be implemented in HAM mode. In the HAM mode, 40% payment of capex shall be paid in equal milestones as per the concession agreement. The remaining payment of capex, as well as O&M cost, shall be paid during the O&M stage quarterly based on satisfactory performance of the STPs and subject to meeting the KPIs as per HAM model of NMCG.

General, Financial and Technical conditions:

1. The State Mission for Clean Ganga Uttar Pradesh (UPSMCG), which is a registered society, shall be responsible for the overall planning, management and effective implementation of the project at the state level.
2. 'Nagar Palika Parishad – Chandauli' shall be the Urban Local Body (ULB) responsible for ensuring commitment to ownership, commitment to reforms for sustainable O&M, and community involvement.
3. The Uttar Pradesh Jal Nigam – Rural i.e. UPJN (R) shall be the Executing Agency (EA) of the project to be implemented under the guidance of the UPSMCG, in coordination and consultation with the ULB and overall monitoring of the National Mission for Clean Ganga (NMCG) as per provisions laid down in the NGRBA programme framework.
4. The project will be implemented in Hybrid Annuity Based PPP mode with Operation & Maintenance support for a period of 15 years. The O&M works would include basic cleaning works, service management for the proposed service area of I&D and STP operation. After 15 years, the operation and maintenance of the plant shall be the responsibility of the State Government.
5. Sustainable revenue generation from beneficiaries, re-use of treated effluent and waste to energy, etc. shall be explored by the State Government to reduce the O&M cost and build the necessary capacity of ULB to incur the O&M cost beyond 15 year's O&M period.
6. Necessary capacity building for the concerned ULB shall be initiated and a detailed action plan for such capacity building may be provided by the State Government to NMCG within a period of 6 months from the issuance of AA&ES.
7. The requisite land parcels and power connections need to be provided by the State Government from the state fund / budget.
8. EA/ State Government needs to ensure possession of suitable land parcels expeditiously before tendering for grounding the works in time.
9. Towards implementation of the project, synergy shall be ensured with other central/State-sponsored programs like AMRUT etc., and shall be aligned with the city sanitation plan.
10. The project is to be implemented within 21 months (including 3 months trial run) from the effective date as per the implementation schedule given in **Annexure-V**. All the bidding activities and award of work are to be completed within 6 months from the date of AA&ES.
11. All infrastructure projects need to conduct project-specific IEC activities and a detailed plan for such activities to be submitted to NMCG.
12. "Namami Gange" signage to be placed at all the project sites approved under the Namami Gange programme.
13. Adequate provision shall be kept in the bid document to invite bids with GST-inclusive cost.
14. In the bid document, the latest effluent standards as per the NGT order shall be followed.
15. UPSMCG need to take steps to prepare bid documents in line with the Model Bid Document (MBD) for projects funded under the National Ganga Plan.
16. The activities proposed under the project shall conform to all Environmental Legislations and the NGRBA programme framework.

17. No untreated municipal/domestic wastewater should be allowed to fall in the Ganga River stretch of Pt. Deen Dayal Upadhyay Nagar municipality.
18. Standard procedure as indicated in the CPHEEO manual on Sewerage & Sewage Treatment, NGRBA Guidelines and codes of practice of BIS will be strictly followed during project implementation.
19. Detailed design & implementation of the project works should be based on an extensive survey. Proper investigation should be carried out before execution to achieve economy in the proposal as well as to avoid any shortfall in the design. The choice of technology should be left open and decided during the bidding process.
20. Progress of implementation of the project shall be closely monitored by the State Government of UP /UPSMCG, to ensure that the project is completed within the stipulated period. In addition, the progress (Physical & Financial, including funds utilization certificates) needs to be reported to NMCG regularly and as and when requested.
21. The project should encourage the reuse of treated wastewater. A plan and implementation schedule for water reuse needs to be provided before bidding.
22. The actual project cost shall be the awarded cost. The state government need to seek "No Objection" from NMCG for the Technical & Financial bid evaluation.
23. The State is advised to consider appropriate user charges monthly for the sewerage system to recover at least O&M cost. Suitable sewage cess/tariff / tax and sewer connection fee may be imposed on the beneficiaries to recover the O&M cost. However, State/ ULBs must target to recover the full project cost for sustainable O&M.
24. It is the responsibility of the UPSMCG and Executing Agency to ensure adequate training to all personnel engaged during construction for quality of construction works and during O&M.
25. UPSMCG and UPJN (R) shall ensure regular monitoring of the project in accordance with the NGRBA framework.
26. Guidelines issued by the Ministry of Finance, the Ministry of Home Affairs and other governing organizations regarding disaster management as applicable and be adhered to during project execution.
27. All components of the project shall be completed within specified time limits and the resources and outputs and outcomes are to be ensured as envisaged in the approved project Completion Report shall be submitted to NMCG on completion of the project.
28. Any additional component relevant for the project or any component requiring modification or deletion, may be added or modified or deleted as the case may be, only with the prior approval of the Competent Authority.
29. Staff that may be employed for the preparation, execution, or operation of the project by the EA are not to be treated as employees of the UPSMCG/ NMCG. The deployment of such staff at the time of completion or termination of the project will not be the concern or liability of the UPSMCG/ NMCG.
30. Optimal utilization of the assets relating to the project and created under the Ganga Action Plan or any other Central /State Plan shall also be ensured by the UPSMCG /EA/ ULB.
31. All data, records, documents and material related to the project shall be stored properly and cataloged by the UPSMCG/ EA for reference and retrieval including regular uploading /disclosure/updating of such data on the website.
32. The State/ UPSMCG/ EA shall ensure that all provisions of the RTI Act 2005 are adhered to as far as information pertaining to the project is concerned.

33. The State/ UPSMCG/ ULB shall ensure that the public is informed in Pt. Deen Dayal Upadhyay Nagar, Chandauli regarding the implementation of the project and soliciting their cooperation and views as applicable.
34. For the provisions made under IEC activities, the UPSMCG shall make suitable arrangements with Nagar Palika Parishad – Pt. Deen Dayal Upadhyay Nagar, Chandauli for executing the 'Communication and Public Outreach' programme under its supervision towards sensitization of people for abatement of pollution.
35. NMCG shall not be responsible for any damage due to natural calamities or any other reasons. State Government is advised to insure the assets at their own cost after suitable risk assessment.
36. All the specific conditions and generic conditions mentioned in the AA&ES are to be complied with, by the UPSMCG through their Executing Agency. The UPSMCG will ensure fulfillment of such conditions before finalizing the bid(s) by the EA.
37. The Monthly Physical Progress Reports (MPPRs) shall be submitted by the 10th day of every month regularly by the EA to the UPSMCG and by the 20th day of every month regularly by the UPSMCG to the NMCG. The Quarterly Physical Progress Report (QPPRs) shall be submitted to the UPSMCG and NMCG within 30 days from the end of each quarter.
38. The signing officers will indicate her/his name and designation in full in capital letters and commencement of processing the case, ink-signed MPPR must follow by Post.
39. The UPSMCG and District Ganga Committee shall monitor the project from time to time and shall also monitor implementation performance of the EA – UPJN (R).
40. The UPSMCG shall ensure appointment of agency (ies) for third party inspection (TPI). The EA through the UPSMCG shall submit copies of the TPI Reports along with their responses/comments to the NMCG. Releases of fund will be subject to compliance of TPI reports.
41. Conditions/ commitments indicated in the Executive Committee (EC) memo/ minutes and other related documents shall be strictly adhered to in the project implementation and management. Copy of EC memo, minutes and other documents are already circulated. The UPSMCG will ensure the fulfilment of such conditions before finalizing the bid(s) by the EA.
42. City-level Citizen's Monitoring Committees (CMC) shall be constituted in the Pt. Deen Dayal Upadhyay Nagar to serve as a transparency mechanism for the flow of project/ programme related information to citizens and key stakeholders and to gather their feedback on project/programme processes, as described in the NGRBA programme framework, social audit will be conducted by the CMC as per the provisions of the NGRBA programme framework.
43. The NMCG may depute any person to visit the UPSMCG/ EA to monitor its work and accounts of the UPSMCG. Full cooperation shall be provided by the executing agency to the persons deputed for inspection.
44. The Director General, NMCG will monitor the overall progress of the project periodically from time to time.

Specific conditions and directions of EC:

- i. As per the confirmation provided by the UPSMCG / UPJN (R) in the 59th Executive Committee meeting that no untreated drains will fall in the river Ganga from the town after the implementation of this project. As a specific condition of the AA&ES the affirmation from the UPSMCG/UPJN (R) shall be ensured.
- ii. The bidding would be completed within 6 months from the date of issue of AA&ES and the total time for completion of the project from the "Effective Date" will be 21 months (18 months for the construction period and 3 months for the trial run).
- iii. The bids would be invited on technology-neutral basis.
- iv. The requisite "No Objection Certificates" for land shall be made available by the State Government prior to bidding.
- v. Any cost escalation due to change of land, change in location, additional scope post-EC approval and any other factors attributable to the State Government shall be the responsibility of the State Government.
- vi. The observations of NMCG, and TPA would be complied with by the State Government/ Executing Agency prior to finalization of the bid document/ at the time of execution and also during O&M period.
- vii. O&M beyond project scope i.e. 15 years shall be the responsibility of State Government/ ULB at its own cost.
- viii. State Government will pari-pasu implement the project for utilization of treated wastewater from the project for irrigation, industrial purpose as per the State Government's treated wastewater reuse policy.
- ix. Installation of trash arresting rack and its regular O&M at the mouth of all drains shall be made. Provision of a 45 KLD capacity plant for co-treatment of septage/ Faecal sludge shall be made in the STP facility and shall also be made part of the bid document/ project proposal for implementation.
- x. Provision for sludge digester and power generation from biogas to be included in the bid document (scope of work).
- xi. The State Government would endeavor to install solar power to reduce the load on O&M costs related to power charges by making suitable incorporations in the bid document.
- xii. The State Government needs to ensure the compliance of treated water quality as well as other environmental norms (such as compliance with prescribed noise level etc.) in the STP area shall be assessed, initially, that will be suitably addressed during the design stage.
- xiii. The project has been considered to be funded under the National Ganga Plan – Non-EAP component.

