File no. V-174/2014-15/414/NMCG

National Mission for Clean Ganga

Ministry of Water Resources, River Development & Ganga Rejuvenation

Government of India

1st Floor, MDC National Stadium India Gate New Delhi-110002 Dated: December 2018

To,

The Project Director,
State Mission Clean Ganga – West Bengal,
Unnayan Bhawan (3rd Floor), DJ-11, Sector-II,
Block-A, KMDA,
Kolkata – 700091

Sub: Administrative approval and expenditure sanction for the project on 'In-situ/ ex-situ treatment of drain at Titagarh, West Bengal (Package -5) at an estimated cost of Rs. 3,11,37,237/-(Rupees Three Crore Eleven Lakh Thirty Seven Thousand Two Hundred and Thirty Seven Only) for a period of 5 year—reg.

I am directed to convey the administrative approval and expenditure sanction for the project 'Insitu/ ex-situ treatment of drain at Titagarh, West Bengal (package -5) under the head of Research studies, Pilot & Training, Workshop, Seminar, Publication etc. as part of overall Research and Development component of National Ganga Plan (NGP) at an estimated cost of Rs. 3,11,37,237/-(Rupees Three Crore Eleven Lakh Thirty Seven Thousand Two Hundred and Thirty Seven Only) for a period of 5 year subject to condition that the project is to reviewed after completion of one year, if found to be treating satisfactory then the project is to be continued for next 4 years.

This approval is in pursuance to decision taken in 15th meeting of Executive Committee held on 28.8.2018. The project was considered and approved in the 9<sup>th</sup> meeting of Executive Committee held on 26.2.2018 with the condition that evaluated bids be put up to Executive Committee for decision. Accordingly, competitive bids for the project comprising of 20 drains located in the State of UP and West Bengal in 14 packages were invited by NMCG vide its RFP Ref No. V-174/2014-15/414/NMCG dated 16.3.2018 and of even no dated April 6, 2018.

The approval is subject to following term and conditions.

- State Mission Clean Ganga (SMCG) are agencies of the State Government constituted with the objective of serving as the dedicated institution for effective implementation of the Namami Gange Programme at the state level. State Mission Clean Ganga – West Bengal (SMCG-WB) shall be the executing agency for the project. List of drains, identified contractor for the package and timelines are at Annexure-1.
- 2. The work is of specialized nature being implemented as innovative project. Therefore, a separate letter of intent will be issued in respect of approved project by NMCG following necessary and established procedures. Execution and monitoring in respect of these will be

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- 3) PS to Executive Director (Technical)/PS to Executive Director (Projects)/PS to Executive Director (Finance) NMCG
- 4) PS to Director (T-II), NMCG/ PS to Director Projects/PS to Dir (T-III)/Procurement Division
- 5) Sanction Folder / Guard File/Computer Cell/MIS, NMCG

(Nityananda Ray)

Deputy Secretary, SMD

Administrative Approval for the project on 'In-situ / ex-situ treatment of drains going into river Ganga & its tributaries under NamamiGange Scheme'

#### 1. General Conditions:

- i. All conditions specified in RFP Ref No. V-174/2014-15/414/NMCG dated March 16, 2018 and Corrigendum-I to the same RFP dated April 6, 2018 shall be adhered to by SMCG/ULB/EA. Conditions specified in the above RFP for award, execution and monitoring are summarized in Annexure-III for ready reference. However, all the conditions in the above RFP including those not summarized in Annexure-III, are to be strictly adhered to by SMCG/ULB/EA.
- ii. SMCG which is a registered society shall be responsible for overall planning, management and effective implementation of the project at state level.
- iii. The SMCG shall be the Executing Agency (EA) of the project to be implemented 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.
- iv. The activities proposed under the project shall conform to all Environmental Legislations, any judicial orders in force at the site of work and the NGRBA framework.
- v. Proper investigation should be carried out before execution to achieve economy in the proposal as well as to avoid any shortfall in the design.
- vi. Progress of implementation of the project shall be closely monitored by the State Government /SMCG, so as to ensure that the project is completed within the stipulated period of time. In addition, the progress needs to be reported to NMCG on quarterly basis and as and when requested.
- vii. Any cost escalation /time overrun will require prior approval of competent authority.
- viii. Guidelines issued by MoEF & CC and other governing organizations regarding disaster management as applicable be adhered to during project execution.
- ix. The SMCG shall ensure appointment of agency for third party inspection (TPI) agency for timely review of the project.
- x. 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.
- xi. Any additional component relevant for project or any component require modification or deletion, may be added or modified or deleted as the case may be, only with the prior approval of the Competent Authority.
- xii. No cost overrun, over and above the sanctioned cost shall be admissible.
- staff that may be employed for preparation, execution or operation of the project by the EA are not to be treated as employees of the SMCG/NMCG. The deployment of such staff at the time of completion or termination of the project will not be the concern or responsibility of the SMCG/NMCG.

