



BIHAR STATE POLLUTION CONTROL BOARD

Parivesh Bhawan, Patliputra Industrial Area, P.O.-Sadakat Ashram, Patna-800010

EPABX-0612-2261250/2262265, Fax-0612-2261050

Ref. No.

Patna, dated-

From,

Alok Kumar,
Member Secretary.

To,

The Member Secretary,
Central Pollution Control Board,
Parivesh Bhawan, East Arjun Nagar,
Delhi-110032.

Sub:- **Submission of monthly progress report for the month of May, 2020 by State as per orders of the Hon'ble NGT dated- 06.12.2019 in O.A. No.673/2018.**

Sir,

Please find herewith the monthly progress report for the month of May, 2020 in compliance with the order of the Hon'ble NGT dated- 06.12.2019 in O.A. No.673/2018 for needful action.

Monthly progress report for the month of March, 2020 has already been submitted vide this Board's letter no. B-1538, dated-20.03.2020 (email as well). Due to lockdown, progress report for the month of April, 2020 was not submitted.

Encl: As above.

Yours faithfully,

Sd/-

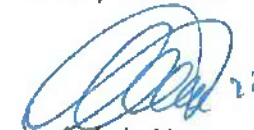
(Alok Kumar)

Member Secretary.

Patna, dated- 22-5-20

Memo No. B-2434

Copy to Sri D.P. Mathurla, Executive Director (Tech.), National Mission for Clean Ganga (NMCG), First Floor, Major Dhyani Chad National Stadium, India Gate, New Delhi-110002 for information and necessary action.


(Alok Kumar)
Member Secretary.

O/o ED (T), NMCG

Dy. No. 696

Date: 09/06/2020

National Mission for Clean Ganga

Format for Submission of Monthly Progress Report by States/UTs
(Hon'ble NGT in the matter of OA No. 673/2018 dated 06.12.2019)

Sl. No.	Activity to be monitored	Timeline	Submission of Progress by State/UT- Compliance Status
1.	Ensure 100% treatment of sewage at least in-situ remediation	31.03.2020	In-situ treatment facilities (bio-remediation) has been provided at Danapur Cant. Drain & Rajapur drain at Patna.
	commencement of setting up of STPs and connecting all the drains and other sources of generation of sewage to the STPs must be ensured	31.03.2020	Presently, there is no sewerage network & STP (except Patna) for sewage management along the Ganga River. Out of 34 projects on 23 Ganga front towns, 03 relate with setting up of STP, 05 relate with Sewerage Network alone, 07 relate with Sewerage Network with STP and 19 relate with I&D and STP. The works related with setting up of STP of Karmalichak has been completed and STP of Beur is also almost completed (99%) whereas, other projects are to be completed by different dates. The total 34 projects on Ganga front towns include 17 ongoing projects, 09 under tendering process, 01 tender to be floated and 07 proposed projects. Out of the 06 polluted rivers stretches (Ganga, Punpun, Ramrekha, Harbaura, Parmar and Sirsiya), projects related with Ganga front towns including Fatuha (Ganga & Punpun river) are under execution and DPR for remaining 04 proposed projects related with other polluted river stretches are under preparation by NEERI, Nagpur. Initiatives also have been taken for I&D and STP at 15 selected different towns on tributaries of the river Ganga. They are to be completed by June, 2021. Screening arrangements have been provided in a total no. of 125 drains along the Ganga front towns. UD&HD, GoB has invited tender for selection of agency for In-situ treatment through bio-remediation of drains joining Ganga and other polluted rivers vide Notice

			Inviting Tender (NIT) dated-08.05.2020.
2.	Timeline for completing all steps of action plans including completion of setting up STPs and their commissioning.	31.03.2021	Status of sewage management w.r.t. setting up of STP, I&D and sewerage network is annexed as Annexure-3(a), 3(b) & 3(c)
3.	Chief Secretaries may set up appropriate monitoring mechanism at State level Specifying accountability of nodal authorities not below the Secretary level. Chief Secretaries may have an accountable person attached in their office for this purpose.	22.01.2020	Regular review meetings are conducted under the chairmanship of the Chief Secretary, Bihar to ensure the compliances of orders of the Hon'ble NGT on different environmental issues including orders in O.A. No. 606/2018, 673/2018 etc.
	Monitoring at State level must take place	Fortnightly Commencing 21.12.2019	Being complied.
4.	Progress report may be furnished by the States/UTs to Secretary, Ministry of Jal Shakti, Member Secretary, CPCB.	Monthly (preferably before 20th of every month)	Being complied.
5.	Progress Report may be comprised of details along with completion timelines on:		
	(i) Identification of polluting sources including drains contributing	Complied	Details of polluting sources: a. Industrial pollution along polluted river stretches is annexed as Annexure-1 .
		Complied	b. Details of drains contributing river pollution is annexed as Annexure-2 .

	to river pollution and action as per NGT order on in-situ treatment	March, 2020	c. In-situ treatment facilities (bio-remediation) has been provided at Danapur Cant. Drain & Rajapur drain at Patna. d. UD&HD, GoB has invited tender for selection of agency for In-situ treatment through bio-remediation of drains joining Ganga and other polluted rivers vide Notice Inviting Tender (NIT) dated-08.05.2020.
(ii)	Status of STPs, I&D and sewerage networks Details of Existing Infrastructure, Gap Analysis, Proposed along with completion timeline		Status of sewage management w.r.t. setting up of STP, I&D and sewerage network is annexed as Annexure-3(a), 3(b) & 3(c) .
(iii)	Status of CETPs Details of Existing CETP and ETP Infrastructure, Gap Analysis, Proposed along with completion timeline, No. of industries and complying status	March, 2020	Ganga River: The State is contemplating to have CETPs for the industrial areas: Fatuha (02 MLD) in Patna; Barari (01 MLD) in Bhagalpur; Hajipur (06 MLD) in Vaishali and Bela (05 MLD) in Muzaffarpur). Environmental Clearance (EC) has been accorded by SEIAA for aforesaid proposed CETPs in Bihar. Tenders have been invited many times but no responsive bids have been obtained. Harbaura (Sikrahna) River, Sirsiya River, Parmar River, Ramrekha River and Punpun River: There is no Industrial Cluster/Area/Estate in the polluted river stretches other than that on Ganges, hence no requirement for setting up of CETP in the area. Individual industries located in the catchment area have separate ETP.

(iv)	Status of Solid Waste Management & Details of Processing Facilities Details of Existing Infrastructure, Gap Analysis, Proposed along with completion timeline		➤ Status of Solid Waste Management & Details of Processing Facilities is annexed as Annexure-4.
(v)	Latest water quality of polluted river, its tributaries, drains with flow details and ground water quality in the catchment of polluted river;		➤ Latest water quality of polluted river and its tributaries is annexed as Annexure-5. ➤ Drains with flow details are annexed as Annexure-2. ➤ Ground water quality in the catchment of polluted river is annexed as Annexure-6.
(vi)	Preventing dumping of waste and scientific waste management including bio-medical wastes, plastic wastes and decentralizing waste processing, including waste generated from hotels, ashrams, etc.		ULBs have been directed to ensure the compliance of provisions of the Solid Waste Management Rules, 2016 including restriction on disposal of solid waste along water bodies.
(vii)	Ground water regulation		Government of Bihar has initiated drives for recharging of ground water by providing roof

			top rain water harvesting structures and construction of soak pits/recharge pits near public well, hand pump, tubewell and other water bodies under Jal-Jeevan-Hariyali Abhiyan. Bihar Govt. has also notified The Bihar Ground Water (Regulation & Control of Development & Management) Act, 2006 for regulating and management of ground water. The authority may impose stipulated conditions for providing roof top rain water harvesting structures in the building plan in an area of the 1000 Sqm or more while according approval for construction.
(viii)	Adopting good irrigation practices,		In order to enhance water use efficiency in water intensive crop, assistance is given for promotion of water saving tools/ technologies like sprinkler and drip irrigation, creation of farm ponds, efficient delivery and distribution system and adoption of agronomic practices like alternate row/ furrow irrigation, mulching, etc. Pradhan Mantri Krishi Sinchai Yojana also focuses on creating protective irrigation by harnessing rain water at micro level through 'Jal Sanchay' and 'Jal Sinchan' to insure 'Per Drop More Crop'. The state is implementing Pradhan Mantri Krishi Sinchai Yojana (Per Drop More Crop) for development of Micro Irrigation in Bihar during the year 2018-19 with the cost of Rs 133.00 Crore by providing 90% subsidy to all categories of Farmers under Drip Irrigation and 75% Subsidy to all categories of farmers under Sprinkler Irrigation. State Govt. is also implementing community Tube well Scheme for benefit of small and marginal farmers with 100 % subsidy to provide water source for installation of Drip Irrigation System under the State Plan. As Horticultural and Commercial crops like Sugarcane require heavy water during summer season, Drip Irrigation is highly beneficial because about 60% of

			conventional Irrigation water is saved under this system. The productivity of the crops under this system increases by about 25-30 % while cost of production decreases 30-35% in comparison to Conventional Irrigation System.
(ix)	Protection and management of Flood Plain Zones (FPZ),		Considering densely populated northern plain terrain and mostly embanked river, the issue of demarcation of flood plain zone/buffer zone is not applicable in case of Bihar. State Govt. is contemplating to approach the Hon'ble NGT in this regard.
(x)	Rain water harvesting,		➤ To ensure initiatives of drives for recharging of ground water by providing roof top rain water harvesting structures and construction of soak pits/recharge pits near public well, hand pump, tubewell and other water bodies under Jal-Jeevan-Hariyali Abhiyan. ➤ Imposition of condition for providing roof top rain water harvesting structures in the building plan in an area of the 1000 Sqm or more while according approval for construction.
(xi)	Maintaining minimum environmental flow of river		There is no control structure on Ganga and other polluted river stretches and such maintenance of e-flow is not applicable.
(xii)	Plantation on both sides of the river		In view of the point no. 5(ix) above, State has certain limitation. However, a team of Department of Environment, Forest & Climate Change, Govt. of Bihar official visited Yamuna bio-diversity park in Delhi and exploring its replication in the State.
(xiii)	Setting up biodiversity parks on flood plains by removing encroachment		

NOTICE INVITING TENDER FOR Selection of Agency for In-Situ Treatment of Sludge of septic tanks of Community / Mobile Toilets and Sewage through Bioremediation for Treatment of the Nallas joining the river Ganga in Bihar.



Urban Development and Housing Department, Govt. of Bihar

1st Floor, Vikas Bhawan, New Secretariat, Patna – 800015

(Tel – 0612-2215880, Email – urbansac-bih@nic.in)

RFP NO. - B4CM/2019/Bio remediation/25/194

DATE: - 08/05/2020

1. Special Secretary, UD&HD on behalf of Secretary, Urban Development & Housing Department, Govt. of Bihar, invites proposal for Selection of Agency for In-Situ Treatment of Sludge of septic tanks of Community / Mobile Toilets and Sewage through Bioremediation for Treatment of the Nallas joining the river Ganga in Bihar.

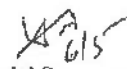
2. UD&HD, Bihar, invites Bids under Single Stage two envelope system - Technical and Financial Bid, from reputed and experienced agencies for Bioremediation work as per works detailed in the table below. Bidding will be conducted through National Competitive Bidding and is open to all eligible bidders. Bids will be received in the office of Special Secretary, UD&HD, Govt. of Bihar.