Financial Conditions:**1. Flow of Funds:**

- I. This being a project on Hybrid Annuity Mode, fund flow to the concessionaire from the Escrow Bank Account will be as per the Concession Agreement.
- II. In accordance with the concession agreement, under Hybrid Annuity based PPP mode, 40% of the project capital cost after adjustment for change in price indices, will be paid on achievement of agreed milestones as per Concession Agreement. Balance 60% of the capital cost, adjusted by the applicable price indices, along with interests as per Concession Agreement, will be paid over the concession period of 15 years. Further, power charges and Operation & Maintenance (O&M) charges will also be paid as per Concession Agreement. The concessionaire is entitled to receive quarterly payments of Annuity, power charges and O&M during the concession period. While power charges are reimbursable on actual basis, the O&M charges shall be adjusted for variation in price indices as per the Concession Agreement.
- III. Funds for the project implementation will be allocated by the NMCG in accordance with the provisions of Concession Agreement through an Escrow Account opened by NMCG for this purpose. NMCG, Project Executing Agency, the Concessionaire and the Escrow Bank shall enter into an Escrow Agreement as per the provisions of Concession Agreement. Payment to the concessionaire from the Escrow account shall be in accordance with the provisions of the Escrow Agreement and Concession Agreement only.
- IV. NMCG will deposit and maintain in the Escrow Bank Account, a minimum balance as per the provisions of the Concession Agreement.
- V. During the construction period, the Project Executing Agency shall issue certificate of payment to the Escrow Bank on achievement of construction milestones by the Concessionaire in accordance with the provisions of Concession Agreement.
- VI. During O&M period the Payment Certificate shall be issued by the Project Executing Agency to the Escrow Bank on achievement of Key Performance Indicators as per the provisions of the Concession Agreement.
- VII. Escrow Bank will release payments to the Concessionaire upon the receipt of the Payment Certificate issued by the Project Executing Agency.
- VIII. Any interest earned in the Escrow Bank Account to be remitted back and will be deposited in the Consolidated Fund of India.

2. Audit:

- I. The Comptroller & Auditor General of India at his discretion shall have the right of access to the project related books of accounts of the Executing agency/Concessionaire/Project Engineer for the purpose of Audit.
- II. The books of accounts of the Executing agency/Concessionaire/Project Engineer, relating to this project, shall be open to audit by the Internal Auditor and External Auditor of National Mission for Clean Ganga.

- III. SMCG to ensure that all financial documents related to the project are maintained by the EA and Concessionaire for submission to NMCG/ Audit on demand.

3. Submission of Payment Certificate:

SMCG to ensure that Payment Certificates are furnished by the Project Executing Agency to the NMCG in prescribed format as per Concession Agreement, and supporting documents are retained by the EA.

4. Other Aspects:

- I. It is the responsibility of the SMCG/EA/Concessionaire/ ULB to ensure that the assets are exclusively used for the purpose for which grant is sanctioned and to maintain the assets and their records properly.
- II. Any of the assets acquired/created out of the project shall not be disposed of, encumbered, or utilized for any purpose other than that for which sanctioned without prior approval of the Government.
- III. The SMCG concerned through EA, shall ensure close monitoring and evaluation of progress of the project. SMCG also to monitor implementation performance of the EA.
- IV. NMCG may depute any person to visit the EA/Concessionaire for the purpose of monitoring its work and accounts. Full cooperation shall be provided by EA/Concessionaire to the persons deputed for inspection.

5. General Financial Rules, 2017:

All relevant provisions of General Financial Rules, 2017, as amended from time to time, will be applicable to SMCG/EA/Concessionaire.



Indicative Project Implementation Schedule - I&D and STP Scheme for Pt. Deen Dayal Upadhyay Nagar, Chandauli, UP																						
Probable Starting of project - 2025 & Project completion period 21 months																						
S No.	Activity	Months																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Mobilization, Preparation of working drawings, submission of designs for approval	█	█	█																		
2	Interception & Diversion of drains			█	█	█	█	█														
3	MPS, Effluent pipeline				█	█	█	█	█	█												
4	Sewage Treatment Plant				█	█	█	█	█	█	█	█	█	█	█	█	█	█	█			
5	Procurment & installation of Electro-mechanical equipments				█	█	█	█	█	█	█	█	█	█	█	█	█	█	█			
6	Compound wall, approach road, horticulture & other peripheral works		█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
7	Trial Run & commissioning of components																			█	█	█

संख्या-456/2024/2302/नौ-5-2024/001-Comp. No. 1858864

प्रेषक,

कल्याण बनर्जी,
संयुक्त सचिव,
उत्तर प्रदेश शासन।

सेवा में,

जिलाधिकारी,
चन्दौली।

नगर विकास/अनुभाग-5

लखनऊ : दिनांक 05 दिसंबर, 2024

विषय:- जनपद-चन्दौली के ग्राम रौना परगना मवई तहसील पं0 दीद0उपा0 नगर में सीवरेज ट्रीटमेन्ट प्लान्ट (एस0टी0पी0) निर्माण के लिए भूमि क्रय किये जाने हेतु प्रशासकीय एवं वित्तीय स्वीकृति प्रदान किये जाने के संबंध में।

महोदय,

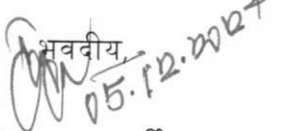
कृपया उपर्युक्त विषयक प्रबन्ध निदेशक, उत्तर प्रदेश जल निगम (ग्रामीण), लखनऊ के पत्र संख्या-जी0-4/012-272(38)/2024 दिनांक 18.05.2024 के संदर्भ में मुझे यह कहने का निदेश हुआ है कि जनपद-चन्दौली के ग्राम रौना परगना मवई तहसील पं0 दीद0उपा0 नगर में सीवरेज ट्रीटमेन्ट प्लान्ट (एस0टी0पी0) निर्माण के लिए भूमि क्रय किये जाने के संबंध में रू० 3,57,48,150 (रुपये तीन करोड़ सत्तावन लाख अड़तालीस हजार एक सौ पचास मात्र) की प्रशासकीय एवं वित्तीय स्वीकृति प्रदान करते हुए समस्त धनराशि अवमुक्त किये जाने पर राज्यपाल महोदय एतद्वारा निम्नलिखित प्रतिबन्धों एवं शर्तों के अधीन सहर्ष स्वीकृति प्रदान करते हैं:-

नियम व शर्तें / प्रतिबन्धों

- (1) स्वीकृत धनराशि के आहरण हेतु निकाय द्वारा प्रस्तुत बिल संबंधित जनपद के जिलाधिकारी/सक्षम अधिकारी द्वारा प्रतिहस्ताक्षरित किया जायेगा, जिसे संबंधित जनपद के मुख्य कोषाधिकारी/ कोषाधिकारी द्वारा निकायों के खाते में सीधे जमा किया जायेगा। उक्त के अतिरिक्त आहरित धनराशि किसी अन्य बैंक/डाकघर/पी.एल.ए./डिपाजिट खाते में नहीं रखी जायेगी। यह कार्यवाही शीर्ष प्राथमिकता पर सम्पादित की जायेगी तथा निकाय द्वारा बीजक प्रस्तुत किये जाने की तिथि से तीन दिवस के अन्दर धनराशि निकाय के खाते में अन्तरित कर दी जायेगी।
- (2) नियमानुसार समस्त आवश्यक वैधानिक अनापत्तियां एवं पर्यावरणीय क्लियरेन्स सक्षम स्तर से प्राप्त करते हुए निर्माण कार्य प्रारम्भ कराया जाय।
- (3) स्वीकृत धनराशि निर्धारित अवधि में उन्हीं कार्यों पर व्यय की जायेगी, जिसके लिए स्वीकृत की गयी है।
- (4) स्वीकृत धनराशि का उपयोगिता प्रमाण-पत्र कार्यालय महालेखाकार, उत्तर प्रदेश इलाहाबाद एवं निदेशक, स्थानीय निकाय/शासन को दिनांक 31.03.2025 तक भेजा जाना अनिवार्य होगा।
- (5) इस संबंध में वित्त विभाग के कार्यालय जाप संख्या- 1/2024/बी-1-294/दस-2024-231/2024, दिनांक- 04-मार्च, 2024 द्वारा जारी दिशा-निर्देशों का अनुपालन सुनिश्चित किया जायेगा।

2- इस संबंध में होने वाला व्यय रुपये 3,57,48,150 (रुपये तीन करोड़ सत्तावन लाख अड़तालीस हजार एक सौ पचास मात्र) को चालू वित्तीय वर्ष 2024-25 के आय-व्ययक में अनुदान संख्या 037 लेखा शीर्षक 2217058001000 नगर विकास विभाग के अन्तर्गत संचालित परियोजनाओं हेतु भूमि के क्रय हेतु अनुदान मानक मद 35 पूँजीगत परिसम्पत्तियों के सृजन हेतु अनुदान के नामे डाला जायेगा।

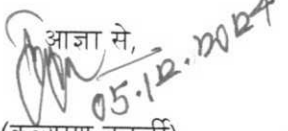
3- यह आदेश वित्त (आय - व्ययक) अनुभाग - 1 के कार्यालय ज्ञाप संख्या - 1/2024/बी-1-294/दस-2024-231/2024, दिनांक- 04-मार्च, 2024 में प्रशासकीय विभाग को उक्तवत प्रतिनिधानित अधिकार के अंतर्गत निर्गत किये जा रहे हैं।