iii. The overall auditing arrangements to cover both periodical internal and annual external audit of project shall be ensured as per the Financial Management Manual (FMM) of the NGRBA programme framework.

#### 2.4. Flow of Funds:

The fund releases by the NMCG shall be remitted by Electronic transfer to the SMCG account. The following details may be kept updated from time to time enable electronic remittance:-

- i. Bank account details of SMCG, both in figures and words to NMCG.
- ii. MICR Code and IFSC Code of the Bank Branch (es).
- iii. The NMCG will transfer funds from the NMCG's account to the SMCG account on submission of Interim Un-Audited Financial Report (IUFR) and other documents/information as prescribed in the Financial Management Manual (FMM) of the NGRBA programme framework.
- iv. The overall fund flow arrangements shall be ensured as per the Financial Management Manual (FMM) of the NGRBA programme framework.
- v. SMCG shall maintain accurate records of expenditure incurred on each packages.

## 2.5. Submission of Monthly and Quarterly Physical Progress Report (MPPR/QPPR):

- i. The Monthly Physical Progress Reports (MPPRs) shall be submitted by the 20<sup>th</sup>day of every month regularly by the EA /SMCG to the NMCG. The Quarterly Physical Progress Report (QPPRs) shall be submitted to the 'State Mission Clean Ganga' and NMCG within 30 days from the end of each quarter.
- ii. The MPPRs in standard format, to be developed by the EA /SMCG, shall be signed by at least two designated officers of the EA/SMCG, one of whom will be the Programme/Project Director.
- iii. 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.
- iv. Consistency between physical progress and expenditure shall be maintained and reasons for substantial variations i.e. more than 10% shall be appropriately explained against each item.
- v. SMCG shall update the progress regularly on monthly, quarterly and annually on the MIS website of NMCG.

# 2.6. Submission of Accounting and Financial Reports (AFR) by the EA:

- i. The EA/SMCG shall furnish monthly Accounting and Financial reports (AFRs) by the 20<sup>th</sup>day of every month with all relevant documents and materials as per the Financial Management Manual (FMM) of the NGRBA programme framework after commencement of the project to the NMCG.
- ii. The Accounting and Financial Report (AFR) in standard format, to be developed by the EA /SMCG, shall be signed and stamped by the Head of the Accounts Department and Head of the Organization of EA/SMCG.

- iii. The NMCG may depute any person to visit the SMCG/ EA for the purpose of monitoring its work and accounts of the SMCG. Full cooperation shall be provided by the executing agency to the persons deputed for inspection.
- iv. Time and cost overrun leading to delay in implementation of projects is viewed with serious concern by the Central Government and as per instructions contained in Cabined Secretary's D.O. letter No. 261/1/10/2000-Cab., dated 19.8.1998, mandatory review of the project must be carried out from time to time so as to assess the expenditure trend and time schedule of the project and appropriate action against those responsible for delay shall be taken, in accordance with the instructions.
- v. The Director General, NMCG may monitor overall progress of project periodically from time to time.