Name of the Work	Bid Security	Cost of bidding document	Period
(1) Selection of Agency for In-Situ Treatment of Sludge of septic tanks of Community / Mobile Toilets and Sewage through Bioremediation for Treatment of the Nallas joining the river Ganga in Bihar	Rs. 5,00,000/-	Rs. 10,000/-	One Year.

- Interested Agency may download the complete. Request for Proposal (RFP) Document, from tenders section on the website <http://urban.bih.nic.in/> from date of Publication.
- A firm will be selected under **Least Cost Selection Method** and procedures described in the RFP.
- Last date to receive Pre-bid Queries: 18/05/2020 up to 12:00 pm. (Email id : spmgbihar@gmail.com)
- Pre-bid meeting will be held on: 18/05/2020 Time 03:00 pm.
- No proposals will be accepted without cost of Bid Document and valid Bid Security. No liability will be accepted for downloading in the incomplete Document.
- Sealed Completed Proposal will be received at the address mentioned below on any working day up to **01:00 PM on 02.06.2020** and Technical Proposal of Bids shall be opened on the same day at 03:00 PM hours at Address:

The Secretary, Urban Development & Housing Department, Vikas Bhawan, New Secretariat, Patna – 800001, Bihar.

- The Secretary, UD&HD, GoB-cum-Project Director, SPMG reserves the right to accept or reject any or all proposals without incurring any obligation to inform the affected applicant/s of the grounds.


Special Secretary
(UD&HD, Bihar)

Industrial Pollution along Polluted River Stretches:

1. Ganga River:

Bihar State Pollution Control Board has identified 57 Grossly Polluting Industries in the Ganga basin in Bihar. The major operational industries located on the banks of the River Ganga in Bihar stretch are M/s Barh Super Thermal Power Station, NTPC, Barh, Dist.-Patna; M/s Kahalgaon Super Thermal Power Station (KhSTPS), NTPC, Kahalgaon, Dist.-Bhagalpur; M/s Barauni Oil Refinery, IOC Ltd. Barauni, Dist.-Begusarai; Barauni Thermal Power Station (BTPS), Begusarai; M/s Indian Tobacco Company Ltd., Dist.-Munger. There is no any discharge from aforesaid units into the Ganga river.

ETPs have been installed in all operating industries. Online Continuous Effluent Monitoring System has been installed. Regular inspection is carried on to ensure the compliances. ETPs have been installed in all operating industries. Online Continuous Effluent Monitoring System has been installed. Regular inspection is carried on to ensure the compliances.

2. Harbaura (Sikrahna) River:

Bihar State Pollution Control Board has identified 02 Grossly Polluting Industries in the Harbaura river in Bihar. The major operational industries located on the banks of the River Harbaura in Bihar stretch are M/s New Swadeshi Sugar Mills & M/s New Swadeshi Sugar Mills, (Distillery Division), Narkatiaganj, Dist.-West Champaran. There is no any discharge from aforesaid units into the Harbaura River.

ETPs have been installed in all operating industries. Online Continuous Effluent Monitoring System has also been installed. Regular inspection is being carried on to ensure the compliances.

3. Sirsiya River:

There is no any water polluting or grossly polluting industry on the banks of Sirsiya River in Indian Territory. There is also no industrial cluster /area/estate in this polluted river stretch.

4. Parmar River:

There is no any water polluting or grossly polluting industry on the banks of Parmar River in Indian Territory. There is also no industrial cluster /area/estate in this polluted river stretch.

5. Ramrekha River:

Bihar State Pollution Control Board has identified 02 Grossly Polluting Industries in the Ramrekha river in Bihar. The major operational industries located on the banks of the River Ramrekha in Bihar stretch are M/s Harinagar Sugar Mills Ltd., Harinagar, Dist.- West Champaran & M/s Harinagar Sugar Mills Ltd., (Distillery Division) Harinagar, Dist.-West

Champaran. There is no discharge from aforesaid units into the Ramrekha river.

ETPs have been installed in all operating industries. Online Continuous Effluent Monitoring System has also been installed. Regular inspection is being carried on to ensure the compliances.

6. Punpun River:

Bihar State Pollution Control Board has identified 04 Grossly Polluting Industries in the Punpun basin in Bihar. The major operational industries located on the banks of the River Punpun in Bihar stretch are M/s Smirity Paper Mills Pvt. Ltd., Mahuli Road, Chitauna, Kothia, Patna City, Dist.- Patna, M/s Indira Paper Mill Pvt. Ltd., Mohuli Road, Mathpar, Begumpur, Didarganj, Patna, M/s Mateshwari Paper Mills Pvt. Ltd., Mahauli Road, Karmalichak, Didarganj, Patna and M/s Patna Paper Mill Pvt. Ltd., Mahauli, Kothiya, Patna.

ETPs have been installed in all operating industries. Online Continuous Effluent Monitoring System has been installed. Regular inspection is carried on to ensure the compliances. There is also no industrial cluster/area/estate in this polluted river stretch.

Annexure-2

Details of drains contributing river pollution:

1. Ganga River:

A total number of 42 drains having flow > 01 MLD discharging into river Ganga with total discharge/flow of **778 MLD** have been identified in Bihar stretch. The details of the drains with its flow, pollution load and quality are hereunder:-

Details of drains having flow >01 MLD discharging into River Ganga										
SN	Catchment Area	Name of drain	Standing / Flowing	Flow (MLD)	BOD (mg /l)	Pollution Sources (Domestic/ Industrial/ Mixed)	Catchment Area (Sq. Km)	Traceable Length of Drain in km approx.	Leantn of Sampling point from confluence point in KM approx.	Recipient
1	Buxar	Chhoti Saripur Drain	Flowing	5.87	26	Domestic	Civil Lines, Syndicate Colony, Mathiya Mohalla, Saripur	0.2	0.03	Ganga River
2	Buxar	Hospital Road Drain	Flowing	3.82	36	Domestic	Ward No. 22, 23, 24	0.15	0.03	Ganga River
3	Buxar	Sati Ghat Drain	Flowing	6.29	72	Domestic	Ward No. 13, 24, 25, Tetari Bazar, Munim Chowk	0.25	0.05	Ganga River
4	Buxar	Bangla Ghat Drain	Flowing	1.80	70	Domestic	Ward No. 6	0.3	0.05	Ganga River
5	Buxar	Tadka Drain	Flowing	8.23	74	Domestic	Ward No. 13, 14, 24, 25, 26, 28, 29, 32	0.5	0.05	Ganga River
6	Buxar	Nath Baba Mandir Drain	Flowing	4.23	15	Domestic	Ward No. 1, 2, 3	1.6	0.05	Ganga River
7	Buxar	Sohnipatti Drain	Flowing	1.31	15	Domestic	Ward No. 20, 33	0.5	0.03	Ganga River
8	Maner	Maner Bazar Drain, Infront of Machhli Market, Maner, Patna	Flowing	3.55	140	Domestic	Ward No.- 1,4,5,6,7	5	4	Ganga River
9	Danapur, Patna	Danapur Cant. Drain	Flowing	8.16	24	Domestic	Danapur, Sadar Bazar, Bibiganj, Lal Kothi, Ramnagar Colony, Sultanput, Yadav Colony, Cefence Colony, Mubarakpur, Kachra Colony, Judge Colony,	4	0.117	Ganga River

Details of drains having flow >01 MLD discharging into River Ganga										
SN	Catchment Area	Name of drain	Standing / Flowing	Flow (MLD)	BOD (mg /l)	Pollution Sources (Domestic/ Industrial/ Mixed)	Catchment Area (Sq. Km)	Traceable Length of Drain in km approx.	Leanth of Sampling point from confluence point in KM approx.	Recipient
							Ramkrishnapuram, Bank Colony, Hathikhana, Lodipur, Sikandarpur, Urja Nagar, Tarachak,			
10	Dighwara	BeerpurBhua I NH-19 Drain, Dighwara	Flowing	1.15	80	Domestic	Ward No.- 7,8,9 and 10, Shankarpur, Main market	1.0 KM approx.	0.08 KM approx.	Ganga River
11	Patna	DighaGhat Drain (Canal)	Flowing	134.00	23	Domestic	Digha, Ramjaipal Nagar, Vastu Ganga Colony, IAS Colony, Adampur, Jai Ram Bazar, Vrindavan Colony, Maulana Azad Nagar, Bochachak, Taj Nagar, Jalalpur, NavneetVihar, AdarshVihar Colony, Ved Nagar, MirdulaVihar, Rukanpura, BashantVihar, NTPC Phase- 2, Yadav Colony, SBI(old) Colony, MaaliTola, Railway Colony.	9.5	0.485	Ganga River
12	Patna	Kurji Drain	Flowing	65.00	34	Domestic	Rajiv Nagar, JaiprakashNigar, A.G. Colony, CDA Colony, North Patel Nagar, Indrapuri, Patliputra Colony, PatliputraIndustrial Area, Kurji, Shivalji Nagar, Balupur.	5.34	1.82	Ganga River
13	Patna	RajapurPul Drain	Flowing	128.00	16	Domestic	Sheikhpura, Shastrinagar, NandGaon, Rajbanshi Nagar, R. Block, Rajbhawan, Sanjay Gandhi JaivikUdyan, Board Colony, Professor's Colony, Adarsh Colony, Shivpuri, Mahesh Nagar, West Ananadpur, LIC Colony, Basant Bihar Colony, Indra Nagar, RajapurMainpura, Dujra, Gandhi Nagar, GosaiTola, LIC Ghat, Anandpuri, Nehru Nagar, Kidwaipuri, S.K. Puri.	3.5	4.34	Ganga River

Details of drains having flow >01 MLD discharging into River Ganga										
SN	Catchment Area	Name of drain	Standing / Flowing	Flow (MLD)	BOD (mg /l)	Pollution Sources (Domestic/ Industrial/ Mixed)	Catchment Area (Sq. Km)	Traceable Length of Drain in km approx.	Leantth of Sampling point from confluence point in KM approx.	Recipient
14	Patna	Mandiri (Bans Ghat) Drain	Flowing	148.00	54	Domestic	GPO, S.K. Nagar, East Budha Colony, Harding Park, Frazer Road, Rajapur, Lodipur, Golghar Area, Mohamadpur (Chainpura), Budhmard, Patna Jn., Harding Road, S.P. Verma Road.	2.44	3.12	Ganga River
15	Patna	Anta Ghat Drain	Flowing	43	75	Domestic	Gandhi Maidan, Frazer Road, Exhibition Road, LaljiTola, SalimpurAhra, Dujra, Bakarganj, Pirmohani, Daldali, Lohanipur, Lohanipur West, Sabjibagh, Civil Court, KadamKuhan, Antaghat.	1.7	1.36	Ganga River
16	Patna	Krishna Ghat Drain	Flowing	Pump House	80	Domestic	Patna University Area, SudhiTola, Science College, NIT Patna, Thathari Bazar, NayaTola, Bhikhnapahari, ChakMusallahpur, Musallahpur Hat, Sharif Colony, Ramna Road, LalBagh, Annie Besant Road, B.M. Das Road, MakhaniKuhan, Mehandru.	Not traceable as it is a underground drain.	Same location	Ganga River
17	Patna	MittanGhat Drain	Flowing	48.00	90	Domestic	Khatri Path, MittanGhat Path, Guzri Bazar, Manas Path.	0.547	Sampling and confluence point are same	Ganga River
18	Fatuha, Patna	Makshudpur Drain (West of Bindheshwar iGhat)	Flowing	1.10	46	Domestic	BindeshwariGhat	0.024	-	Ganga River
19	Fatuha, Patna	DevantiGhat	Flowing	2.30	19	Domestic	SonakothiMohallah	0.013	-	Ganga River
20	Fatuha, Patna	MastanaGha t	Flowing	1.14	42	Domestic	-	0.014	-	Ganga River