 (कल्याण बनर्जी)
 संयुक्त सचिव,
 उत्तर प्रदेश शासन।

संख्या-456/2024/2302/नौ-5-2024/001-Comp. No. 1858864, तद् दिनांक।

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित:-

- 1-महालेखाकार (लेखा एवं हकदारी) प्रथम/द्वितीय, उत्तर प्रदेश इलाहाबाद।
- 2-महालेखाकार(लेखा परीक्षा) प्रथम/द्वितीय, उत्तर प्रदेश इलाहाबाद।
- 3-राज्य मिशन निदेशक (अमृत), नगरीय निकाय निदेशालय, उ०प्र० लखनऊ।
- 4-मण्डलायुक्त, वाराणसी।
- 5-निदेशक, स्थानीय निकाय निदेशालय, लखनऊ।
- 6-प्रबन्ध निदेशक, उत्तर प्रदेश जल निगम (ग्रामीण/नगरीय), लखनऊ।
- 7-मुख्य कोषाधिकारी, जवाहर भवन कोषागार, लखनऊ।
- 8- कोषाधिकारी, कलेक्ट्रेट कोषागार, लखनऊ।
- 9- संयुक्त प्रबन्ध निदेशक, उत्तर प्रदेश जल निगम, (नगरीय), लखनऊ।
- 10- निदेशक, सूचना एवं जनसम्पर्क विभाग, उ०प्र० लखनऊ।
- 11- वरिष्ठ अधिकारी/मुख्य सहायक लेखाधिकारी, जैसी भी स्थिति हो।
- 12- अधिशासी अधिकारी, नगर पालिका परिषद, दीनदयाल उपाध्याय नगर, जनपद-चन्दौली।
- 13- वित्त (व्यय-नियंत्रण) अनुभाग-9।
- 14- निजी सचिव, मा० मंत्री जी, नगर विकास विभाग, उ०प्र० शासन।
- 15- गार्ड फाईल/कम्यू यं टर सेल वेबसाइट पर अपलोड किये जाने हेतु।


 आज्ञा से,
 (कल्याण बनर्जी)
 संयुक्त सचिव,
 उत्तर प्रदेश शासन।

Allotment Grid Report


वित्तीय वर्ष:-2024-2025
आवंटन दिनांक-05/12/2024

प्रेषण संख्या:- 456
आवंटन आदेश संख्या:- 001-456-2024-2302-9-5-2024-001-CN-1858864
अनुदान संख्या:- 37 नगर विकास विभाग(वित्तीय वर्ष 2024-2025 का आवंटन)
लेखाशीर्षक:- 2217 - शहरी विकास(आयोजनेत्तर-मतदेय)
05 - अन्य शहरी विकास योजनाये
800 - अन्य व्यय
10 - नगर विकास विभाग के अन्तर्गत संचालित परियोजनाओं हेतु भूमि के क्रय हेतु अनुदान

(धनराशि रु. में)

S.No.	अधिकारी/जनपद का नाम		35-पूँजीगत परिसम्पत्तियों के सृजन हेतु अनुदान	योग
1	चन्दौली-4183-जिलाधिकारी , --01--	वर्तमान प्रगामी	35748150 35748150	35748150 35748150
	योग	वर्तमान प्रगामी	35748150 35748150	35748150 35748150

महायोग- (वर्तमान आवंटन):- रूपया तीन करोड़ सत्तावन लाख अड़तालीस हजार एक सौ पचास
महायोग- (प्रगामी आवंटन):- रूपया तीन करोड़ सत्तावन लाख अड़तालीस हजार एक सौ पचास


(कल्याण बनर्जी)
संयुक्त सचिव

**Agenda Note for 60th Meeting of the
Executive Committee (EC) of
National Mission for Clean Ganga
(Vol - II)**

10th February 2025 at 02:30 PM



**National Mission for Clean Ganga (NMCG)
Department of Water Resources, River Development
& Ganga Rejuvenation, Ministry of Jal Shakti
(Government of India)**

1st Floor, Major Dhyan Chand National Stadium, New Delhi

TABLE OF CONTENTS

SL NO.	AGENDA ITEMS	PAGE NO.
60.12	Interception & Diversion and 60 MLD STP works for Durga Drain, Varanasi, Uttar Pradesh	214

Acronyms:

AA&ES	Administrative Approval and Expenditure Sanction
BIS	Bureau of Indian Standards
BOD	Biochemical Oxygen Demand
BUIDCO	Bihar Urban Infrastructure Development Corporation
CCEA	Cabinet Committee on Economic Affairs
CPHEEO	Central Public Health and Environmental Engineering Organization
DBO	Design Build Operate
DPR	Detailed Project Report
EA	Executing Agency
EAP	External Aided Project
EMP	Environment Management Plan
ESC	Empowered Steering Committee
ESMF	Environment and Social Management Framework
FR	Feasibility Report
GAP	Ganga Action Plan
GAAP	Governance and Accountability Action Plan
GoI	Government of India
ICB	International competitive Bidding
JnNURM	Jawaharlal Nehru National Urban Renewal Mission
LARAP	Land Acquisition and Resettlement Action Plan
LPCD	Liter Per Capita per Day
MLD	Million Litres per Day
MoA	Memorandum of Agreement
MoJS	Ministry of Jal Shakti
DoWR,RD&GR	Department of Water Resources River Development & Ganga Rejuvenation

MoEF&CC	Ministry of Environment, Forest & Climate Change
MWW	Municipal Waste Water
NDMA	National Disaster Management Authority
NGRBA	National Ganga River Basin Authority
NMCG	National Mission for Clean Ganga
O&M	Operation and Maintenance
RL	Reduced Level
SFC	Standing Finance Committee
SPMG	State program Management Group
SPS	Sewage pumping stations
STP	Sewage Treatment Plant
TPA	Third Party Appraisal
ULB	Urban Local body
UV	Ultra violet
UPJN	Uttar Pradesh Jal Nigam
UKPJN	Uttarakhand Pey Jal Nigam
WB	World Bank

AGENDA ITEM NO. 60.12

**Interception & Diversion and 60 MLD STP
works for Durga Drain, Varanasi,
Uttar Pradesh**

SALIENT FEATURES OF THE PROJECT

New Proposal	Interception & Diversion and 60 MLD STP works for Durga Drain, Varanasi, Uttar Pradesh
Estimated Cost:	The estimated cost of the proposed project is Rs. 274.31 Crore including 15 years of O&M Cost as detailed below. <ul style="list-style-type: none"> i. Capital Cost: Rs. 107.70 Crore ii. O&M Cost: Rs. 126.08 Crore (For 15 years). iii. Public Awareness, GAAP, ESAMP & Project Design vetting Cost: Rs. 0.80 Crore iv. Project Preparation and Supervision Charges – Rs. 8.62 Cr v. GST & Labor Cess: Rs. 27.30 Crore. vi. Project Engineer Cost: Rs. 3.81 Crore including GST. (if implemented on Hybrid Annuity Mode)
Central Government Share	Rs. 274.31 Crore (100% - Central Funded scheme)
State Government Share	Additional centages to UPJN (R) as per State Government policy, power connection/ transmission line charges, and land cost, if any.
Major Components:	<ul style="list-style-type: none"> A. Construction of 60 MLD STP B. Construction of Main Pumping Station (Civil – 75 MLD) C. Rising Main – 120 m (From MPS to STP) D. I&D of Durga Drain E. Treated effluent disposal line– 100 m F. 15 years of Operation and Maintenance G. ESAMP, Public outreach, and GAAP
Executing Agency	Uttar Pradesh Jal Nigam (Rural)
DPR Prepared by	Uttar Pradesh Jal Nigam (Rural)
Third-Party Appraisal By	IIT – Roorkee
Bidding Process	Bidding proposed to be done on Hybrid Annuity Based PPP mode (HAM) and technology options shall remain open for bidders.
Completion Period	21 months for construction and 3 months trial run. Applicable from issuance of LOA (DBOT) / Effective Date (HAM)

**Checklist for the EC Memo - I&D and 60 MLD STP works for Durga Drain in
Varanasi, UP**

Particulars	Indicate Y or N
Whether the proposal has been prepared in the prescribed EC format.	Yes
Whether an Executive Summary has been attached.	Yes
Whether Financial Concurrence of ED (Finance) has been taken	Yes, examined by Finance Wing and observations addressed at para 14 of the Note
Whether feasibility report, if any, has been appended with the EC memo.	No. The project is being considered based on the detailed project report (DPR) prepared by UPJN-Rural and recommended by UPSMCG.
Whether Third Party Appraisal has been done or not?	Yes, third-party appraisal of the DPR has been carried out by the IIT Roorkee.
Whether mandatory clearances / approvals have been obtained.	Land for STP and other allied infrastructure has been identified and will be procured by the State within three months of the issuance of the AA&ES of the project.
Whether necessary discussions held with the state government/SPMG/ULBs etc.	Yes

EXECUTIVE SUMMARY

State Government of Uttar Pradesh submitted a DPR for I&D and 55 MLD STP works for Durga Drain, Varanasi, UP with 15 years O&M at an estimated cost of ₹348.86 Crore, including GST in year 2022 for the abatement of the pollution of river Varuna at Varanasi.

The River Varuna is an identified polluted river stretch as per the CPCB report of 2022 under category I.

S No.	River	Stretch	Priority (as per 2018 report)	Priority (as per 2022 report)
1.	Varuna	Rameshwar to till confluence with River Ganga	I	I

Durga Drain is discharging untreated sewage/ waste water, generated from Sewerage District IV of Varanasi town, into the priority stretch of the Varuna River, a major tributary of the Ganga and thereby polluting it.