Where X - Pollutant of concern (POC) - Total Suspended Solids (TSS),

Total Organic Carbon (TOC) and Total Nitrogen (TN)

1,800f-Inlet and Outlet Flow (cum/hr) of MTS

10.80<sub>c</sub> Concentration of POC at inlet and outlet of MTS

Flow and Concentration of POC in the main channel (Bypass) Bf XBc

The RTWQMS shall be calibrated as per the guided frequency prescribed in Guidelines for (b) Online Continuous Monitoring System for Effluent" published Central Pollution Control Board.

- NMCG/SMCG or its authorized agent will be performing the validation of data and will be (c) witnessing the calibration. The accuracy and other details as specified in the said document shall be followed. Deviation or provision not covered in the document with regard to quality of data generated, system calibration, data validation, communication, logging, storage and other aspects necessary to have a reliable set of data for payment and for dissemination in public domain, shall be articulated in the contract document of on scientifically and mutually agreed basis between NMCG and the bidder before commencement of the contract.
- (d) The performance of the MTS and other works as specified in the scope of work shall be monitored and assessed by a Local Committee constituted by State Mission Clean Ganga with concurrence of NMCG, having representation from SMCG, local administration and local urban bodies (including Panchayat). The Committee shall give its monthly progress report to the SMCG, by 7th of the following month for payment to the Party. Late submission of reports by the committee shall be closely monitored by SPMG, who shall take all action in its capacity for rectification of the same, under intimation to NMCG. Any late submission of report shall be duly informed to NMCG. In case, the monthly report is not received by the SMCG by 7th of the following month, it shall process the payment claim of the bidder after satisfying itself on its merit based on field observations and available RTQMS data as per tender document (Appendix-V of RFP - Monitoring Mechanism of Intervention).
- The payment shall be made by respective SMCG to the bidder by 15<sup>th</sup> of the following month (e) positively. The data on pollution reduction and the criteria set out for eligibility for payment shall be derived from the data available at NMCG/ SMCG server. The bidder shall raise payment invoice for his services in the 1st week of following month based on the criteria and service extended within the provision of the contract.
  - The availability of fund to SMCG for the services shall be provided by NMCG on quarterly (f) basis as per the demand of the SMCG as per the framework and guidelines of NMCG.
  - (g) Online Monitoring Systems shall be installed by the bidder and data shall be shared by the bidder with the SMCG and NMCG. The agency shall furnish a monthly report on the activities carried out to the local committee (constituted by SMCG for the purpose of performance monitoring of the MTS) with a copy to SMCG and NMCG. The performance of the services will be monitored by the concerned ULB through a nominated officer (who shall be part of local committee appointed by SMCG for performance monitoring of the MTS). The nodal officer of the selected agency shall report to nominated officer of ULBs and shall work as per the directions of ULB. The agency shall furnish a monthly

## LETTER OF ACCEPTANCE

То:	
(Name and address of the service provider)	
Dear Sirs,	
This is notify you that your Bid dated (Date) for	
	ber, as given in the instructions to Bidders) for the unt in words and figures as corrected and modified in ereby accepted by our agency.
	per terms and conditions of the tender documents .
- Execute the contract agreement within 2	25 days from the date of issue of this LoA.
All other terms and conditions shall be bind acknowledge receipt.	ing on you as per the tender document. Please
Yours faithfully,	
Authorized Signature	

Name and Title of Signatory

Name of Agency.

## CONTRACT FORM

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	, Gover (hereinafter		a (Address)	(name a	nd address c Employer)"an
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«1141» (MT/», (************************************	nployer is desirous that t				
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manig signature c	of Service provider Signed Resolution No	(for and or	behalf of	dul	y authorized vide ors of)
the presence of	(Witnesses)				
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- (b) 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.
- (c) The service providers shall not make any change in the constitution of the firm during the currency of the contract, without the prior approval of the NMCG. The service providers shall notify, to the NMCG 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 NMCG shall have the right to terminate the contract at its discretion.

#### IV. SUBLETTING

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

#### V. RELATIONSHIP WITH THIRD PARTY

All transaction between the service provider(s) and the third party shall be carried out as between two principals without reference in any event to the NMCG. The service providers(s) shall also undertake to make third party fully aware of the position aforesaid.