Details of drains having flow >01 MLD discharging into River Ganga										
SN	Catchment Area	Name of drain	Standing / Flowing	Flow (MLD)	BOD (mg /l)	Pollution Sources (Domestic/ Industrial/ Mixed)	Catchment Area (Sq. Km)	Traceable Length of Drain in km approx.	Leantn of Sampling point from confluence point in KM approx.	Recipient
21	Bakhtiyarpur, Patna	Raghopur-Dagar Drain	Flowing	4.30	36	Domestic				Ganga River
22	Barh, Patna	Gauri Shankar Ghat, Barh	Flowing	1.09	42	Domestic	13(P) & 14(P)	-	-	Ganga River
23	Mokama	Tapashwai Ghat, Mokama	Flowing	6.02	20	Domestic	Ward No.-1 & 10	3.8	0.025	Ganga River
24	Munger	LalDrawaza Drain	Flowing	21.50	14	Domestic	Munger Town	0.004	Sampling and confluence point are same.	Ganga River
25	Sultanganj	Masjid ghat Drain	Flowing	1.70	14	Domestic	Sultanganj Town	0.014	Sampling and confluence point are same.	Ganga River
26	Bhagalpur	Adampur Drain	Flowing	18.91	15	Domestic	Budhanath Park, Budhanath Baba Madir, Adampur	0.5	0.15	Ganga River
27	Bhagalpur	Hathiya Drain near Intake well	Flowing	7.54	9	Domestic	Mustafapur, Hanuman Ghat, Sant Nagar, Mayaganj	0.5	0.05	Ganga River
28	Bhagalpur	Surkhikal Drain	Flowing	13.10	32	Domestic	BadiKhanJarpur, MaharaJGhat, Surkhikal, Tilakamanjhi	0.5	0.1	Ganga River
29	Bhagalpur	SakhichandD rain	Flowing	12.69	10	Domestic	Makhajan, Tiger Market, BudhanathRoad	0.4	0.1	Ganga River
30	Bhagalpur	BarariGhat Drain, near Vikramshila Bridge, Bhagalpur	Flowing	6.61	17	Domestic	Railway Colony, Barari State Housing Board Colony	2	0.05	Ganga River
31	Bhagalpur	Neel KothiGhat Drain, Bhagalpur	Flowing	1.91	20	Domestic	MadhukarChak, Parmanandpur	0.7	0.05	Ganga River
32	Bhagalpur	PipaliDham Drain-II, Bhagalpur	Flowing	1.49	10	Domestic	Moorgi Pharm, RoopVihar Colony	0.5	0.05	Ganga River

Details of drains having flow >01 MLD discharging into River Ganga										
SN	Catchment Area	Name of drain	Standing / Flowing	Flow (MLD)	BOD (mg /l)	Pollution Sources (Domestic/ Industrial/ Mixed)	Catchment Area (Sq. Km)	Traceable Length of Drain in km approx.	Leanth of Sampling point from confluence point in KM approx.	Recipient
33	Bhagalpur	KuppaGhat Drain	Flowing	4.43	8	Domestic	MaharshiMehi Ashram, Mustafapur, Mayaganj	0.6	0.05	Ganga River
34	Bhagalpur	KoylaGhat	Flowing	7.63	125	Domestic	ChhotiKhanjarpur, KoylaGhat, Kachahari, Faris Lane Road, Ward No. 22, 25	0.5	0.1	Ganga River
35	Bhagalpur	HathiyaNala, Near Tilkamajhi University	Flowing	22.66	145	Domestic	TilkaManjhi University, MaharajGhat, Naya Bazaar, ParbattiMohalla, Tatarpur, VikramshilaMohalla, Urdu Bazar, ChunihariTola	1	0.3	Ganga River
36	Bhagalpur	STP Drain, Bhagalpur	Flowing	1.77	130	Domestic	SahebganjMohalla	0.8	0.4	Ganga River
37	Bhagalpur	Sahebganj/Miyabari Drain	Flowing	4.51	32	Domestic	Karnagarh, Sahebganj	0.8	0.4	Ganga River
38	Bhagalpur	ChampaNala -1	Flowing	11.57	95	Domestic	Champa Nagar, Nath Nagar	0.5	0.3	Ganga River
39	Bhagalpur	ChampaNala -2	Flowing	8.38	42	Domestic	Nath Nagar, Medini Nagar	0.8	0.1	Ganga River
40	Kahalgaon	Kagji Drain	Flowing	2.23	38	Domestic	Thana Road, Kulkulia Road	1.0 km	-	Ganga River
41	Kahalgaon	AshmashanGhat Drain	Flowing	1.60	15	Domestic	Kazipura, Palthanpura	1.0 km	0.08 KM	Ganga River
42	Kahalgaon	Pampu Drain	Flowing	1.40	24	Domestic	Station Chawk, Basti	1.5 km	0.016 KM	Ganga River
Total				777.99						

2. Harbaura (Sikrahna) River:

There are three (3) drains (near power grid of sugar mill, near Dhumnagar mandir and near Hardia) in Narkatiaganj town through which domestic waste water is discharge to Harbaura River. The total sewage/waste water discharges through aforesaid drains have been assessed to **14.59 MLD**. The details of the drains are hereunder:-

Sl. No.	Name of drain	Average flow (MLD)	Recipient	Sewage/waste water Quality
1.	Domestic Waste Water/Sewage drain, passing near power grid of Sugar Mill	6.736	Harbaura River	pH: 6.59 BOD: 22 mg/L COD: 80 mg/L TSS: 53 mg/L
2.	Dhum Nagar Mandir drain	4.215	Harbaura River	pH: 6.59 BOD: 38 mg/L COD: 148 mg/L TSS: 78 mg/L
3.	Nehar drain, Near Hardiya	3.640	Low Lying Area and Found Dry after 3.5 KM	pH: 6.62 BOD: 24 mg/L COD: 84 mg/L TSS: 26 mg/L
	Total	14.591		

3. Sirsiya River:

There are three (3) drains (at Naga Road, at Chhatlaya Ghat and near Custom Check Post Bridge) in Raxaul town through which domestic waste water is discharge to Sirsiya River. The total sewage/waste water discharges through aforesaid drains have been assessed to 14.89 MLD. The details of the drains are hereunder:-

Sl. No.	Name of drain	Average flow (MLD)	Recipient	Sewage/waste water Quality
1.	Drain at Naga Road, Shivpuri Mohalla, Raxaul	6.03	Sirsiya River	pH: 7.04 BOD: 62 mg/L COD: 232 mg/L TSS: 38 mg/L
2.	Drain at Chhatlaya Ghat, near Railway Bridge,	3.1	Sirsiya	pH: 7.25

	Raxaul		River	BOD: 9 mg/L COD: 44 mg/L TSS: 36 mg/L
3	Drain near Custom Check Post Bridge, Raxaul	5.76	Sirsiya River	pH: 7.31 BOD: 16 mg/L COD: 60 mg/L TSS: 38 mg/L
	Total	14.89		

4. Parmar River:

There are four (4) drains namely Khajurbari Drain, Ward No.6, Haji Mohalla Drain, Idgah Chowk Drain, Isalmpur Drain, Ward No.-17. The aforesaid drains disperse in low lying area. The total sewage/waste water discharge through aforesaid drains has been assessed to **5.559 MLD**. There is no sewerage network & STP for sewage management at Jogbani Nagar Panchayat area. The details of the drains are hereunder:-

Sl. No.	Name of drain	Average flow (MLD)	Recipient	Sewage/waste water Quality
1.	Khajurbari Drain, Ward No.6	2.96	Low lying area	pH: 7.32 BOD: 88 mg/L COD: 264 mg/L TSS: 118 mg/L
2.	Haji Mohalla Drain	0.50	Low lying area	pH: 7.20 BOD: 36 mg/L COD: 124 mg/L TSS: 82 mg/L
3.	Idgah Chowk Drain	0.704	Low lying area	pH: 7.42 BOD: 50 mg/L COD: 168 mg/L TSS: 74 mg/L
4	Isalmpur Drain, Ward No.-17	1.395	Low lying area	pH: 7.28 BOD: 70 mg/L COD: 212 mg/L TSS: 92 mg/L
	Total	5.559		

5. Ramrekha River:

There are five (5) drains (at Nagar Panchayat Road, near Dhangal Toli, at Kathawa Pull, at Raily Bazar and near Mill Quarter) in Ramnagar block through which domestic waste water is discharge to Ramrekha River. The total

sewage/waste water discharges through aforesaid drains have been assessed to 27.88 MLD. The details of the drains are hereunder:-

Sl. No.	Name of drain	Average flow (MLD)	Recipient	Sewage/waste water Quality
1.	Mukhya Bazar, Near Fish Market, Nagar Panchyat Road,	10.743	Ramrekha River	pH: 6.08 BOD: 115 mg/L COD: 372 mg/L TSS: 54 mg/L
2.	ChatiyaGhat Drain West, DhangaToli,	11.721	Ramrekha River	pH: 6.34 BOD: 135 mg/L COD: 520 mg/L TSS: 60 mg/L
3.	ChatiyaGhat Drain East, Kathawa Pull,	1.065	Ramrekha River	pH: 6.69 BOD: 42 mg/L COD: 160 mg/L TSS: 116 mg/L
4.	Railly Bazar Drain,	0.892	Ramrekha River	pH: 5.63 BOD: 28 mg/L COD: 108 mg/L TSS: 22 mg/L
5.	Mill Quarter Drain, Pachurkha	3.464	Ramrekha River	pH: 6.81 BOD: 24 mg/L COD: 108 mg/L TSS: 46 mg/L
Total		27.885		

6. Punpun River:

There are two (2) drains Bakipur Gorakh Drain and Badshahi Drain (**Badshahi Drain coming from Patna**) in Fatuha town through which domestic waste water is discharge to Punpun River. The total sewage/waste water discharges through aforesaid drains have been assessed to 64.95 MLD. The details of the drains are hereunder:-

Sl. No.	Name of drain	Average flow (MLD)	Recipient	Sewage/waste water Quality
1.	Bakipur Gorakh Drain	2.95	Punpun River	pH: 6.41 BOD: 85 mg/L COD: 268 mg/L TSS: 54 mg/L
2.	Badshahi Drain	62	Punpun River	pH: 7.67 BOD: 38 mg/L COD: 124 mg/L TSS: 26 mg/L
	Total	64.95		

Annexure-3 (a)

Sewerage Management in Bihar					
Treatment Capacity Total Towns- 22 Ganga Towns					
Sewerage Generation (in MLD)	Existing	GAP	Proposed	Timeline	Remarks
651.5 MLD	NIL	651.5 MLD	Dec' 2022	Completed - 1 Projects June' 20 - 2 Project Dec' 20- 6 Projects June' 21- 2 Projects Dec' 21 - 5 Projects June' 22 - 4 Projects Dec ' 22 - 5 Projects	Project wise timeline report annexed as Annex-1

Sewerage Network in Bihar				
Existing Sewerage Length	Required	GAP	Timeline	Remarks
429.71 KM	1747.92 KM	1318.21 KM	June' 20 - 1 Project Dec' 20 - 5 Projects June' 22 - 1 Project Dec' 22 - 5 Projects	Project wise timeline report annexed as Annex-1

Number of STPs in Bihar				
Number of STPs	New Proposed	Total STPs	Timeline	Remarks
NIL	25	25	Completed - 1 Project June' 20 - 2 Projects Dec' 20- 6 Projects June' 21- 2 Projects Dec' 21 - 5 Projects June' 22 - 4 Projects Dec ' 22 - 5 Projects	Project wise timeline report annexed as Annex-1

Re-Use of Treated Sewage				
Present Utilization	Proposed	Timeline	Type of Use	Remarks
Nil	651.5 MLD	-	Agriculture purpose only	Treated sewage water of STP having capacity 100 MLD or above will be used by Water Resource Department and less than 100 MLD will be used by Minor Water Resource Department for agriculture purpose as per the decision of State Government of Bihar.