The project has been appraised by a third-party appraisal agency (TPA) namely IIT Roorkee. During the appraisal process, while considering various other alternatives and the currently envisaged base year as 2027, the STP capacity has been revised to 60 MLD (for mid-year requirement) along with necessary revisions in the associated infrastructure. The DPR cost estimate was accordingly revised by the State to ₹395.85 Crore. The TPA after project appraisal has recommended the project “I&D and 60 MLD STP works for Durga Drain, Varanasi, UP with 15 years O&M” at an estimated cost of Rs. 324.41 Crore.

The proposal intends to tap Durga drain and develop a 60 MLD-capacity STP along with associated infrastructure including a main pumping station (MPS), rising mains from MPS to STP, and a treated effluent disposal pipeline.

The proposal on implementation will avoid the discharge of untreated sewage from the sewerage district IV of the town into river Varuna thereby reducing pollution load to river Varuna and assist in improving river Varuna/ Ganga water quality.

The State has also undertaken a Drone Survey of the Varuna River and identified a few additional minor untapped drains discharging into the priority stretch of the Varuna between Durga drain and further downstream Phulwaria drain. These drains are proposed to be addressed through either rehabilitation of the Varuna Interceptor or a supplementary proposal after a detailed study of these drains and the feasibility of various treatment options.

The TPA report has been reviewed and certain cost elements have been revised following NMCG’s guiding norms including, tentative provision for project engineer and design vetting costs if implemented under hybrid annuity mode. The revised proposed project cost is Rs. 274.31 Crore including GST (Capex – Rs. 107.70 Cr; Opex (Non-Power) – Rs. 28.58 Cr; Opex (Power) – Rs. 97.50 Cr; Other Costs – Rs. 9.42 Cr; GST & Labour Cess – Rs. 27.30 Cr and provision for Project Engineer’s cost – Rs. 3.81 Cr).

The development of the infrastructure would be with exploration of captive renewable power generation through solar, biogas means, and other possibilities of revenue streams.

Pr-12012/20/2020 TECH1 - NMCG
National Mission for Clean Ganga
Department of Water Resources, River Development
& Ganga Rejuvenation, Ministry of Jal Shakti
Government of India

Date: 3rd February 2025

Memorandum for Executive Committee on the proposal of “Interception & Diversion and 60 MLD STP works for Durga Drain in Varanasi, Uttar Pradesh” under Namami Gange Programme.

1. Proposal identification

1.1 Title of the proposal.

“Interception & Diversion and 60 MLD STP works for Durga Drain in Varanasi, Uttar Pradesh”

1.2 Name of the sponsoring agency (Ministry/ Department/ Autonomous Body/ Central PSE).

This proposal is to be considered under the National Ganga Plan of Namami Gange Programme which is a 100% central sector scheme, being implemented by the National Mission for Clean Ganga, an authority under the Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti.

1.3 Proposed duration of the proposal/Scheme.

The total duration of the project is 24 months (21 months for construction and 3-month trial run), applicable from issuance of LOA (DBOT) / Effective Date (HAM). The project, post-commissioning, will be provided operation & maintenance (O&M) support for 15 years.

1.4 Total cost of the proposal over the proposed duration.

The estimated cost of the proposal is **Rs. 274.31 Crore (Rs. Two Hundred Seventy-Four Crores and Thirty-One Lakh only) including GST.**

1.5 Nature of scheme: Central Sector/ Centrally Sponsored/Additional Central Assistance

- Central Sector
- Costs towards land acquisition, power connection and any additional centage for UPJN-R, are to be borne by the State Government.

- Any cost escalation over and above the sanctioned cost attributable to the Government of Uttar Pradesh, including cost escalation due to delay in land acquisition, change in location; additional scope post-EC approval and any other factors attributable to the State Government and defects in DPR, etc. shall be the responsibility of the State Government and shall not be borne by NMCG.

2. Justification of Proposal

2.1 The justification for taking up new/ continuing the ongoing proposal may be provided in terms of:

- Uttar Pradesh is an important state from the perspective of the Namami Gange Programme.
- Durga Drain (Sewerage District IV) discharges the untreated sewage into river Varuna, a major tributary of river Ganga, identified under the polluted river stretch (PRS) of Category I.
- The sewerage district IV does not have a sewerage system at present and the sewage generated from the district flows into Durga Drain which finally discharges into River Varuna, a major tributary of river Ganga.

2.3 Please state whether the proposal has objectives and coverage which overlap with projects/ schemes being implemented by the same or another agency (Ministry/ Department/ State government). In cases of overlap, please state why the proposal needs to be considered as a separate stand-alone effort.

There are no other schemes those are overlapping with the objectives of this project, in other Ministries of the Central Government or the Departments in the State Government of Uttar Pradesh.

3. Proposal Objectives and targets

3.1 The objectives of the proposal may be mentioned. These objectives should flow from the proposal justification.

The principal objective of the project is to improve the water quality of river Varuna, a major tributary of river Ganga, by avoiding the discharge of untreated sewage into Ganga and/or its tributaries. The objective is proposed to be achieved through tapping of Durga Drain, development of a main pumping station; development of an STP of 60 MLD capacity including rising main and treated effluent channel for the treatment of the sewage, generated from the town, which currently finds its way into River Varuna, a major tributary of river Ganga.

- 3.2 The specific targets proposed to be achieved of the proposal may be mentioned. These targets should be necessarily measurable. These should also be monitorable, against baseline data. The baseline may be indicated. The targets should be in tabular form as shown below.**

The project proposes the following specific targets to be achieved through the implementation of this project:

- a) Development of 60 MLD STP along with associated infrastructure
- b) Parameters for treated effluent as per below: -
- | | | |
|------------------|---|---|
| pH | - | 5.5-9.0 |
| BOD | - | ≤ 10 mg/L |
| COD | - | < 50 mg/L |
| TSS | - | ≤ 20 mg/L |
| Total Nitrogen | - | ≤ 10 mg/L |
| Total Phosphorus | - | ≤ 1.0 mg/L |
| FC | - | Desirable < 100 MPN/ 100mL
(Max Permissible < 230MPN/ 100mL) |

The total duration of the project is 24 months (21 months for construction and 3-month trial run), applicable from issuance of LOA (DBOT) / Effective Date (HAM). The project, post-commissioning, will be provided operation & maintenance (O&M) support for 15 years.

The benefits of the project shall be visible after the commissioning of works.

- 3.3 The outcomes of the proposal to be achieved should be indicated. These outcomes should be in the form of measurable indicators which can evaluate the proposal on quarterly/half yearly/annual/plan basis.**

The expected project outcome is the reduction of pollution load from Varanasi town into river Varuna along with the improvement in bio-diversity and eco-system of the river. The following benefits are likely to be achieved:

- River water quality improvement.
- Reduction in pollution load on river Ganga.
- Re-use of effluent for irrigation purposes

The outcome indicated above will be achieved only on completion of the project and its monitoring during the implementation phase may not be feasible. However, the project's physical progress may be measured against the targets / physical outputs indicated.

3.4 Briefly explain the objectives of the other programs / projects undertaken by Ministry/Dept which are in convergence with the objectives of proposed proposal.

Namami Gange program has been envisaged as an umbrella program, aiming at integrating previous & currently ongoing initiatives by enhancing efficiency, extracting synergies, and supplementing them with more comprehensive & better-coordinated interventions.

Apart from the above, the Department of Water Resources, River Development and Ganga Rejuvenation under the Ministry of Jal Shakti has not yet introduced any other scheme aimed at the same objectives.

3.5 Please indicate whether the proposal is for current Plan only or will continue in next Plan also.

The project is expected to be commissioned within the estimated period of 24 months (21 months for construction and 3-month trial run), applicable from issuance of LOA (DBOT) / Effective Date (HAM). Further, post-commissioning O&M support for 15 years will spill over in the next Plan period.

4. Gender Analysis of the Proposal

4.1 Briefly explain the specific objectives of the proposal relating only to women.

This proposed project is gender-neutral.

4.2 In case the proposal has gender components, please provide the following information in tabular form as shown below.

N/A

5. Proposal design

5.1 Briefly explain the proposal Design. This should include all components of the proposal including:

i. Scope of the project:

- A. Construction of 60 MLD STP;
- B. Construction of 75 MLD (civil works) Main Pumping Station (MPS);
- C. Rising Main – 120 m (From MPS to STP);
- D. I&D of Durga drain;
- E. Treated effluent disposal line– 100 m;
- F. 15 years of Operation and Maintenance;
- G. ESAMP, Public Outreach, and GAAP

ii. Assumptions used

- a) The base, mid & design years for the project have been considered as 2027, 2042 & 2057 respectively.
- b) As per the CPHEEO Manual, the unit rate of water supply for metropolitan and megacities, where sewage systems exist or are contemplated, is taken at the rate of 135 lpcd, and generation of sewage is estimated @ 80% of water supply. Thus, for Varanasi town (Sewerage District IV), the unit rate of sewage generation is taken at 80 % of 135 lpcd i.e., 108 lpcd. However, the STP and associated infrastructure capacities have been considered based on the actual flows in the drain and their projection following the NMCG published guidelines.
- c) MPS civil structures and sewer lines shall be designed and constructed considering ultimate year flow requirements. E&M equipment shall be as per mid-year design requirements
- d) The cost estimates for civil works are based on UPJN SoR 2021-22 and DSR 2021 while for E/M works based on market rates / budgetary offers received from the firms.

iii. Technology

The project does not propose any specific technology and shall be tendered on the lowest life cycle cost – technology-neutral basis to treat the sewage to achieve the design discharge standards.

iv. Size/ Specifications

- Capacity of the treatment plant: 60 MLD.
- Capacity of Main pumping station with civil works designed for ultimate year flow of 75 MLD

v. Plant & Machinery

The project proposes the development of 60 MLD STP along with associated infrastructure which would include necessary machinery related to pumping, clarification, primary treatment, secondary treatment, diesel power generation, etc. However, the exact details will be known only on the selection of the successful bidders as the project will be tendered on a technology-neutral basis.

vi. Others (Please specify)

The components of the project should be carved out from the Detailed Project Report. The study/ investigations on which project parameters are based should be clearly indicated.