### VI. Execution of work: Service provider's Responsibilities:

- (a) The service provider 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 Officer-in-Charge (ULB)/SMCG.
- (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 Officer-in-Charge and nothing extra shall be paid on this account.
- (c) The service provider 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 service provider 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 service provider in

#### FIRST AID FACILITY:

The Service provider is liable to provide first Aid facility as provided in the contract Labour (Regulation and Abolition) Act and the Rules framed there under or any other applicable law.

#### VIII. PERIOD OF CONTRACT:

The Contract period shall be 5 years from the date of contract, which may be further extended for a period of one or more year(s) based on satisfactory performance, cost implication and mutually agreed terms and conditions. The bidder shall be required to commission "ready to deploy" ex-situ Modular Treatment System at the identified drain location within a period of 4 months from 15th date of issue of LoA.

NMCG reserves right to terminate the contract at any time during its currency without assigning any reason there of by giving thirty days' notice in writing to the service provider(s) at their last known place of residence/business and the service providers shall not be entitled to any compensation by reason of such termination. The action of NMCG under this clause shall be final conclusive and binding on the service providers and shall not be called in question.

### ii) Deployment Schedule:

Contractor shall deploy the MTS at respective locations within 4 months from the 15th day of the date of issue of Letter of Acceptance (LOA). Note: Grace period of upto 15 days shall be allowed for making the MTS operational at respective location. However, payments shall be effective since commencement of operation of the MTS.

## iii) Penalty / Price Reduction for Non Deployment (beyond Scheduled Deployment)

- Penalty/Price reduction at the rate of Rs. 25,000/- (Rupees Fifty Thousand Only) shall be applicable per day for delay in deployment of MTS and making system operational beyond the deployment date plus 15 days grace period (effective period of delay shall be calculated beyond making the system operational).
- Payments shall be effective since commencement of operation of the MTS and the above mentioned Penalty/Price Reduction shall be applicable separately.
- Penalty/Price Reduction shall be applicable up to 15 days of delay beyond the Grace Period beyond which the deployment of MTS at respective location may be liable for termination including forfeiture of performance security.

### IX. SECURITY DEPOSIT:

- (a) The service provider(s) shall furnish within fifteen days from the acceptance of their tender, security deposit in favor of State Mission Clean Ganga -UP as prescribed in the invitation to tender failing which the contract shall be liable to cancellation at the risk and cost of the service provider(s) and the EMD will be forfeited and subject to such other remedies, as may be open to DG, NMCG under the terms of the contract.
- (b) The Security Deposit shall be furnished in prescribed forms given in the Appendix-III.

from, any sum then due or which at any time hereafter may become due to the service provider(s) under this or any other contract with the NMCG. In the event of the sum which may be due from the NMCG, as aforesaid being insufficient, the balance of the total sum clamed and recoverable form the service provider(s). Should this sum also be not sufficient to cover the full amount claimed by the NMCG, the service provider shall pay to the NMCG on demand the remaining balance of the aforesaid sum claimed. The NMCG will be the sole judge determining after taking into consideration all the relevant circumstance, the quantum value of loss and also in regard to the liability of service provider(s) for such loss the amount to be recovered from them. The decision of the NMCG in this regard shall be final and binding on the service provider(s).

### (c) SET-OFF

Any sum of money due and payable to the service provider(s) (including security deposit returnable to them) under this contract may be appropriated by the NMCG and set off against any claim of the NMCG for the payment of any sum of money arising out of or under any other contract made by the service provider(s) with the NMCG.

#### XI. BOOK EXAMINATION:

The service provider(s) shall, whenever required produce or cause to produce for examination by the NMCG. 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 desires by NMCG. The decision of NMCG on the question of relevancy of any document, information or return shall be final and binding on the service provider(s). The service provider(s) shall produce the required document, information and returns as at such time and place, as may be directed by the NMCG or any other officer authorized in this regard.