Restoration of Polluted River Stretches in Bihar							
Priority Class	I	II	III	IV	V	VI	Total
No of PRS			1		5		6

S. No	River Name	Stretche Identify	BOD Range max value	Priority
1	Ganga River	- Buxar to Manihari - Total no of towns – 22 (list of towns is attached as annex – 1)		V
2	Punpun River	Fatuha		V
3	RamrekhaRiver	Harinagar (Ramnagar)		V
4	Sikrahna River	Narkatiaganj		V
5	Parmar River	Jogbani		V
6	Sirsia River	Raxual		III

Priority Class	No of PRS	No of RRC Approved Action Plan Received	Date of Receipt of Action Plan	Action Plan Approved by CPCB Task Team	Remarks
I	0	-	-	Revised individual action plan submitted on 31.01.2020 and presented before CPCB task team on 25.02.2020 through VC.	➤ Action plan was originally prepared by RRC and submitted to CPCB on 30.01.2019. ➤ Further revised action plan submitted on 20.07.2019 to CPCB. ➤ As per suggestion, individual action plan for all polluted river stretches were prepared and submitted to CPCB on 31.01.2020.
II	0	-	-		
III	1	-	30.01.2019, 20.07.2019 & 31.01.2020		
IV	0	-	-		
V	5	-	30.01.2019, 20.07.2019 & 31.01.2020		

Annexure-3 (b)

Status of STPs and Its Timelines						
S.No	Action Point	Terms	Action Taken	Project completion date as per plan	Amendment in timeline, If any	Total Cost in Cr.
1.	Patna:					
(a)	Pahari STP	Physical Progress- 51.00%	Ongoing	As per agreement date of completion 9/11/2020	Target date of completion Dec, 2020	147.65
(b)	Pahari Sewerage Network Zone IV_A(S)	Physical Progress- 67.00%	Ongoing	As per agreement date of completion 28/02/2021	Target date of completion Dec, 2020	167.84
(c)	Pahari Sewerage Network Zone V	Physical Progress- 41.34%	Ongoing	As per agreement date of completion 25/04/2021	Target date of completion Dec, 2020	364.9
(d)	Beur STP	Physical Progress- 99.00%	Ongoing	As per agreement date of completion 5/10/2019	Proposal for completion June, 2020	77.85
(e)	Beur Sewerage Network	Physical Progress- 68.40%	Ongoing	As per agreement date of completion 5/4/2020	Target date of completion Dec, 2020	398.4
(f)	Karmalichak STP	Physical Progress- 100%	Completed	As per agreement date of completion 5/10/2019	-	73.61
(g)	Karmalichak Sewerage Network	Physical Progress- 54.00%	Ongoing	As per agreement date of completion	Target date of	253.98

				20/05/2021	completion Dec, 2020	
(h)	Saidpur STP & Adjoining Network	Physical Progress- 92.00%	Ongoing	As per agreement date of completion 5/4/2020	Target date of completion June, 2020	188.18
(i)	Saidpur Sewerage Network	Physical Progress- 47.60%	Ongoing	As per agreement date of completion 29/01/2021	Target date of completion Dec, 2020	431.21
(j)	Digha STP and Sewerage Scheme	Survey work in progress	Ongoing	Agreement Executed on 30.12.2019, Target date of completion Dec, 2022	-	1187.86
(k)	Kankarbagh STP and Sewerage Scheme	Survey work in progress	Ongoing	Agreement Executed on 30.12.2019, Target date of completion Dec, 2022	-	
(l)	Phulwarisharif I&D and STP	Financial evaluation done. Bid document pending from BUIDCo.	Tendered	Target date of completion Dec, 2021	-	46.25 (Sanctioned)
2	Sultanganj I&D and STP	Physical Progress- 26.00%	Ongoing	As per agreement date of completion Dec, 2019	Proposal for completion Dec, 2020	63.51
3.	Barh I&D and STP	Physical Progress- 35.00%	Ongoing	As per agreement date of completion January, 2020	Proposal for completion Dec, 2020	53.9
4.	Naugachhia I&D and STP	Physical Progress- 15.00%	Ongoing	As per agreement date of completion January, 2020	Proposal for completion Dec, 2020	61.89

5.	Mokama I&D and STP	Survey work completed. Waiting from IIT. Roorkee of Design work is completed. STP land handed over on 27.12.2019. Site development and Boundary wall work & Site Development in progress.	Ongoing	As per agreement date of completion June, 2020	Proposal for completion Dec, 2020	59.17
6	Sonepur I&D and STP	Site survey work and boundary wall work is completed. Vetting for Desing and Drawing from IIT is under progress. Execution work started for Building construction.	Ongoing	As per agreement date of completion Feb, 2020	Proposal for completion Dec, 2020	29.35
7.	Maner I&D and STP	Agreement executed with successful bidder.	Ongoing	As per agreement date of completion Dec, 2020	Proposal for completion June, 2021	40.83
8	Bakhtiyarpur I&D and STP	Agreement executed with successful bidder.	Ongoing	As per agreement date of completion Dec, 2020	Proposal for completion June, 2021	36.04
9.	Bhagalpur I&D and STP	Tendered, Two bids received. Financial evaluation submitted to NMCG on 30.09.2019. Some observation has been received on 11.09.19 and there compliances has been sent to NMCG.	Tendered	Target date of completion June, 2022	-	254.13 (Sanctioned)
10.	Hajipur STP and Sewer Network	Two Bid received. Technical evaluation completed and financial bid is under process.	Tendered, Two bid received on 25.10.2019	Target date of completion Dec, 2022	-	305.19 (Sanctioned)
11.	Chhapra I&D and STP	Agreement executed on 04.02.2020, survey work completed.	Ongoing	Target date of completion Dec, 2021	-	236.15 (Sanctioned)

12.	Buxar STP and Sewer Network	Revised AA&ES issued by NMCG on 31.12.2019	Revised AA&ES amounting Rs. 128.14 Cr obtained from NMCG. Tender to be floated.	Target date of completion Dec, 2022	-	164.23 (Sanctioned)
13.	Begusarai STP and Sewer Network	Survey work is completed.	Ongoing	Target date of completion June, 2022	-	230.06 (Sanctioned)
14.	Danapur I&D and STP	Financial evaluation done. Bid document pending from BUIDCo.	Tendered	Target date of completion Dec, 2021	Target date of completion Dec, 2021	103.27 (Sanctioned)
15.	Khagaria I&D and STP	Retender publish soon.	Tendered	Target date of completion Dec, 2021	Target date of completion Dec, 2021	21.00 (Sanctioned)
16.	Munger STP and Sewer Network	4 Bids received on 07.01.2020. Bid evaluation is under progress.	Tendered, 4 Bids received on 07.01.2020.	Target date of completion Dec, 2022	-	294.02 (Sanctioned)
17.	Barahiya I&D and STP	Tender Process.	AA&ES received on 31.12.2019	Target date of completion June, 2022	-	27.00 (Sanctioned)
18.	Kahalgau I&D and STP	Tender Process.	AA&ES received on 30.12.2019	Target date of completion June, 2022	-	25.77 (Sanctioned)
19.	Dighwara I&D and STP	Proposed project, Revised DPR sent to NMCG for approval.	Compliance report sent to NMCG for DPR approval on 24.08.2018	Target date of completion Dec, 2021	-	-
20.	Teghra I&D and STP	Proposed project, Revised DPR sent to NMCG for approval.	Compliance report sent to NMCG for DPR approval on 17.12.2018	Target date of completion Dec, 2021	-	-
21.	Manihari I&D and STP	Proposed project, DPR prepared.	DPR sent to NMCG for approval on 06.08.2018	Target date of completion Dec, 2021	-	-

22.	Jamalpur I&D and STP	Proposed project, DPR sent to NMCG for approval.	Compliance of TPA awaited.	Target date of completion Dec, 2021	-
23.	Khagaul I&D and STP	Proposed project	DPR is under preparation	Target date of completion Dec, 2021	-
3. Status of STPs in state of Bihar under Namami Gange Programme in 5 River Stretches					
2	Punpun River				
1	Fatuha I&D and STP	Financial evaluation done. BUIDCo Board approval to be obtained.	Tendered	Target date of completion Dec, 2021	-
3	Ramrekha River				
1.	Harinagar (Ramnagar) I&D and STP	Proposed project	DPR is under preparation by NEERI	Target date of completion Dec, 2021	-
4	Sikrahna River				
1	Narkatiaganj I&D and STP	Proposed project	DPR is under preparation by NEERI	Target date of completion Dec, 2021	-
5	Parman River				
1	Jogbani I&D and STP	Proposed project	DPR is under preparation by NEERI	Target date of completion Dec, 2021	-
6	Sirsia River				
1	Raxual I&D and STP	Proposed project	DPR is under preparation by NEERI	Target date of completion Dec, 2021	-
2. Status of STPs in Bihar State of other 7 Tributaries of River Ganga					
I	Sone River				
1	Dehri I&D and STP	Proposed project	DPR is prepared by PBS and send to NMCG for approval	Target date of completion Dec,	

					2021		
2	Arwal I&D and STP	Proposed project		DPR is prepared by Aarveer Associates and send to NMCG for approval	Target date of completion Dec, 2021		
3	Daudnagar I&D and STP	Proposed project		DPR is under preparation by NEERI	Target date of completion Dec, 2021		
II	BurhiGandak River						
1	Muzaffarpur I&D and STP	Proposed project		DPR is prepared by DARASHAW and send to NMCG for approval and TPA compliance in progress	Target date of completion Dec, 2021		
2	Samastipur I&D and STP	Proposed project		DPR is under preparation by REPL	Target date of completion Dec, 2021		
3	Motihari I&D and STP	Proposed project		DPR is under preparation by NEERI	Target date of completion Dec, 2021		
III	Kosi River						
1	Supaul I&D and STP	Proposed project		DPR is prepared by NEERI and send to NMCG for approval	Target date of completion Dec, 2021		
2	Saharsa I&D and STP	Proposed project		DPR is under preparation by NEERI	Target date of completion Dec, 2021		
3	Madhepur I&D and STP	Proposed project		DPR is under preparation by NEERI	Target date of completion Dec, 2021		
IV	Bagmati River						