The project components have been drawn from DPR prepared by the State Government and reviewed by NMCG and TPA.

- 5.2 In case the proposal is specific to any location, area and segment of population please state the basis for selection. Details regarding special physical features, technology, etc., may be given.**

The proposal pertains to “I&D and 60 MLD STP works for Durga Drain in Varanasi, UP” located in Varanasi town (Sewerage District IV), on the bank of river Varuna.

- 5.3 Please indicate whether the proposal is secured against natural/ man-made disasters like floods, cyclones, earthquakes, tsunamis, etc. If the proposal involves creation/ modification of structural and engineering assets or change in land use plans, disaster management concerns should be assessed.**

The project sanctioned will be subject to compliance with the guidelines issued by National Disaster Management Authority (NDMA), and applicable State Disaster Management Authority guidelines for Disaster Management.

NMCG shall not be responsible for any damage due to natural calamities or any other reasons. State Government is advised to insure the asset at their own cost after suitable risk assessment.

- 5.4 In case of beneficiary-oriented proposal, the mechanism for identification of the beneficiary and the linkage of beneficiary identification with UID numbers, on a voluntary / non-mandatory basis, may be indicated.**

The scheme does not envisage support to individual beneficiaries but to serve Varanasi town for the contributing drainage areas by reducing the pollution load falling into river Varuna, a major tributary of river Ganga leading to improved river water quality, besides improving the bio-diversity and eco-system of the river indirectly.

- 5.5 Wherever possible, the mode of delivery should involve the Panchayati Raj Institutions and Urban Local Bodies. Where this is intended, the preparedness and the ability of the Panchayats for executing the proposal may be indicated. If exceptions are to be made, the reasons may be explained.**

The project will be implemented through a Hybrid Annuity Based PPP mode including Operation and Maintenance for 15 years. After 15 years, the asset will be handed over to the Urban Local Body i.e. Varanasi Nagar Nigam.

- 5.6 Whether the land required for the proposal is in possession of the agency. In case the proposal involves land acquisition or environmental clearances, the specific requirements and the status in this regard may be indicated.**

The land for the Main Pumping Station and Sewage Treatment Plant has been identified. The land shall be procured post-sanctioning of the project.

- 5.7** The legacy arrangements after the scheduled proposal duration may be mentioned. In case the proposal creates assets, arrangements for their maintenance and upkeep may be stated. (For example the proposal assets may be taken over and maintained by the State Government/ PRIs, ULBs).

Operation & Maintenance of the assets created under the scheme will be undertaken by the Contractor / Concessionaire for 15 years post-completion of works, under the supervision of the State Government. After the contract period, the assets will be transferred to the Varanasi Nagar Nigam/ State Govt. and will be responsible for its operation & maintenance from the State budget. The cost of the O&M for the first 15 years is inbuilt in the present project cost.

- 5.8** Please indicate:

- Inter-linkages with other schemes mainly in terms of coverage, impact, outcomes, etc.
- Steps taken towards convergence with other schemes to achieve the intended outcomes may also be stated.
- Steps taken towards convergence in flow of funds from other schemes.

NA

6. Proposal cost

- 6.1** Please provide the proposal cost estimate for its scheduled duration along with a break-up of year-wise, component-wise expenses segregated into non-recurring and recurring expenses.

The project cost estimate of the proposal component-wise is as follows:

(Amount in Rs. Lakh)

S No.	Items	Quantities	Cost as per DPR	TPA Recommended Cost	Remarks of TPA	PU Recommendation	PU Remarks
A	Basic Capital Cost						
A.1	Tapping/ Diversion Works		36.15	36.15		36.15	As recommended by TPA
Sub Total A.1			36.15	36.15		36.15	
A.2	MPS						
A.2.1.	Civil works at Durga Drain	75 MLD	337.74	2250	Recommended cost of MPS @ Rs. 30 Lakh per MLD including other works	2250	As recommended by TPA
A.2.2	Pumping plant, Main piping valves & accessories		437.26				
A.2.3	Bar Screens & Sluice Gates		87.26				

A.2.4	DG Sets		221.59				
A.2.5	Automation		48.1				
A.2.6	HT Panel, Cable & Substation		696.82				
A.2.7	OCEMS		51.9				
A.2.8	Miscellaneous works at MPS (Internal Roads, Site Development etc.)		475.24				
Sub Total A.2			2355.91	2250		2250	
A.3	Rising Main (MPS to STP)	900 mm, 120 m	37.92	37.92		37.92	As recommended by TPA
Sub Total A.3			37.92	37.92		37.92	
A.4	Sewage Treatment Plant						
A.4.1	STP	60 MLD	9000				
A.4.2	Miscellaneous works at STP (Admin Building, Laboratory, Staff Quarters, Site Development etc.)		713.93	8400	The cost of STP has been recommended as Rs. 140 Lakh/MLD including the SCADA system & other works	8400	As recommended by TPA
Sub Total A.4			9713.93	8400		8400	
A.5	Effluent Pipeline	1400 mm, 100 m	46.04	46.04		46.04	As recommended by TPA
Sub Total A.5			46.04	46.04		46.04	
Sub Total (A): Basic Capital Cost			12189.95	10770.11		10770.11	
B	Centage (applicable on basic capital cost)						
B.1	Cost of project preparation @ 4% (maximum) of basic capital cost		487.6	430.8		430.8	A maximum 4% each of AA&ES basic capital cost/ awarded capital cost (whichever is lower) is admissible towards (a) DPR preparation and (b) supervision fees. However, payments for DPR preparation and supervision fees to Executing Agencies (EAs)/ Consultants are to be made as per actuals based on the scrutiny of supporting documents furnished by them for such claims (Reference: NMCG circular No. No. G-35/10/2020 - BUDGET NMCG dated 19.01.2023)
B.2	Cost of project supervision @ 4% (maximum) of basic capital cost		487.6	430.8		430.8	

B.3	Supervision charges @ 4.5% to be borne by State Government		548.55	0	To be borne by State Government		To be borne by State Govt. It is an additional supervision charges as per State Guidelines, not admissible under Namami Gange.
Sub Total B - Centage			1523.75	861.6		861.6	
C	O&M cost for 1 st 15 years, excluding power charges		6090.52	2857.5		2857.5	As recommended by TPA
D	Power charges for 1 st 15 years		15888.66	14768.25		9750	The power cost, including DG power, has been rationalized considering gross power requirement @225 KWH/ MLD (including MPS) and 10% from DG sets. To be reimbursed on actual basis by NMCG.
E	Other work components (without GST)						
E.1	Power connection		350	350		0	Power Connection to be provided by the State Govt at its own cost.
Sub Total E – Other Work Components			350	350		0	
F	Other components (GST applicable)						
F.1	Communication & Public Outreach		10	10	Provision is indicative. Payment will be as per actuals within the ceiling indicated.	10	As recommended by TPA
F.2	Governance and Accountability Plan (GAPP)		10	10	Provision is indicative. Payment will be as per actual within the ceiling indicated.	10	As recommended by TPA
F.3	Environmental Mitigation and Monitoring Cost (ESAMP)		10	10	The cost provisions relate to interventions on noise control, dust bins and good environment condition etc. and are the responsibility of the contractor.	10	As recommended by TPA
F.4	Project Design and Vetting Cost					50	As the project is proposed on HAM, the cost towards project design/ vetting is included. To be

							reimbursed on actual basis by NMCG.
Sub Total – F – Other Components			30	30		80	
G	Statutory Duties						
G.1	Labor cess	1% of basic capital cost	121.9	107.7		107.7	
Sub Total G			121.9	107.7		107.7	
H	GST						
H.1	GST on A+B+F	18%	2194.19	2181.49		2108.11	GST on centage also included.
H.2	GST on O&M cost excluding power (C)	18%	1096.29	514.35	Power costs are excluded as these are to be reimbursed as per actuals.	514.35	Power costs are excluded as these are to be reimbursed as per actuals.
Sub Total H - GST			3290.48	2695.84		2622.46	
Total Cost of project (A+B+C+D+E+F+G+H) excluding Project Engineer cost			39485.26	32441		27049.37	
I	Project Engineer's cost						
I.1	Provision for Project Engineer's cost (3% of Basic Capital cost + GST), If considered on HAM Mode of implementation					381.26	Indicative amount. Payment will be as per the contract with the selected agency.
Sub Total G - PE Cost						381.26	
Total Cost of project (A+B+C+D+E+F+G+H) including Project Engineer cost						27430.63	

6.2 In case the land is to be acquired, the details of cost of land and cost of rehabilitation/resettlement may be provided.

The land, free of encumbrances, for STP and MPS shall be procured by the State Government, post-sanctioning of the project.

6.3 Estimated expenditure on proposal administration (including expenses on consultants, monitoring, evaluation, IEC, etc.) may be separately indicated.

As a part of the project, a maximum provision of **Rs. 8.62 Crore** has been kept in the cost estimate for Project Preparation and Project Supervision cost following the NGRBA framework and indicated in para 6.1.

6.4 The basis of these cost estimates along with the reference dates (it should not be more than six months old) for normative costing may be provided. Please indicate the firmness of the estimates, component-wise, with the extent (+ / -) of the expected variation.

The proposal has been prepared by UP Jal Nigam (Rural) and forwarded by the Government of Uttar Pradesh. The cost estimates for civil works are based on UPJN SoR 2021-22 and DSR 2021 while for E/M works based on market rates/ budgetary offers received from the firms. The project has been scrutinized and appraised by IIT Roorkee as a third-party Appraisal agency.