### XII. Role of State Mission Clean Ganga (SMCG)

The SMCGs are the respective state level counterparts of the NMCG and have state level responsibilities for management and implementation of the Project. The SMCG will accept performance security, approve work plan submitted by the service provider, execute contract with the service provider and issue notice to proceed with works on NMCG's behalf. The NMCG will transfer funds to the SMCGs for implementation. The SMCGs Bank will then transfer required funds from the SMCG account to the Service provider account. This transfer of funds will happen through Real Time Gross Settlement (RTGS)/NEFT after certificate of the bill about the completion of work as per specifications.

#### XIII. PAYMENT:

(a) An interest free Mobilization Advance of an amount equal to 6 monthsvalue of contract price against submission of advance bank guarantee of an equivalent amount to be adjusted in 12 equal instalments against the monthly bills submitted, subject to maximum time limit of 18 months to fully set off the advance given. However, in the event of non-commissioning

## XV. DUTIES AND RESPONSIBILITY OF THE SERVICE PROVIDER(S):

- (a) The service provider(s) shall carry out all items of services assigned or entrusted to him/them by NMCG 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 NMCG 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 service provider 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 service provider shall engage adequate workers and other competitor staff for the nature of work to be performed to the satisfaction of the NMCG or any other officer acting on his behalf. The service provider shall be responsible for the good conduct of their employees and shall compensate the NMCG for losses arising from neglect, carelessness, want of skill or misconduct of themselves, their servant or agents or representatives, The NMCG shall have the right to ask for the dismissal of any employee of service providers 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 service providers, their servant and agents of representative shall be final and binding on the service provider.
- (c) The service providers shall advise the NMCG 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 NMCG 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 service providers shall strictly abide by Laws, Rules & Regulations.
- (e) The service provider shall provide verifiable proof that EPF/EST that has been deposited in respect of particular workers, working under the Service provider who is working in NMCG along with the EPF/ESI number issued by concerned authorities. A copy of ESI card also is deposited with NMCG 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.
  - (g) An amount of 2% shall be deducted from the Invoices submitted by the Contractor as retention money to be utilized in case of default by the Contractor. The retention money, less any sums properly charged against it by the NMCG, shall be paid over to the Service

#### XVII. 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) ionising 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) epidemics, 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 10 (ten) 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 Service provider, the Service provider must provide an amended Works Programme rescheduling the Works to minimise the effects of the prevention or delay caused by the event of Force Majeure.

Full List of Drains (packages wise) proposed for services (This AA&ES is only for packages as

<u>Package</u>	Name of Drains	City	Flow##	Organic Load	BOD in mg/l
No.		1	Million Liter	in TPD	BOO III III g/1
			per Day		****
1.	SashanGhat Drain	Bhudana	3	0.45	150
1.	Dhobi Basti Area	the state of the s	2	0.95	520
2.	NaiMandi Drain	Muzaffarnagar	23**	4.8	200
۷.	Suzru Main Drain		5.5	0.65	120
3.	Gajaraula*	Gajraula	6	0.6	100
4.	City Jail Drain	Unnao	(35 <sup>\$</sup> ) 86**	9.37	109
4.	Loni Drain	in/ pognatia) a exili	(15 <sup>\$</sup> ) 22**	16.19	736
5.	Titagarh drain	Titagarh	4	0.49	122
6.	Jangipur drain	Jangipur	1	0.29	268
7.	Champdany ferry/Paul ghat drain	Champdani	4	0.51	122
	Chandannagar drain	Chandan Nagar	5	0.54	108
8.	JagatnathGhat	Belur	9**	1.33	142
9.	Moksha dham drain	Moradabad	16**	1.07	68
10.	Hapur drain-I (city drain)	Hapur	5	0.21	42
11.	Gulaothi drain	Gulaothi	7	0.97	138
12.	Kasganj Drain	Kasganj	9	1.11	123
	Chauri drain, Bhadohi	Bhadohi	4	0.18	46
13.	Barbaspur drain, Bhadohi		2.5	0.1	37
4.4	Ganda Nala Raiyapur	Kunda	1.5		
14. <del> </del>	Taar Nala Babagani	<u> </u>		N	

<sup>\*\*</sup> The flows are indicative at the confluence point of river Ganga or its tributaries. However, the locations of interventions proposed should be nearer to the major source of pollutions at suitable location where the flow may vary on lower side.