1	Darbhangha I&D and STP	Proposed project	DPR is under preparation by NEERI	Target date of completion Dec, 2021	
V			Gandak River		
1	Gopalganj I&D and STP	Proposed project	DPR is prepared by SECON and send to NMCG for approval	Target date of completion Dec, 2021	
2	Bagha I&D and STP	Proposed project	DPR is under preparation by DARASHAW	Target date of completion Dec, 2021	
VI			Mahananda River		
1	Kishanganj I&D and STP	Proposed project	DPR is under preparation by NEERI	Target date of completion Dec, 2021	
VII			Kiul River		
1	Lakhisarai I&D and STP	Proposed project	DPR is under preparation by NEERI	Target date of completion Dec, 2021	
2	Jamui I&D and STP	Proposed project	DPR is under preparation by NEERI	Target date of completion Dec, 2021	

Annexure-3(c)

TOWNWISE INFORMATION ON SEWAGE MANAGEMENT IN DIFFERENT STATES

Sl. No.	State	City/ Town	Population (based on 2011 Census)	Sewage Generation (MLD), (based on 2011 population Census data)	STP capacity installed (to be installed in MLD)	Implementing agency	Year of Commissioning	Scheme under which STP was constructed	Design parameter	Technology adopted	Utilization capacity	Influent parameter	Effluent parameter	Use of treated effluent in MLD, if any	Discharge of treated effluent to natural water bodies/ land (MLD)	Present monitoring system	Sludge Management	Operational status	Status of STP proposed to be constructed/ Underconstruction
1	Bihar	Patna, Pahari STP	1,684,222	181.9	60	BUIDCo	Nov-20	Namami Gange	for 15 yrs	SBR	Not applicable as STP is not commissioned till date	As per CPHEEO Manual	As per MoEF &CC notification Oct,2017	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under construction	Under construction
		Patna, Beur STP			43	BUIDCo	Mar-20	Namami Gange	for 15 yrs	SBR	Not applicable as STP is not commissioned till date	As per CPHEEO Manual	As per old MoEF &CC guideline	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under construction	Under construction

Patna, Karmalichhak STP	37	BUIDCO	Completed	Namami Gange	for 15 yrs	SBR	Not applicable as STP is not commissioned till date	As per CPHEO Manual	As per old MoEF & CC guideline	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Completed	
Patna, Saidpur STP	60	BUIDCO	Apr-20	Namami Gange	for 15 yrs	SBR	Not applicable as STP is not commissioned till date	As per CPHEO Manual	As per old MoEF & CC guideline	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under construction	
Patna Digha STP	100	BUIDCO	Dec-22	Namami Gange	for 15 yrs	ASP	Not applicable as STP is not commissioned till date	As per CPHEO Manual	As per old MoEF & CC notification Oct, 2017	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Agreement done on 30/12/2019	
Patna, Kankarbagh STP	50	BUIDCO	Dec-22	Namami Gange	for 15 yrs	ASP	Not applicable as STP is not commissioned till date	As per CPHEO Manual	As per old MoEF & CC notification Oct, 2017	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Agreement done on 30/12/2019	

2	Danapur	182,241	19.7	25	BUIDCo	Jun-21	Namami Gange	for 15 yrs	Not yet finalized	Not applicable as STP is not commissioned till date	As per CPHEEO Manual	As per NGT order April 2019	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under tender	Under tender
3	Maner	40,068	4.3	6.5	BUIDCo	Sep-21	Namami Gange	for 15 yrs	SBR	Not applicable as STP is not commissioned till date	As per CPHEEO Manual	As per MoEF & CC notification Oct, 2017	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under construction	Under construction
4	Fatuha	50,961	5.5	7	BUIDCo	Jun-21	Namami Gange	for 15 yrs	Not yet finalized	Not applicable as STP is not commissioned till date	As per CPHEEO Manual	As per NGT order April 2019	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under tender	Under tender
5	Barh	61,470	6.6	11	BUIDCo	Dec-22	Namami Gange	for 15 yrs	SBR	Not applicable as STP is not commissioned till date	As per CPHEEO Manual	As per MoEF & CC notification Oct, 2017	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under construction	Under construction

6	Bakhtiyarpur	47,897	5.2	10	BUIDCo	Sep-21	Namami Gange	for 15 yrs	SBR	Not applicable as STP is not commissioned till date	As per CPHEO Manual	As per MoEF & CC notification Oct, 2017	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under construction	Under construction
7	Phulwarisharif	81,740	8.8	13	BUIDCo	Jun-21	Namami Gange	for 15 yrs	Not yet finalized	Not applicable as STP is not commissioned till date	As per CPHEO Manual	As per NGT order April 2019	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under tender	Under tender
8	Mokarna	60,678	6.6	8	BUIDCo	Jun-21	Namami Gange	for 15 yrs	SBR	Not applicable as STP is not commissioned till date	As per CPHEO Manual	As per MoEF & CC notification Oct, 2017	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under construction	Under construction
9	Hajipur	147,688	16.0	22	BUIDCo	Jun-22	Namami Gange	for 15 yrs	Not yet finalized	Not applicable as STP is not commissioned till date	As per CPHEO Manual	As per NGT order April 2019	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under tender	Under tender

10	Chhapra	202,352	21.9	32	BUIDCo	Sep-21	Namami Gange	for 15 yrs	SBR	Not applicable as STP is not commissioned till date	As per CPHEEO Manual	As per MoEF & CC notification Oct, 2017	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	LoA issued	LoA issued
11	Sonepur	37,776	4.1	3.5	BUIDCo	Feb-21	Namami Gange	for 15 yrs	SBR	Not applicable as STP is not commissioned till date	As per CPHEEO Manual	As per MoEF & CC notification Oct, 2017	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under construction	Under construction
12	Begusarai	252,008	27.2	17	BUIDCo	Dec-21	Namami Gange	for 15 yrs	SBR	Not applicable as STP is not commissioned till date	As per CPHEEO Manual	As per MoEF & CC notification Oct, 2017	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	LoA issued	LoA issued
13	Buxar	102,861	11.1	16	BUIDCo	Sep-22	Namami Gange	for 15 yrs	Not yet finalized	Not applicable as STP is not commissioned till date	As per CPHEEO Manual	As per NGT order April 2019	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Tender to be published	Tender to be published

14	Munger	213,303	23.0	30	BUIDCo	Sep-22	Namami Gange	for 15 yrs	SBR	Not applicable as STP is not commissioned till date	As per CPHEEO Manual	As per NGT order April 2019	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Bid evaluation under process
15	Sultanganj	52,892	5.7	10	BUIDCo	Dec-20	Namami Gange	for 15 yrs	MBR	Not applicable as STP is not commissioned till date	As per CPHEEO Manual	As per MoEF & CC notification Oct, 2017	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under construction
16	Bhagalpur	400,146	43.2	45	BUIDCo	Dec-21	Namami Gange	for 15 yrs	Not yet finalized	Not applicable as STP is not commissioned till date	As per CPHEEO Manual	As per MoEF & CC notification Oct, 2017	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under tender
17	Naugachia	49,069	5.3	9	BUIDCo	Dec-20	Namami Gange	for 15 yrs	SBR	Not applicable as STP is not commissioned till date	As per CPHEEO Manual	As per MoEF & CC notification Oct, 2017	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under construction

18	Khagaria	49,406	5.3	4.5	BUIDCO	Jun-21	Namami Gange	for 15 yrs	Well advanced technology	Not applicable as STP is not commissioned till date	As per CPHEO Manual	As per MoEF & CC notification Oct, 2017	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under tender	Under tender
19	Barahiya	43,032	4.6	6	BUIDCO	Dec-21	Namami Gange	for 15 yrs	Not yet finalized	Not applicable as STP is not commissioned till date	As per CPHEO Manual	As per NGT order April 2019	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under tender	Under tender
20	Kahalgaoon	33,700	3.6	6	BUIDCO	Dec-21	Namami Gange	for 15 yrs	Not yet finalized	Not applicable as STP is not commissioned till date	As per CPHEO Manual	As per NGT order April 2019	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Not applicable as STP is not commissioned till date	Under tender	Under tender
21	Didhwara	96,811	10.5			Not yet sanctioned										Not yet sanctioned	Not yet sanctioned
22	Teghra	56,234	6.1			Not yet sanctioned										Under DPR	Under DPR

23	Manihari	191,407	20.7	Not yet sanctioned	Under DPR
24	Jamulpur	105,434	11.4	Not yet sanctioned	Under DPR
25	Khagual	44,364	4.8	Not yet sanctioned	Under DPR
26	Harinagar/Ramnagar	48,411	5.2	Not yet sanctioned	Under DPR
27	Narkatiaganj	49,507	5.3	Not yet sanctioned	Under DPR
28	Jagbani	39,281	4.2	Not yet sanctioned	Under DPR
29	Raxual	55,536	6.0	Not yet sanctioned	Under DPR
30	Dehri	137,231	14.8	Not yet sanctioned	Under DPR

39		Darbhanga	296,039	32.0															Not yet sancti oned				Under DPR
40		Gopalganj	67,339	7.3															Not yet sancti oned				Under DPR
41		Bagha	112,634	12.2															Not yet sancti oned				Under DPR
42		Kisanganj	105,782	11.4															Not yet sancti oned				Under DPR
43		Lakhisarai	99,979	10.8															Not yet sancti oned				Under DPR
44		Jamui	87,357	9.4															Not yet sancti oned				Under DPR

Annexure - 4

Urban Development and Housing Department, Govt. of Bihar Solid Waste Management Report

STATE OF BIHAR

(1) Solid Waste Management including Legacy Waste

Status of Solid Waste Management in Bihar				
Total No. of ULBs : 142				
MSW Generated (TPD)	MSW Processed (TPD)	MSW Landfill (TPD)	Gap (TPD)	Timeline
2272	1163 (51%)	112 (4.9 %)	997(43.9%)	Environment Clearance (EC) from SEIAA needed. December 2022

Assessment of SWM Facilities (Capacity Wise)				
	Required Capacity (TPD)	Existing Capacity (TPD)	Gap (TPD)	Observations
Waste Segregation Facility (MRF)	954 (TPD) DRY WASTE	487(51 %)	467 (49 %)	Non-biodegradable waste Presently being Processed through Self-Help Groups (SHGs), informal waste picker, Local waste recycler and rag picker in all ULBs.
Waste Processing				
Biodegradable Waste (Bio-methanation and Composting)	1068 (TPD) WET WASTE	545 (51%)	523 (49%)	Work underway through 69 composting units at 56 ULBs of Bihar.
Non Biodegradable (Recycling: RDF, WTE Co-processing)	260 (TPD)	5 (TPD)	255 (TPD)	Considering population more than 10,0000 Cites required 26 units of Recycling Plant (STPD)and 26 units RDF plant (STPD) respectively.

				01 Recycling plant of capacity 05 TPD at Patna Municipal corporation Started.
Waste Disposal (Landfill)	250 (TPD) Inert Waste	112 (TPD)	138 (TPD)	Inert waste @ 11% yet to be planned and work will be done as per assumption. Out of 142 ULBs, 103 have their own sanitary landfill sites, while 39 ULBs have been tagged to the nearby location.