6.5 In case the proposal involves payout of subsidy, the year wise and component wise expected outgo, up to the last year of payout, may be indicated.

There is no involvement of subsidy.

6.6 In case the proposal intends to create capital assets, employ specialized manpower or involves other activities that necessitate a Recurring Cost of Capital Expenditure (RCCE) (e.g., maintenance and upkeep costs of assets, salary costs of manpower, etc.) over the lifetime of the asset, such expenditures, on an annual basis, may be indicated in the proposal.

Recurring Cost of Capital Expenditure (RCCE) i.e., Operation and Maintenance (O&M) cost of the assets created in this project is estimated to be **Rs. 126.08 Crore (excluding GST)** for initial 15 years post commissioning of works and included in the project cost. The O&M cost thereafter will be borne by the State Government.

6.7 It may also be stated whether the agency which would be assigned this legacy responsibility has been consulted and has agreed to bear the continuing recurring expenditure. (e.g., the State governments may need to incur the maintenance and upkeep costs of assets created under Plan schemes).

Varanasi Nagar Nigam is the identified agency to whom the assets will be transferred post-construction and mandatory initial 15 years' operation & maintenance by the selected Concessionaire. The O&M cost beyond the initial 15 years shall be met by the State Government.

6.8 The cost towards salary/ fees/ emoluments of the proposal human resources as being proposed should be indicated (procedure for seeking approval for human resource requirements is detailed at para-9 below).

A provision of 8% (4% max for project preparation and 4% max for supervision as per NGRBA framework) of the total cost project cost has been earmarked.

Thus, there is no additional requirement for seeking approval of the human resource requirements.

6.9 The component of the costs mentioned at 6.1-6.8, that will be shared by the state governments/PRI/User Beneficiaries may be indicated.

The project will be implemented as a central sector scheme with 100% support from the Government of India.

State Government shall be required to provide required land parcels at its own cost, for the project. Further, the power connection cost also needs to be borne by the State Government.

Any additional cost due to change of land, defects in DPR, or any other factor within the control of the State, will be borne by the State Government of Uttar Pradesh.

6.10 In the event of fund transfer being made to State Govt/ local bodies or other organizations, “grants for creation of capital assets” may be indicated separately.

As per directions of NMCG.

7. Proposal: Financing

7.1 Indicate the source of finance of project proposal, i.e. EAP, Non-EAP or National Ganga Plan.

National Ganga Plan which is a 100% central sector scheme.

The project is proposed to be taken up under Namami Gange Mission 2.0, Non-EAP Fund line.

7.2 If there are gaps in the financing of the proposal, the sponsoring agency may indicate how such gaps in FYP as well as the Annual Plans will be addressed.

N/A

7.3 If external sources are intended, the sponsoring agency may indicate whether such funds have been tied up. In case firm commitment is not available, alternative plans for arranging funds may be indicated.

N/A

7.4 In case of partial allocation of funds for the proposal, then the components which may be removed/ reduced may be indicated.

N/A

8. Proposal: Human Resources

- 8.1 In case posts (permanent or temporary) are intended to be created, a separate proposal may be sent on file to Personnel Division of Department of Expenditure. Such proposals may be sent only after the main proposal is recommended by the appropriate appraisal body (SFC, ESC, etc.).**

National Mission for Clean Ganga (NMCG), in the Ministry of Jal Shakti (Department of Water Resources, River Development & Ganga Rejuvenation) will monitor the implementation of the project. No additional posts will be required in the Ministry and the existing structure will be utilized.

- 8.2 In case outsourcing of services or hiring of consultants is intended, brief details of the same may be indicated. It may also be certified that the relevant GFR provisions will be followed while engaging the agency/ consultant.**

The Project Engineer (PE) for the project will be appointed by the National Mission for Clean Ganga, as per Procurement Guidelines, to assist in the implementation and monitoring of the project works. PE will prepare and submit Monthly Progress Reports during the construction and execution period (i.e. 1st year of the O&M period) for all components of the present proposal. A provision (if implemented on Hybrid Annuity Mode) for the cost of the project engineer amounting to **Rs. 3.81 Crore including GST** has been kept and included in the total project cost.

- 8.3 In case additional manpower requirement, please indicate the phased requirement over the proposal timeline (i.e. year-wise break-up of the manpower requirement)**

No additional manpower will be required in project implementation. GFR provisions shall be applicable.

9. Proposal viability

- 9.1 In case of proposals which have identified stream of financial returns, the financial internal rate of return may be calculated. The hurdle rate is considered at 12%.**

The benefits accruable from the project of river conservation cannot be quantified in physical terms. However, the principal objective of the project is to improve the water quality of the river Varuna/ Ganga. The implementation of the works proposed will result in the avoidance of the discharge of untreated sewage from the town into the river thereby improving the water quality of river Ganga.

- 9.2 In case of proposals where financial returns are not readily quantifiable (typically social development proposals), the measurable benefits/ outcomes may be indicated.**

As indicated in para 3.3 above.

10. Proposal implementation and monitoring

10.1 Implementing agency (s) may be indicated.

SMCG, Uttar Pradesh is the nodal implementing and monitoring agency for the project.

- 10.2 The administrative structure for implementing the proposal may be stated. Usually new structures/ entities, etc. Are, by and large, to be avoided. In case new structures are intended to be created for administering the scheme, the details of such structures and specific justification for the same may be provided. Such a new structure should be proposed only if it has been established after due analysis, that existing structures cannot be levered for the proposed/additional work.**

The project at the national level will be coordinated & monitored by the National Mission for Clean Ganga. SMCG, UP is the state nodal monitoring agency for the project. The executing agency for the project will be responsible for project bidding & award on Hybrid Annuity based PPP mode in accordance with the applicable procurement guidelines. These structures are already in place and will be used.

The Executing Agency will supervise and monitor the construction and operation works. In addition, the works will be inspected through a PE, appointed by NMCG. Further, the works will be inspected through a third-party agency at a suitable frequency, appointed by the State Executing agency.

- 10.3 The completion schedule of the proposal indicating timelines of activities should be provided in PERT/Bar Chart along with critical milestones.**

The project will be implemented in 24 months (including 21 months for construction & 3 months of trial run), applicable from issuance of LOA (DBOT) / Effective Date (HAM). Post-commissioning O&M would continue under the project for 15 years. The bar chart for the implementation is shown in **Annexure-2**.

- 10.4 Mode of implementation: Departmental/ Contract/ Turnkey contract/ EPC/ PPP, etc. with justification may be given.**

The proposal will be implemented based on Hybrid Annuity based PPP mode through a concessionaire selected through a transparent bidding process.

- 10.5 Nodal officer identified / appointed for being directly in charge and overseeing progress of the proposal may be indicated. Details about his status, past experience in executing similar proposals and balance tenure left for steering the proposal may also be mentioned. He/ She should normally be appointed for entire duration of the proposal.**

The progress at the state level and central levels will be reviewed by the concerned officers of the SMCG Uttar Pradesh and National Mission for Clean Ganga respectively.

- 10.6 The monitoring framework preferably on MIS for the proposal may be indicated. The arrangements for audit/social audit of the proposal may also be stated.**

The physical and financial progress reports of the project shall be submitted by the implementing agency every month in the prescribed format to the National Mission for Clean Ganga (NMCG), DoWR, RD & GR. The Utilization Certificates in respect of the funds utilized for expenditure on the project and the unspent amount at the end of the period shall be submitted by the implementing agency every quarter. The officers of the NMCG, DoWR, RD & GR will visit the project sites regularly to monitor and review the progress of implementation of the projects under the NGRBA programme. Review meetings will also be held by the senior officers of DoWR, RD & GR with the State Government Officials from time to time.

Further, an IT-enabled web-based monitoring mechanism is planned to be developed for uploading information/data/progress by various participating institutions and agencies such as SMCG, SPCBs, CPCB, etc. and will be accessible directly through a clear-cut dashboard provision for senior officials.

The project has been reviewed from an environmental & social management perspective in accordance with the NGRBA framework. The environmental social assessment & management plan is approved along with DPR.

In addition, a District Ganga Committee shall be constituted under the chairmanship of the District Magistrate to review the project regularly.

In order to strengthen the monitoring mechanism and improve transparency and accountability for the project implemented under the NGRBA programme, a Third-Party Inspection (TPI) system is in place. This system is devised along the lines of the Independent Review and Monitoring Agency (IRMA) mechanism under the JNnURM and is expected to significantly augment the capacity of the State Government to monitor the physical progress of projects.

The TPI system would review and monitor the performance of the project through the entire lifecycle of implementation based on detailed onsite review, examination of appropriate documents and discussions with the Project Implementing Agencies and other key stakeholders. The monitoring would cover all four stages in the life cycle of a project, namely Pre-construction, Construction, Commissioning & trial run and, Post construction for effective monitoring.

11. Proposal sensitivities/uncertainties

11.1 Any foreseeable constraints/ uncertainties that can affect the technical design, costing and implementation of the proposal may be indicated.

N/A

11.2 The likely impact of these constraints/uncertainties on the proposal parameters may be stated. In particular, the sensitivity of the proposal cost, proposal schedule and proposal viability towards the possible constraints/ uncertainties may be mentioned.

N/A

12. Mandatory approvals / clearances:

The details regarding the requirement of mandatory approvals / clearances of various local, state and national bodies and their availability may be indicated in a tabular form

- ✓ Land for STP and MPS will be procured post-sanctioning of the project.
- ✓ The project would need site clearances from local authorities for undertaking the works on the ground however, these would be applicable after the sanction of the project.
- ✓ The Environmental, Health, and Safety norms are to be followed as per the ESAMP report.

13. Consultations with the Public, State Governments, External Research Agencies, Think Tanks, etc.

13.1 To the extent possible and practicable, such consultations may be done by the Administrative Ministries. The draft Proposals may be placed on the website of the sponsoring Ministries and comments invited from the general public. The draft proposals may be formulated/finalized taking into account such comments. Details in this regard may be indicated in the EC memo.