<sup>\$</sup> Indicated flow may be adopted for the drain at locations of interventions near highway and nearer to source of pollution.

<sup>##</sup> All flow and the qualities are indicative and may be assessed by the bidder for their proposed interventions.

- 11. The necessary facility to support and operate the treatment system including manpower, electric power, security, safety against theft and flood will be the responsibility of the bidder.
- 12. The qualitative and quantitative data as per requirement of NMCG as mentioned in Appendix-II shall be monitored on real time basis and communicated by the bidder on real time basis to NMCG. Such information will be the basis for payment.
- The water quality parameters to be monitored and the acceptable technology for their monitoring have been provided in **Appendix-V** and the bidder has to install from the specified system. The data generated shall be transferred to NMCG or other servers without any loss of data in text form as details provided in **Appendix-V**.
- 14. The bidder shall install camera to cover the situation of drain at upstream and downstream of MTS to reflect the status of cleaning work.
- 15. A flow indicator/ meter shall also be installed at the downstream of any intervention made to pond/store the water in the drain in order to provide sufficient information on the amount of water being treated and being discharge (by-pass) refer Plate-1.
- 16. The MTS system may have to be shifted by the Bidder to any other suitable location as specified by NMCG within R. Ganga Basin within the contract period and the cost associated with shifting will be reimbursed by NMCG on actual basis.
- 17. Bidders are required to provide terms & Conditions for shifting MTS, while submitting the technical bid, however, the cost may be submitted along with Price Bid.
- 18. NMCG will facilitate NOC from the concern agency to work on the drain, BUT the liability for arrangement of land and space to install, transport, operationalize and dismantle or shift the MTS shall be the obligation of the bidder at his cost.
- 19. The payment terms and condition for extending the service as defined in the scope of Work shall be as per the guidelines provided in **Appendix-IV**.
- 20. There will be no liability with NMCG to create any asset for obtaining the services
- 21. The bidder shall provide the details on the on-line real time monitoring system with regard to its calibration and validation. NMCG or its authorised agent will witness the calibration or call for calibration at any given time and also may validate the generated data. "Guidelines for Online Continuous Monitoring System for Effluent" published Central Pollution Control Board dt. 7<sup>th</sup> Nov 2014 will be the followed for system calibration, data validation and technology verification of the real time instruments installed for the monitoring of water quality including the technology selection, data transmission and data management.

## Guidelines for Extending the Contract

- 1. The term of a contract may be extended provided that NMCG and the service provider agree to the extension *prior to* the expiration of the contract term (including extension options stated in the contract).
- 2. If the existing contract term, inclusive of exercised extension options, has expired, then the contract cannot be extended. If the contract has expired, then it no longer legally exists and therefore it follows that, if it doesn't exist, it cannot be extended.
- 3. Both NMCG and the agency must agree on the terms of the contract extension.
- 4. The contract will usually be extended in accordance with the terms and conditions of the existing contract but some terms and conditions may be re-negotiated. However, principles of contract shall remain inviolable in the extended contract.
- 5. The agreement to extend the contract shall be documented and clearly agreed by both parties. The agreement must also reflect any re-negotiated terms agreed by the parties.

- (d) All information related to quality assurance of data shall be maintained by the Service provider and shall be submitted along with the payment invoice in soft and hard copy or in format requested by NMCG from time to time.
- (e) The traceability of the chemicals used for calibration shall be traceable to NIST standard.

### III. Mandatory Measurement Conditions

- (a) Mandatory measurement condition will be used to qualify the treatment for payment; the service provider must assure that the following conditions are in place. It is expected that the service provider will confirm these measurement throughout the period of contract.
- (b) Flow and water quality for pH, TOC and Turbidity/TSS (mg/l) parameters are measured at the inlet and outlet of the treatment system and payment will be governed as per section C.