Assessment of SWM Facilities (ULB wise)					
	Required	Existing	Gap	Time frame	Observations
Waste Segregation Facility (MRF)	223 no.	67 no	156 no	December 2022	Suitable Land for Material Recovery Facility (MRF) Center Development has identified in all 142 ULBs. Work started at 67 sites in 60 ULB.
Waste Processing					
Bio-Degradable waste (Bio-methanation and Composting)	267 site	69 site	198 site	December 2020	State has gone for decentralized composting out of 142 ULBs. 138 ULBs have identified land for waste to compost plant for <05 TPD. Work started to processing the wet waste at 69 sites in 56 ULBs. 159 sites under construction in 118 ULBs. Remains 04 ULBs is under process to purchase/ lease for establish processing plant.

Non Biodegradable (Recycling RDF, co-processing)	52 no	01 no	51 no	December 2022	All 26 cities having population more than one lakh Land available for Recycling and RDF Plant.
Waste Disposal (Inert Landfill)	142	103 ULBs	38 (tagged)	December 2022	Out of 142 ULBs land has already been identified in 103 ULBs for setting up sanitary Landfills facility. 39 ULBs tagged for sanitary Landfill facility nearer locations.

Legacy Waste		
1	Number of Dumpsites	04 sites (Where dumping of waste is closed and treated as Legacy Waste. Patna, Muzaffarpur, Gaya and Darbhanga Municipal corporation)
2	Quantity of Waste dumped at Dumpsites	3288 MT
3	Number of dumpsites cleared	00 (Patna and Muzaffarpur municipal corporation has started the legacy waste remediation)
4	Number of dumpsites in which bio-mining has commenced	Patna and Muzaffarpur Municipal corporation has stated bio mining work and completed by March 2022
5	Time frame for clearing all dumpsites	March 2022

Annexure - 5

Water Quality Status of River Ganga during the Year (2019-2020) Excluding Rainy Season (August to October)

Sl. No.	Sampling Point		pH	D.O. mg/L	B.O.D. mg/L	T.C. MPN/100ml	F.C. MPN/100ml	Designated best use
1	Ganga at Chausa karmnasa D/S Confluence , Buxar	Minimum	7.91	7.0	1.4	6300	450	Class-D
		Maximum	9.03	10.2	208	54000	28000	
		Average	8.47	8.98	1.7	25325	12706	
3	Ganga at Ramrekha ghat, Buxar. Dist.- Buxar	Minimum	7.70	6.0	1.4	9400	1100	Class-D
		Maximum	8.77	9.3	2.6	92000	35000	
		Average	8.20	8.1	1.98	32425	13912	
3	Ganga River at Jail Ghat, Buxar	Minimum	7.82	6.0	1.4	9300	2100	Class-D
		Maximum	8.42	9.5	2.7	43000	28000	
		Average	8.16	7.65	1.9	26712	9787	
4	Ganga at D/S Buxar near Road Bridge. Dist. - Buxar	Minimum	7.89	6.3	1.6	11000	1400	Class-D
		Maximum	8.81	9.2	2.7	160000	35000	
		Average	8.27	7.9	2.1	42875	10725	
5	Ganga at Danapur near Pipapul. Dist. - Patna	Minimum	8.18	7.7	1.6	3100	780	Class-D
		Maximum	8.50	8.7	2.4	11000	3600	
		Average	8.31	8.3	1.96	5980	2156	
6	Ganga at U/S Patna, Kurji. Dist. - Patna	Minimum	8.0	7.5	1.4	5500	2100	Class-D
		Maximum	8.54	10.0	2.0	54000		
		Average	8.23	8.6	1.76	21625	5475	
7	Ganga at Gandhighat, NIT, Patna	Minimum	7.90	6.5	1.7	11000	1400	Class-D
		Maximum	8.30	9.7	2.9	54000	28000	
		Average	8.08	7.82	2.07	25625	11837	
8	Ganga River at Gulabi Ghat, Patna	Minimum	7.43	6.0	1.5	6800	1400	Class-D
		Maximum	8.41	9.8	2.8	160000	160000	
		Average	8.03	7.51	2.17	45137	30075	
9	Ganga at D/S Patna, Gaighat Dist. Patna.	Minimum	7.9	6.3	1.6	13000	1100	Class-D
		Maximum	8.61	9.5	2.6	160000	28000	
		Average	8.12	7.76	2.05	42500	13412	
10	Ganga at Malsalami, Patna City Dist. - Patna	Minimum	7.8	7.2	1.5	4000	1100	Class-D
		Maximum	8.54	9.8	2.6	22000	11000	
		Average	8.18	8.23	1.87	14075	6075	
11	Ganga Before Confluence of Punpun River at Triveni Ghat Fatuha, Patna Dist. - Patna.	Minimum	7.82	6.8	1.4	3900	1400	Class-D
		Maximum	8.45	9.8	2.7	35000	17000	
		Average	8.19	7.88	2.1	18487	7087	

12	Ganga at Kewala ghat, Fatuha Dist.- Patna	Minimum	7.6	6.2	1.8	3800	1100	Class-D
		Maximum	8.2	8.5	2.9	92000	35000	
		Average	7.88	6.92	2.4	41800	11550	
13	Ganga at Kachchi Dargah- Bidupur Road Bridge, Dist-Patna	Minimum	7.90	7.2	1.4	5500	1100	Class-D
		Maximum	8.55	9.6	2.1	43000	17000	
		Average	8.28	8.7	1.7	18037	8300	
14	Ganga at Bakhtiyarpur-Tajpur Road Bridge near Athamalgola, Dist-Patna	Minimum	7.5	5.8	1.2	3100	1700	Class-D
		Maximum	8.68	9.7	2.0	35000	7000	
		Average	8.07	8.04	1.57	16442	5528	
15	Ganga at U/S Mokama, Mahadeo Asthan Dist.- Patna.	Minimum	7.9	6.1	1.1	1700	1100	Class-D
		Maximum	8.80	9.8	2.6	43000	7000	
		Average	8.19	8.12	1.54	14157	2957	
16	Ganga at D/S Mokama near Rajendra Bridge, Simaria Ghat Patna	Minimum	6.82	6.4	1.5	11000	680	Class-D
		Maximum	8.51	9.8	2.6	35000	17000	
		Average	7.92	7.8	1.84	26142	9168	
17	Ganga at Barh Dist.- Patna	Minimum	7.8	6.1	1.2	11000	1300	Class-D
		Maximum	9.9	9.7	1.9	160000	22000	
		Average	8.45	8.05	1.5	41142	8428	
18	Ganga U/S of NTPC Water intake Point, Barh Dist.- Patna	Minimum	7.6	6.0	1.1	3900	1400	Class-D
		Maximum	8.9	9.8	2.1	35000	7000	
		Average	8.21	8.15	1.58	20985	2928	
19	Ganga D/S of NTPC Water intake Point, Barh Dist.- Patna	Minimum	7.8	7.3	1.3	14000	1700	Class-D
		Maximum	8.67	9.6	2.2	35000	11000	
		Average	8.20	8.4	1.65	26333	4916	
20	Ganga at Barahiya, Nepal Tola, Maranchi Dist. - Lakhisarai	Minimum	7.6	6.1	1.1	14000	1100	Class-D
		Maximum	8.79	9.8	2.3	28000	14000	
		Average	8.26	8.55	1.45	18285	6185	
21	Ganga at U/S Munger near Kasth haranighat. Dist.- Munger	Minimum	7.85	6.0	1.1	21000	1100	Class-D
		Maximum	8.67	9.8	2.3	35000	17000	
		Average	8.17	7.85	1.61	27285	8728	
22	Ganga at D/S Munger near Crematorium Ghat Dist. - Munger	Minimum	7.6	5.8	1.3	22000	1100	Class-D
		Maximum	8.58	9.7	2.5	92000	22000	
		Average	8.17	7.74	1.8	39285	10628	
23	Ganga at U/S Sultanganj, Ajgaibi Nath Dist.- Bhagalpur	Minimum	7.8	6.1	1.3	14000	1700	Class-D
		Maximum	8.7	9.6	2.3	28000	14000	
		Average	8.15	8.18	1.78	23428	9285	
24	Ganga at D/S Sultanganj at Cremation ghat Dist.- Bhagalpur	Minimum	7.9	6.2	1.3	3900	780	Class-D
		Maximum	8.68	9.6	2.6	35000	17000	
		Average	8.13	7.92	1.68	24271	8854	

25	Ganga at D/S Bhagalpur near Bararighat. Dist.- Bhagalpur	Minimum	7.6	6.0	1.5	17000	930	Class-D
		Maximum	8.67	9.8	2.4	35000	17000	
		Average	8.03	7.62	2.07	30571	8104	
26	U/S Ganga at Bhagalpur kuppa ghat Dist.- Bhagalpur	Minimum	7.8	6.1	1.4	22000	780	Class-D
		Maximum	8.37	9.8	2.5	35000	17000	
		Average	8.08	8.34	1.67	29142	10725	
27	Ganga River at Champa Nagar, Bhagalpur. Dist.- Bhagalpur	Minimum	7.0	6.8	1.4	2700	200	Class-D
		Maximum	8.63	9.5	2.6	160000	22000	
		Average	8.00	7.98	1.8	41950	6416	
28	Ganga at Water intake point, Bhagalpur	Minimum	7.57	6.1	1.3	4700	1200	Class-D
		Maximum	9.15	9.8	2.8	160000	28000	
		Average	8.15	7.94	1.75	59671	14000	
29	Ganga at Kahalgaon near Jahajghat. Dist.- Bhagalpur	Minimum	7.8	6.1	1.1	14000	200	Class-D
		Maximum	8.64	9.8	2.3	28000	17000	
		Average	8.10	8.35	1.7	24285	10042	
30	Ganga D/S at Kahalgaon near Cremation Ghat.	Minimum	7.5	5.9	1.2	28000	1400	Class-D
		Maximum	8.59	9.8	2.6	160000	17000	
		Average	8.03	7.97	1.8	71000	10342	
31	Ganga River near maa Ambika Sthan, Aami, Dist-Saran	Minimum	7.22	8.0	1.4	22000	450	Class-D
		Maximum	8.4	9.5	2.0	35000	17000	
		Average	7.68	8.6	1.7	30500	9208	
32	Ganga River at water intake point Mauzampur Block, Barhara, Dist-Bhojpur	Minimum	8.11	6.1	1.4	4000	450	Class-D
		Maximum	8.57	9.8	2.1	160000	35000	
		Average	8.35	8.7	1.7	56757	14164	
33	Ganga at Ara - Chhapra Near Road Bridge , Koelwar-Babura Road, Bhojpur	Minimum	7.4	5.7	1.4	3300	1100	Class-D
		Maximum	8.47	9.8	2.3	92000	28000	
		Average	8.02	8.12	1.8	20642	5657	
34	Ganga at the Confluence of Sone River at Doriganj, Chapra. Dist. - Saran	Minimum	7.21	7.4	1.4	2600	1400	Class-D
		Maximum	8.5	9.8	2.5	35000	17000	
		Average	7.82	8.40	1.75	18983	6366	