The proposal has been examined and recommended by a third party as part of a third-party appraisal (TPA) by IIT Roorkee. The State Government has submitted the compliance report to such observations earlier.

For effective implementation of the project Government of Uttar Pradesh shall be asked to ensure the following:

- a) The progress of implementation of the project shall be closely monitored by the State Government of Uttar Pradesh /SMCG, to ensure that the project is completed within the stipulated period.
- b) The activities proposed under the project shall be confirmed by all Environmental Legislations.
- c) No untreated municipal wastewater should be allowed to fall into the river Varuna from the Sewerage District IV of the town.
- d) The State needs to address new drains, identified during the Drone Survey, through either rehabilitation of the Varuna Interceptor or a supplementary proposal after a detailed study of these drains and examination of the feasibility of various treatment options.
- e) Detailed design & implementation of the works should be based on an extensive survey. Proper investigation should be carried out before execution to achieve economy in the proposal as well as to avoid any shortfall in the design as per the CPHEEO manual. Detailed condition assessment should be made part of the bidding document.
- f) Standard procedure as indicated in the CPHEEO manual on Sewerage & Sewage Treatment and codes of practice of BIS will be strictly followed.
- g) Efforts to be made for the recovery of other resources from STP such as sewage sludge etc.
- h) Suitable sewage cess/tariff/tax and sewer connection fee may be imposed on the beneficiaries to recover the O&M at the least to start with. However, the full project cost recovery at the earliest should be aimed at.
- i) Regular monitoring of the project implementation following the NGRBA framework.
- j) Ensure compliance with the TPA and NMCG observations in the revised DPR before bidding.
- k) The project will be tendered on a technology-neutral – lowest life cycle cost basis and Hybrid annuity-based PPP mode adopting applicable transparent procurement procedures.

14. Concurrence of ED (Finance)

14.1 Comments/Concurrence of Executive Director (Finance) may be indicated along with reply:

ED (Finance), NMCG has concurred with the proposal with certain observations on the proposal. The replies to the observations made are as under:

S No.	Finance Observations	PU Reply
1.	The project is on a priority 1 stretch and is indeed critical to improving the water quality of the River Ganga.	As per the latest CPCB report on River Varuna and the stretch is near the confluence with River Ganga.
2.	The estimated capex, pure O&M and power costs are in the acceptable range. In fact per MLD O&M costs seem to be lower than the recently sanctioned STP projects of similar capacity (analysis attached)	Agreed.
3	The cost estimates for civil works are based on UPJN SoR 2021-22 and DSR 2021 while E/M works are based on market rates. The SoR rates are nearly 3 years old. Given the recent experience of bidders loading inflationary impact in their bids and consequent higher bid prices compared to estimated costs, the PU is advised to suitably redress such possibility.	Accepted. The latest SOR (24-25) has been published by UPJN recently in June 2024 after the preparation & submission of the DPR For future, the State Government shall be advised to adopt latest SOR.
4	As per the EC Memo (Para 5.6), the land for the Main Pumping Station and Sewage Treatment Plant has been identified but will be procured post-sanctioning of the project. Transfer of land to the EA may be ensured within a month of the project sanctioning; otherwise, the administrative sanction may be withdrawn. Bids should preferably be invited only after the NOC for the transfer of land to the EA has been issued.	The required land parcels have been identified by the State Government and is in the process of procurement by district administration. The bidding process takes nearly 4 months and thus linking invitation of bid to prior transfer of land may delay the tendering process. The decision of the EC in the matter will be abided with and the same shall be suitably included in the draft AA&ES.
5	A plan for the reuse of treated water, sludge management etc. may be ensured.	Noted. In the AA&ES a condition will be included asking State to explore the opportunities for the recycling of the treated effluent and may also be suitably included in the tender documents. Sludge digester and captive power generation from the biogas generated shall be included as the mandatory scope

		in the bid documents which will reduce the sludge quantity and also reduce grid power consumption.
6	Solar power, biogas-based electricity or other "green" methods may be explored to meet the energy needs of the STP.	Noted. In the AA&ES a condition will be included asking State to explore the opportunities for the generation of captive power generation through solar power / biogas or other 'green' methods and will also be suitably included in the tender documents.
7a	It is pertinent to submit that cost estimates for civil works are based upon SoR of 2021-22. PU to ensure that estimates should be based on latest SoR.	Refer PU reply to the observation at Sr.No. 3 above.
7b	There are still untapped drains between Durga Drains and further downstream Phulwaria drain. These are also to tapped and treated. PU submits that these shall be taken up after detailed study and feasibility of various treatment options. PU to ensure that these does not affect the objectives of the present proposal.	<p>On the NMCG's insistence, the state has undertaken the drone survey to identify remaining untapped drains.</p> <p>For the pollution abatement of the river Varuna the state also need to take further initiative pertaining to repair and rehabilitation of the 'Varuna Interceptor Sewer'</p> <p>To ensure that the objectives of the instant proposal are not defeated, the state shall be directed, through AA&ES, to address these drains through either rehabilitation of the Varuna Interceptor or a supplementary proposal after a detailed study of these drains and the feasibility of various treatment options.</p>
7c	The Proponent Unit to ensure compliance to the observations of the Third Party Appraisal Agency; (ii) Parameters of treated effluent shall be as per the prescribed standards.	<p>Noted. The state will be directed for compliance to the observations of the TPA and the same will be suitably incorporated in the AA&ES.</p> <p>The treated effluent parameters shall be as per stringent norms indicated by the Hon'ble NGT vide its order dated 30.04.2019.</p>

8	Some generic suggestions are also attached below for efficient management and monetization of the asset. (Asset insurance, use of solar / biogas energy, compliance to NGT standards & noise levels, exploring treated water reuse / recycling including in thermal power plants / industries, sludge management, sustainable O&M arrangements by the State post 15 years)	Noted. All these conditions will be included in the General & Technical conditions of the AA&ES.
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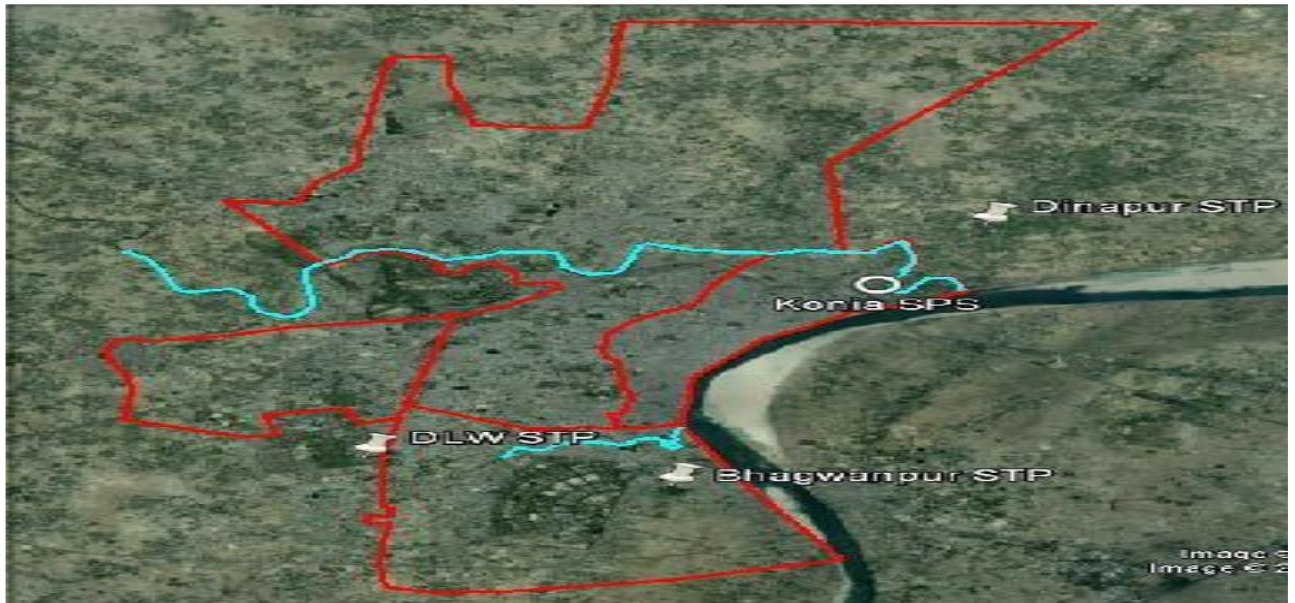
15. Approvals:

15.1 Please indicate the specific points on which approval of EC is sought.

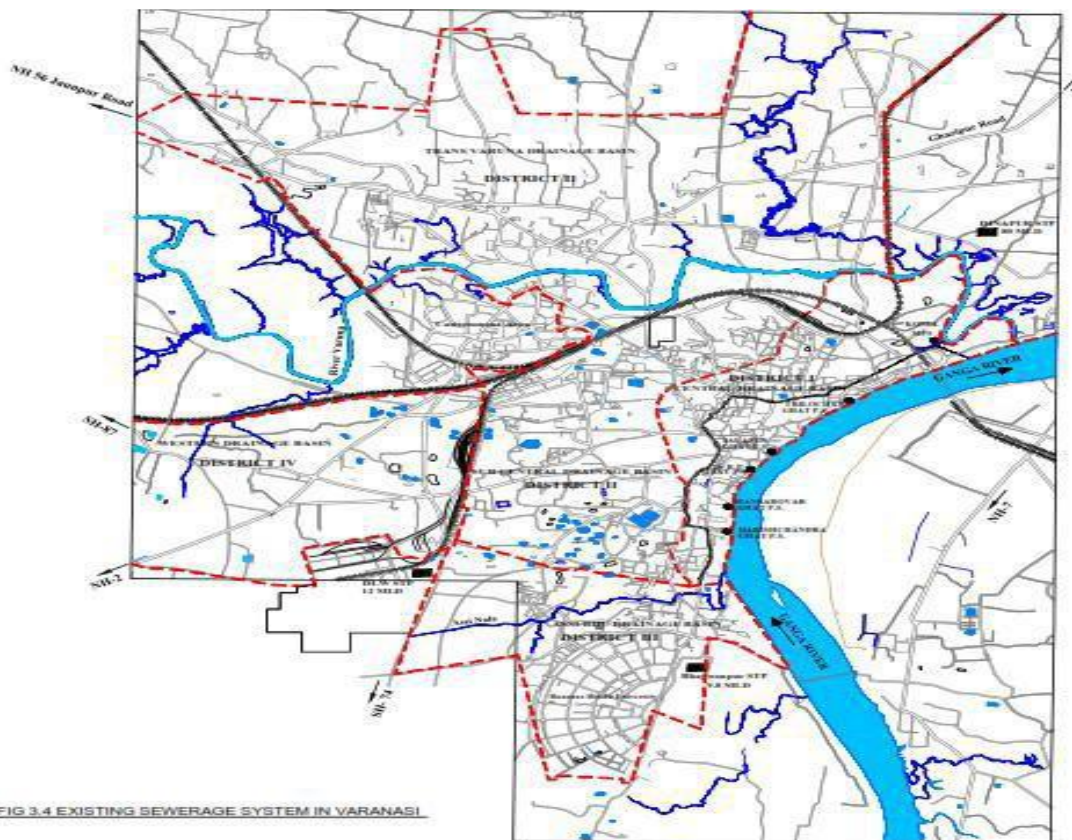
The proposal is placed for the consideration of the Executive Committee to accord the Administrative Approval & Expenditure Sanction (AA&ES) for the project “**I&D and STP 60 MLD STP works for Durga Drain at Varanasi in Uttar Pradesh**” to be implemented on Hybrid Annuity based PPP mode, at an estimated cost of **Rs. 274.31 Crores including GST and Project Engineer cost**, with 100% support from Central Government under National Ganga Plan.

**Sd/-
Executive Director (Projects)**

Sewerage Districts in Varanasi



Existing sewerage works in Varanasi



Proposed I&D at Durga Drain



Proposed STP site



Implementation Plan

Indicative Project Implementation Schedule - I&D and treatment works for Durga Drain, Varanasi, UP																										
Probable Starting of project - 2025 & Project completion period 24 months																										
S No.	Activity	Months																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	Mobilization, Preparation of working drawings, submission of designs for approval	█	█	█																						
2	Interception & Diversion of drains			█	█	█	█	█	█																	
3	MPS, Effluent pipeline				█	█	█	█	█	█	█															
4	Sewage Treatment Plant							█	█	█	█	█	█	█	█	█	█	█	█	█	█					
5	Procurment & installation of Electro-mechanical equipments				█	█	█				█	█	█	█	█	█	█	█	█	█	█					
6	Compound wall, approach road, horticulture & other peripheral works		█	█	█	█															█	█	█	█	█	
7	Trial Run & commissioning of components																							█	█	█

501

**Mi/24/2020-HR NMCG
Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development & Ganga Rejuvenation
National Mission for Clean Ganga**

1st Floor, Major Dhyan Chand National Stadium
Near India Gate, New Delhi-110001

Dated: 31st January 2025.

MEETING NOTICE

Subject: 60th Meeting of the Executive Committee (EC) of National Mission for Clean Ganga scheduled to be held on 10th February 2025 at 02:30 PM.

The 60th Meeting of the Executive Committee (EC) of National Mission for Clean Ganga (NMCG) under the Chairmanship of Director General, NMCG has been scheduled for **10th February 2025 at 02:30 PM** through hybrid mode in the Conference Room, NMCG.

2. Kindly make it convenient to join the meeting. Link and the agenda items for the meeting shall follow shortly.

**(Awinash Chandra)
Deputy Secretary (Admin), NMCG.**

To

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

502

Copy to:

1. PS to Hon'ble Minister for Jal Shakti
2. PPS to Secretary (WR, RD & GR)
3. The Project Director, SPMG Group 117, Indira Nagar, Dehradun-248001, Uttarakhand
4. The Project Director, SMCG, Plot No. 18, Sector-7, Gomti Nagar, Lucknow-226010.
5. The Project Director, SPMG Group (Secretary Urban Development), Government of Bihar, Vikash Bhawan, Bailey Road, Patna, Bihar – 800001.
6. The Project Director, SPMG Group Urban Development & Housing Department, Room no. 403, 4th Floor, Project Bhawan, Dhurwa, Ranchi, Jharkhand-834004.
7. The Project Director, SPMG Group, Unnayan Bhawan, 3rd Floor, DJ-11, Sector-II, Block-A, KMDA, Kolkata- 700091.
8. PPS to DG, NMCG- for his kind information

ANNEXURE 9

503

मा0 राष्ट्रीय हरित अधिकरण नई दिल्ली में योजित ओरिजनल एप्लीकेशन संख्या-483/2022 आशीष कुमार मिश्र व अन्य बनाम स्टेट ऑफ यू0पी0 में पारित आदेश दिनांक-26.04.2024 के अनुपालन में जलकल विभाग नगर निगम वाराणसी की आख्या:-

विन्दु संख्या-04

अस्सी नदी में वर्तमान में पूर्णतया घरेलू सीवेज निस्तारित हो रहा है, जिसका वर्तमान में डिस्चार्ज लगभग 78 एम0एल0डी0 है। 50 एम0एल0डी0 सीवेज को डायवर्ट कर रमना स्थित 50 एम0एल0डी0 एस0टी0पी0 में शोधित किया जा रहा है। श्री आशीष कुमार सिंह परियोजना प्रबंधक, गंगा प्रदूषण नियन्त्रण इकाई, 30 प्र0 जल निगम ग्रामीण व श्री कमल सिंह अधिशासी अभियन्ता निर्माण खण्ड (प्रथम) 30 प्र0 जल निगम (नगरीय) की संयुक्त आख्यानसार शेष लगभग 28 एम0एल0डी0 के शुद्धीकरण हेतु भगवानपुर में 55 एम0एल0डी0 क्षमता के एस0टी0पी0 के निर्माण की स्वीकृति एन0एम0सी0जी0 नई दिल्ली द्वारा प्रदान की गयी है, जिसकी निविद पूर्ण कर मेसर्स इन्वायरो इन्फ्रा प्रा0लि0 नई दिल्ली को लेटर ऑफ एवार्ड निर्गत कर दिया गया है। कार्य प्रारम्भ करने की तिथि 07.03.2024 एवं कार्य पूर्ण करने की तिथि 06.12.2025 है। वर्तमान में कार्य स्थल पर निर्माण कार्य प्रारम्भ हो चुका है, जिसकी भौतिक प्रगति 5 प्रतिशत है। उपरोक्त वर्णित 28 एम0एल0डी0 के श्राव के शोधन हेतु जलकल विभाग नगर निगम वाराणसी द्वारा वर्ष 2021 से बायोरेमिडिएशन कराया जा रहा था एवं एन0एम0सी0जी0 नई दिल्ली द्वारा अतिरिक्त डिस्चार्ज के आन साइट शोधन व्यवस्था हेतु एडवांस आक्सिडेशन प्रासेस की स्वीकृति परियोजना परियोजना के माह मई 2024 में क्रियाशील होने के उपरान्त बायोरेमिडिएशन कार्य बंद करा दिया गया है। (आख्या संलग्न)

नक्खा ड्रेन आंशिक रूप से टैप्ड है इसका पूर्णतः इन्टरसेप्शन एवं डायवर्जन, 30 प्र0 जल निगम ग्रामीण द्वारा किया जाना प्रस्तावित है। उक्त नाले में भगवानपुर स्थित 9.8 एम0एल0डी0 का शोधित उत्प्रवाह भी प्रवाहित होता है वर्तमान में उक्त नाले में लगभग 5 एम0एल0डी0 सीवेज प्रवाहित होता है जिसका बायोरेमिडिएशन पद्धति द्वारा शोधन किया जा रहा है।

सामनेघाट प्रवाहित सीवेज का इन्टरसेप्शन एवं डायवर्जन कर एन0एम0सी0जी0, नई दिल्ली द्वारा पोषित जायका सहायतित गंगा एक्शन प्लान फेज-1। परियोजना के अन्तर्गत इन्टरसेप्शन, डायवर्जन एवं ग्रेविटी सीवर पाइप लाइन के माध्यम से ट्रामा सेन्टर स्थित सीवेज लिफ्ट स्टेशन द्वारा वर्ष 2021 से संचालित रमना स्थित 50 एम0एल0डी0 एस0टी0पी0 पर शोधन किया जाता है। उक्त इन्टरसेप्शन डायवर्जन के उपरान्त उपरोक्त नाला पूर्ण रूप से टैप्ड है। माह मार्च 2024 में उपरोक्त वर्णित ग्रेविटी सीवर पाइप लाइन में चोक हो जाने के दृष्टिगत गंगा नदी में अशोधित सीवेज को प्रवाहित होने से रोकने के दृष्टिगत जलकल विभाग द्वारा बायोरेमिडिएशन पद्धति से शोधन कराया जा रहा था। उक्त पाइप लाइन में उत्पन्न चोकेज की समस्या के समाधान के उपरान्त वर्तमान में कोई अशोधित सीवेज गंगा नदी में नहीं प्रवाहित हो रहा है।

(ओ0पी0 सिंह)
31/07/24

सचिव,

जलकल विभाग

नगर निगम वाराणसी।

JE AE(49)

(विजय नारायण मौर्या)
31.07.2024

महा प्रबन्धक

जलकल विभाग

नगर निगम वाराणसी।