## IV. Requirement of Treatment

The Employer (NMCG) shall obtain the necessary No-objection Certificate to carry-out the proposed intervention of treatment by the bidder. The bidder will provide necessary site and work plan giving details for getting NOC such as,

- a. physical and hydrological modification proposed to be made in the drain or its banks,
- Area required for the installation and operation of the treatment system, garbage/solid waste / sludge storage
- c. Power requirement and associated work and systems
- d. Risk envisaged and its mitigation measures
- e. Any other information of importance or as required by NMCG or the agency responsible for providing NOC

List of drains with its indicative attributes have been provided in **Appendix I**. Bidders are encouraged to have their own assessment of the attributes of the drain through site visits and also to identify appropriate sites (preferably 2-3 options) based on their requirement, but with minimal compromise with the natural attributes of the drains, its flow and surrounding environment. Due care needs to be taken to avoid any impact on the farm land, accessibility to the site through public access, proximity of electric power supply, if required and ease for movement of material.

### V. Deliverables Expected

- (a) The treatment shall be provided to complete flow in the drain and no-bypass shall be allowed.
- (b) The treatment is expected for a period of 9 months in a calendar year, leaving the monsoon period (15 June 15 Sep). The treatment facility shall be operational and deliver the quality as

iii. The details of the parameter for water quality to be assessed at the inlet, outlet of the treatment system provided by the service provider along with the monitoring and reporting frequency and the desired technology is as below:

S. NO.	Parameter		104	T	
		Frequency	Other requirements	s Remarks	
1	Flow	24 hourly average on 15 minutes basis	Cubic meter per hour	Communicated to NMCG specified	
		20	Technology – Magnetic /	location / server or Real time basis	
			Ultrasonic Or As per CPCB	Controller & DAS & Data Transmission	
			guidelines.	*	
2.	Total Organic Carbon (TOC)	24 hourly average on 15 minutes	Combined Combustion	Controlled & DAS & Data Transmission	
		interval	Catalytic Oxidation at 680 C and NDIR	7,000	
			method		
			Or As per CPCB guidelines (para x of notes below).	Remote Calibration Facility	
3.	рН	24 Hourly average on 15 minutes	Electrode Method Or		
	and grant in make the state of	interval	As per CPCB guidelines (para x of		
		elitir terio ser se conson	notes below).		
-	TSS/ Turbidity	Scattered Light IT Method / UV-Vis Spectro-photometry (Singlewavelength)	As per CPCB guidelines (para x of notes below).		

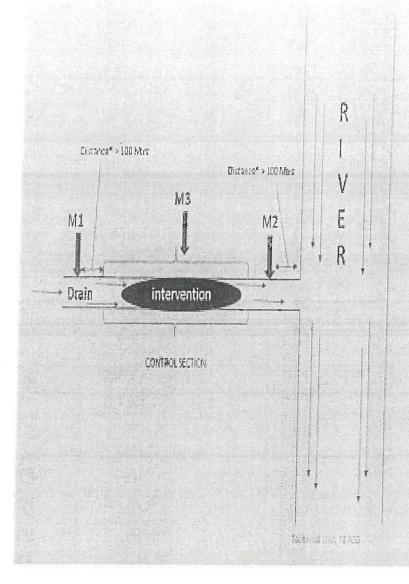
- iv. The measurement data of monitoring through real /online time instruments received from each of the location (Inlet and outlet) for quality and quantity shall not be less than 90 % for TOC and Flow and 80% for TSS and pH on hourly basis for each calendar day.
- C. The payment will be governed by the following formula

Payment = Quoted Payment (A \* B)

{Fixed and Variable price will be calculated separately}

A – Payment Eligibility from Table A

B – Compliance to Clause B(iii) as per Table C



- Control section to be defined by the bidder as per the package.
- M1 & M2 shall be two qualitative & quantitative monitoring stations for performance evaluation.
- M3 flow Monitoring to observe any by-pass to intervention
- \*suggestive distance