Water Quality Status of River Sirsiya							
Location: Raxaul at Entry point in Indian Territory (Near Custom Office) during Year (2019-20)							
Month	Date	pH	D.O mg/L	B.O.D mg/L	C.O.D mg/L	T.C MPN/ 100 ml	F.C MPN/100 ml
May	28.5.19	6.84	Nil	10	60	22000	17000
June	24.6.19	7.32	Nil	6.0	60	43000	1700
Aug.	20.8.19	7.39	Nil	8.4	52	35000	12000
Sept.	17.9.19	7.55	4.4	2.8	32	92000	14000
Oct.	19.10.19	7.36	Nil	30	96	160000	35000
Nov.	19.11.19	7.60	Nil	6.0	48.0	160000	54000
Dec.	27.12.19	7.40	Nil	7.0	36.0	160000	28000
Jan.	24.01.20	7.02	NIL	3.6	36	160000	160000
Feb.	19.02.20	7.22	NIL	4	40	160000	160000
Min.		6.84	0.0	2.8	32	22000	1700
Max.		7.60	4.4	30.0	96	160000	160000
Average		7.30	0.5	8.6	51	110222	53522
Excluding Rainy Season (August to October)	Min.	6.84	0	3.6	36	22000	1700
	Max.	7.60	0	10.0	60	160000	160000
	Average	7.23	0	6.1	47	117500	70117

Location: Koriya Tola at Raxaul during during Year (2019-20)							
Month	Date	pH	D.O mg/L	B.O.D mg/L	C.O.D mg/L	T.C MPN/ 100 ml	F.C MPN/100 ml
May	28.5.19	6.92	Nil	6.8	48	35000	17000
June	24.6.19	7.23	Nil	5.6	52	35000	1400
Aug.	20.8.19	7.34	Nil	7.6	44	43000	15000
Sept.	17.9.19	7.27	5.1	2.6	24	160,000	21000
Oct.	19.10.19	7.27	Nil	30	100	160,000	28000
Nov.	19.11.19	7.20	Nil	6.0	40	160000	28000
Dec.	27.12.19	7.20	Nil	6.3	32.0	160000	54000
Jan.	24.01.20	6.94	Nil	5	44	160000	160000
Feb.	19.02.20	7.32	NIL	4	44	160000	160000
Min.		6.92	0.0	2.6	24	35000	1400
Max.		7.34	5.1	30	100	160000	160000
Average		7.19	0.6	8.2	48	119222	53822
Excluding Rainy Season (August to October)	Min.	6.92	0.00	4.0	32	35000	1400
	Max.	7.32	0.00	6.8	52	160000	160000
	Average	7.14	0.00	5.6	43	118333	70067

Water Quality Status of River Harbaura							
U/S Harbaura River, Narkatiaganj during Year (2019-20)							
Month	Date	pH	D.O mg/L	B.O.D mg/L	C.O.D mg/L	T.C MPN/ 100 ml	F.C MPN/100 ml
April	25.4.19	7.59	8.5	1.6	16	11000	7000
May	28.5.19	7.65	7.7	1.9	16	11000	7000
June	25.6.19	7.62	7.2	2.0	20	4900	450
Aug.	20.8.19	8.0	6.2	2.0	16	35000	11000
Sept.	17.9.19	7.94	7.6	1.9	12	160000	22000
Oct.	19.10.19	7.94	7.6	1.2	8.0	11000	2200
Nov.	20.11.19	7.39	5.1	2.1	28.0	35000	17000
Dec.	28.12.19	7.6	9.8	1.4	8.0	17000	13000
Jan.	25.01.20	7.99	8.6	1.4	12	7000	3300
Feb.	19.02.20	7.68	8.9	2	20	11000	1700
Min.		7.39	5.1	1.2	8	4900	450
Max.		8.00	9.8	2.1	28	160000	22000
Average		7.74	7.7	1.7	15	30290	8465
Excluding Rainy Season (August to October)	Min.	7.39	5.1	1.4	8.0	4900	450
	Max.	7.99	9.8	2.1	28.0	35000	17000
	Average	7.65	8.0	1.8	17.1	13843	7064
D/S Harbaura River, Narkatiaganj during Year (2019-20)							
Month	Date	pH	D.O mg/L	B.O.D mg/L	C.O.D mg/L	T.C MPN/ 100 ml	F.C MPN/100 ml
April	25.4.19	7.16	3.2	4.0	36	22000	17000
May	28.5.19	7.56	5.8	2.8	28	35000	17000
June	25.6.19	7.43	5.3	2.6	28	7900	< 180
Aug.	20.8.19	7.94	6.1	2.5	24	43000	7900
Sept.	17.9.19	7.87	6.5	2.1	16	92000	17000
Oct.	19.10.19	7.86	7.2	1.3	12	92000	17000
Nov.	20.11.19	7.85	7.0	1.8	16.0	92000	13000
Dec.	28.12.19	7.4	8.5	1.6	12.0	28000	17000
Jan.	25.01.20	7.37	7.7	1.9	20	11000	11000
Feb.	19.02.20	7.66	7	2.3	24	11000	2200
Min.		7.16	3.2	1.3	12	7900	2200
Max.		7.94	8.5	4.0	36	92000	17000
Average		7.61	6.4	2.3	22	43390	13233
Excluding Rainy Season (August to October)	Min.	7.16	3.2	1.6	12.0	7900	2200
	Max.	7.85	8.5	4.0	36.0	92000	17000
	Average	7.49	6.4	2.4	23.4	29557	12867

Water Quality Status of River Parmar							
Location: Jogbani at Entry point in Indian Territory during Year (2019-20)							
Month	Date	pH	D.O mg/L	B.O.D mg/L	C.O.D mg/L	T.C MPN/ 100 ml	F.C MPN/100 ml
April	03.4.2019	7.25	7.7	2.7	24	6300	3300
May	10.5.2019	7.23	6.0	2.8	28	5500	3600
June	28.6.2019	7.5	6.2	2.7	28	17000	3600
July	-	-	-	-	-	-	-
Aug.	-	-	-	-	-	-	-
Sept.	11.9.2019	7.61	6.8	1.9	16	2700	1700
Oct.	22.10.19	7.98	7.6	1.9	24	22000	11000
Nov.	22.11.19	8.03	6.8	2.1	24	21000	14000
Dec.	11.12.19	7.94	8.0	1.5	12	17000	7900
Jan.	25.01.20	7.2	7.6	1.9	20	11000	2200
Feb.	11.02.20	7.72	8.7	2.1	20	14000	3300
March	17.03.20	8.15	7.5	1.8	16	160000	28000
Min.		7.2	6	1.5	12	2700	360
Max.		8.15	8.7	2.8	28	160000	28000
Average		7.66	7.3	2.1	21	27650	7536
Excluding Rainy Season (August to October)	Min.	7.20	6.0	1.5	12.0	5500	360
	Max.	8.15	8.7	2.8	28.0	160000	28000
	Average	7.63	7.3	2.2	21.5	31475	7833

Water Quality Status of River Ramrekha							
U/S Ramrekha River Hari Nagar during Year (2019-20)							
Month	Date	pH	D.O mg/L	B.O.D mg/L	C.O.D mg/L	T.C MPN/ 100 ml	F.C MPN/100 ml
April	25.4.19	6.75	Nil	4.3	40	13000	7900
May	28.5.19	7.27	4.9	4.6	28	9300	6800
June	25.6.19	6.95	2.8	4.8	44	35000	1700
Aug.	20.8.19	7.41	4.4	2.8	28	35000	11000
Sept.	17.9.19	7.53	6.0	2.0	16	160000	21000
Oct,	20.10.19	7.54	5.6	1.6	16	28000	14000
Nov.	20.11.19	7.2	3.8	5.3	30.0	35000	11000
Dec.	28.12.19	7.6	5.8	2.3	24.0	24000	13000
Jan.	26.01.20	7.06	4.6	2.2	28	160000	160000
Feb.	19.02.20	6.93	2.1	3	36	160000	160000
Min.		6.75	2.1	1.6	16	9300	1700
Max.		7.60	6.0	5.3	44	160000	160000
Average		7.22	4.4	3.3	29	65930	40640
Excluding Rainy Season (August to October)	Min.	6.75	0.0	2.2	24.0	9300	1700
	Max.	7.60	5.8	5.3	44.0	160000	160000
	Average	7.11	3.4	3.8	32.9	62329	51486
D/S Ramrekha River Hari Nagar during Year (2019-20)							
Month	Date	pH	D.O mg/L	B.O.D mg/L	C.O.D mg/L	T.C MPN/ 100 ml	F.C MPN/100 ml
April	25.4.19	6.79	Nil	9.0	68	23000	13000
May	28.5.19	7.04	4.6	5.0	36	28000	14000
June	25.6.19	6.23	2.1	4.4	44	33000	1400
Aug.	20.8.19	7.43	4.4	2.9	32	43000	14000
Sept.	17.9.19	7.60	5.4	2.7	24	160000	22000
Oct,	20.10.19	7.3	5.4	2.0	24	35000	17000
Nov.	20.11.19	7.03	3.0	5.6	32.0	35000	17000
Dec.	28.12.19	7.24	5.6	2.6	32.0	35000	21000
Jan.	26.01.20	6.85	4.1	2.4	36	160000	160000
Feb.	19.02.20	7	1.8	3	32	160000	160000
Min.		6.23	1.8	2	24	23000	1400
Max.		7.60	5.6	9.0	68	160000	160000
Average		7.05	4.0	4.0	36	71200	43940
Excluding Rainy Season (August to October)	Min.	6.23	0.0	2.4	32	23000	1400
	Max.	7.24	5.6	9.0	68	160000	160000
	Average	6.88	3.0	4.6	40	67714	55200

Water Quality Status of River Punpun							
U/S Punpun River at Kinzar, Jehanabad during Year (2019-20)							
Month	Date	pH	D.O mg/L	B.O.D mg/L	C.O.D mg/L	T.C MPN/ 100 ml	F.C MPN/100 ml
June	14.06.19	8.23	7.7	2.6	28	1100	<180
July	10.07.19	7.6	7.8	1.7	16	21000	360
Aug.	16.08.19	8.02	5.8	2.5	20	28000	11000
Nov.	16.11.19	8.21	8.3	1.8	12	7900	1700
Jan.	12.01.20	8.53	8.6	1.6	12	2700	1400
Feb.	27.02.20	6.98	8.5	1.6	22	92000	54000
Min.		6.98	5.8	1.6	12	1100	<180
Max.		8.53	8.6	2.6	28	92000	54000
Average		7.93	7.8	2.0	18	25450	11410
Excluding Rainy Season (August to October)	Min.	6.98	7.7	1.6	12	1100	<180
	Max.	8.53	8.6	2.6	28	92000	54000
	Average	7.91	8.2	1.9	18	24940	11492

U/S Punpun River at Punpun during Year (2019-20)							
Month	Date	pH	D.O mg/L	B.O.D mg/L	C.O.D mg/L	T.C MPN/ 100 ml	F.C MPN/100 ml
June	15.06.19	7.74	6.6	2.8	40	35000	1700
July	11.07.19	7.79	7.2	2.2	16	35000	2200
Aug.	16.8.19	8.25	6.0	2.3	16	35000	1700
Nov.	16.11.19	8.30	8.0	1.6	12	14000	3300
Jan.	12.01.20	8.43	8.2	1.6	12	9400	2600
Feb.	27.02.20	6.27	7.7	2.0	24	92000	22000
Min.		6.27	6	1.6	12	9400	1700
Max.		8.43	8.2	2.8	40	92000	22000
Average		7.80	7.3	2.1	20	36733	5583
Excluding Rainy Season (August to October)	Min.	6.27	6.6	1.6	12	9400	1700
	Max.	8.43	8.2	2.8	40	92000	22000
	Average	7.71	7.5	2.0	21	37080	6360

D/S Punpun River at Fatuha during Year (2019-20)							
Month	Date	pH	D.O mg/L	B.O.D mg/L	C.O.D mg/L	T.C MPN/ 100 ml	F.C MPN/100 ml
April	22.04.19	7.64	4.0	4.0	36	13000	7900
May	20.05.19	7.71	3.7	3.6	36	14000	11000
June	10.06.19	7.55	9.2	10.0	115	11000	2200
July	06.07.19	7.55	3.0	4.2	36	35000	2600
Sept.	09.09.19	7.90	3.0	2.7	28	35000	3900
Oct,	17.10.19	7.75	6.1	2.4	28	28000	17000
Nov.	06.11.19	7.40	6.6	2.8	32	160000	160000
Dec.	02.12.19	7.92	3.0	3.0	40	160000	160000
Feb.	05.02.20	7.65	3.8	2.8	32	160000	160000
March	04.03.20	7.26	1.5	3.0	32	160000	39000
Min.		7.26	1.5	2.4	28	11000	2200
Max.		7.92	9.2	10.0	115	160000	160000
Average		7.63	4.4	3.9	42	77600	56360
Excluding Rainy Season (August to October)	Min.	7.26	1.5	2.8	32	11000	2200
	Max.	7.92	9.2	10.0	115	160000	160000
	Average	7.59	4.4	4.2	45	89125	67838

Annexure-6

STATE LEVEL WATER TESTING LABORATORY (SLWTL)
PHED, GOVT. OF BIHAR, CHHAJUBAGH, PATNA-800001
Technical Consultancy by: Scientific Research Laboratory, 90, Lake East (4th Road), Santoshpur, Jodhpur, Kohada-760075

TEST CERTIFICATE

Report No: SLWTL/2019/GW - 26680-26683
Name of the Organisation: Departmental
Date of Sampling: 24.12.2019
River Name: Sirsia
Source of Sample: Drinking Water
Date of Reporting: 03.01.2020
Sample Collected By: SLWTL
Sample Received on: 27.12.2019

PHYSICO-CHEMICAL & BACTERIOLOGICAL TEST REPORT

Sl. No.	District Name	Block Name	Panchayat Name	Village Name	Habitation Name	Location Details	Physico-Chemical and Bacteriological Parameters																
							pH	Turb.	EC	TDS	TH	Ca	Mg	Cl	Alka.	Fe	NO ₃	SO ₄	F	As	Mn	T-Cell	
1	East Champaran	Raxaul	Kodiyar	Kodiyar	Ward No-19	Subsidiary Yadav	7.10	1.0	622	436	352	65.36	27.68	36.14	302	0.65	0.24	31.59	0.14	BDL	BDL	Absent	
2	East Champaran	Raxaul	Nagarpatika	Parouna	Ward No-17	Manshi Ram	6.96	1.0	639	420	326	88.41	28.15	36.94	306	0.81	0.37	30.28	0.32	BDL	BDL	Absent	
3	East Champaran	Raxaul	Nunia Dih	Nunia Dih	Nunia Dih	Brahman Ashan	7.11	2.0	598	390	340	76.31	25.13	31.52	318	0.70	0.32	29.16	0.36	BDL	BDL	Absent	
4	East Champaran	Raxaul	Pantoka	Singhpur	Singhpur	Kuwadent Devi	7.45	2.0	630	412	236	33.41	29.95	16.92	214	0.65	0.22	19.20	0.45	BDL	BDL	Absent	

Note - (i) Drinking Water Specification - IS:10500:2012, (ii) All the testing methods are taken from APHA 22nd Edition 2012, (iii) BDL means Below Detection Limit, (iv) NR means no reaction, (v) -- Chaff not be detectable in any 100 ml sample

(i) Consultant Water Quality Cell, PHED, Govt. of Bihar, (ii) Director, Water Quality Cell, PHED, Govt. of Bihar, (iii) Engineer-in-Chief cum Special Secretary, PHED, Govt. of Bihar

The results are reported based on the materials received. Sample will be destroyed after 15 days from the date of issue of the certificate unless otherwise specified. Sample will be preserved according to standard method. The test report shall not be reproduced except in full without the written permission of Laboratory.

Signature of the Lab Incharge

STATE LEVEL WATER TESTING LABORATORY (SLWTL)
PHED, GOVT. OF BIHAR, CHHAJIBAGH, PATNA-800001
Technical Consultancy by: Scientific Research Laboratory, 90, Lake East (4th Road), Santoshpur, Jodhpur, Kolkata-700075

TEST CERTIFICATE

Report No: SLWTL/2019/GW - 26364-26369
Name of the Organisation: Departmental
Date of Sampling: 24.12.2019

Date of Reporting: 03.01.2020
Sample Collected By: SLWTL
Sample Received on: 27.12.2019

River Name: Parmar
Source of Sample: Drinking Water

PHYSICO-CHEMICAL & BACTERIOLOGICAL TEST REPORT

Sl. No.	District Name	Block Name	Panchayat Name	Village Name	Habitatation Name	Location Details	Physico - Chemical and Bacteriological Parameters																
							pH	Turb.	EC	TDS	TH	Ca	Mg	Cl	Alk.	Fe	NO ₃	SO ₄	F	As	Mn	T.Coli	
						Unit	-	NTU	µmhos/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	MPN/100ml	
						Desirable Limit*	6.5-8.5	1.00	-	500	200	75.00	30.00	250.00	200	1.00	45.00	200.00	1.00	0.070	0.10	-	
						Permissible Limit* in absence of alternate source	NR	5.00	-	2000	500	200.00	100.00	1000.00	500	NR	NR	400.00	1.50	NR	0.30	-	
1	Araria	Forbesganj	Amoula	Badhwa	Badhwa	Mandir	7.55	1.0	355	284	195	40.00	15.37	32.20	159	1.54	5.05	31.40	0.55	BDL	BDL	Absent	
2	Araria	Forbesganj	Pipra	Paswan Tola	Paswan Tola	Jagannadi Paswan	6.93	1.0	371	296	204	25.86	13.30	48.10	185	1.12	8.20	18.60	0.61	BDL	BDL	Absent	
3	Araria	Forbesganj	Kushmaha	Chowk Par	Chowk Par	Middle School Garha	7.09	1.0	305	254	167	20.00	13.15	72.30	148	1.36	1.07	32.70	0.50	BDL	BDL	Absent	
4	Araria	Forbesganj	Ramrai	Musahar Tola	Musahar Tola	Thakurwari	6.75	1.0	472	338	214	52.50	21.00	72.90	182	1.25	5.32	28.70	0.55	BDL	BDL	Absent	
5	Araria	Araria	Diyari	Baghalla Tola	Ward No.5	Kundan Bahadur	7.03	1.0	462	320	208	52.50	17.20	56.30	179	0.75	7.26	43.10	0.52	BDL	BDL	Absent	
6	Araria	Araria	Diyari	Baghalla Tola	Ward No.55	Upendra	7.04	1.0	328	276	187	37.30	16.42	30.10	162	0.85	0.84	23.60	0.49	BDL	BDL	Absent	

Note: * (i) Drinking Water Specification Second Revision 4S:10520/2012, (ii) All the testing methods are taken from APHA 22nd Edition 2012, (iii) BDL means below Detection Limit, (iv) NR means no reaction, (v) ** Shall not be detectable in any 100 ml sample

(i) Consultant Water Quality Cell, PHED, Govt. of Bihar, (ii) Director, Water Quality Cell, PHED, Govt. of Bihar, (iii) Engineer-in-Chief, Public Health Engineering, PHED, Govt. of Bihar

The results are reported based on the materials received. Sample will be destroyed after 15 days from the date of issue of this certificate unless otherwise specified. Sample will be preserved according to standard method. The test report shall not be reproduced except in full without the written permission of Laboratory.

Signature of the Lab Incharge

STATE LEVEL WATER TESTING LABORATORY (SLWTL)
PHED, GOVT. OF BIHAR, CHHAJUBAGH, PATNA-800001

Technical Consultancy by: Scientific Research Laboratory, 90, Lake East (4th Road), Santoshpur, Jodhpur, Kolkata-700075

TEST CERTIFICATE

Report No: SLWTL/2019/GW - 26870 - 26820

Water of the Organisation: Government

Date of Sampling: 24.12.2019 to 26.12.2019

River Name: Ganga

Source of Sample: Drinking Water

Date of Reporting: 03.01.2020

Sample Collected by: SLWTL

Sample Received on: 27.12.2019

PHYSICO-CHEMICAL & BACTERIOLOGICAL TEST REPORT

Sl. No.	District Name	Block Name	Panchayat Name	Village Name	Hamlet Name	Location Details	Unit	pH	Turb.	EC	TDS	TR	Alk.	Fe	NO ₃	SO ₄	F	As	Mn	T.Coli
									NTU	µmhos/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	MPN/100ml
								6.5-8.5	5.00	-	500	500	200	1.00	45.00	200.00	1.00	0.010	0.10	-
								NR	5.00	-	2000	600	600	NR	NR	600.00	1.50	NR	0.10	-
1	Buxar	Buxar	Chauranpur	Shapur	Ward No-09	P.S.		7.60	2.0	849	552	377	358	0.86	25.00	40.00	0.26	0.008	BDL	Absent
2	Buxar	Chakki	Chanda	Bharhar	Ward No-05	Unkaidi Bin		7.70	1.0	604	393	280	260	0.18	10.00	40.00	0.40	0.008	BDL	Absent
3	Buxar	Chakki	Chanda	Bharhar	Ward No-06	Sari Bin		7.70	1.0	500	390	300	325	0.21	10.00	40.00	0.28	0.007	BDL	Absent
4	Buxar	Chakki	Chakki	Biadara	Ward No-02	Sagar Yadav		7.60	1.0	735	478	320	260	0.22	10.00	28.00	0.30	BDL	BDL	Absent
5	Buxar	Chakki	Chakki	Biadara	Ward No-02	Harpind Yadav		7.60	1.0	710	452	300	220	0.46	25.00	30.00	0.50	0.012	BDL	Absent
6	Buxar	Brampur	Yogya	Yogya	Ward-02	Alok Mishra		7.60	1.0	323	210	189	172	0.50	35.00	BDL	0.30	0.011	BDL	Absent
7	Buxar	Brampur	Yogya	Yogya	Ward-02	Jagdishra		7.70	1.0	495	297	260	234	0.30	15.00	20.00	0.60	0.008	BDL	Absent
8	Buxar	Chausa	Benapur	Benapur	Ward-02	Anshi Updhyaya		7.50	1.0	492	320	280	265	0.40	BDL	30.00	0.60	0.006	BDL	Absent
9	Buxar	Chausa	Chundi	Akhaurpur Gola	Benapur Gola	Sudasan Bin		7.60	1.0	710	462	360	240	0.10	BDL	30.00	0.40	BDL	BDL	Absent
10	Buxar	Chausa	Piya	Gosainpur	Benapur	Muneshwar choubey		7.90	4.0	1207	785	640	354	0.10	BDL	50.00	0.30	BDL	BDL	Absent
11	Buxar	Simari	Kabur	Balbara	Ward-16	Rahman Pandey		7.70	1.0	667	434	240	214	0.80	45.00	30.00	0.30	0.015	BDL	Absent
12	Buxar	Simari	Dulapur	Khalipatti	Ward-02	Vinod Ram		7.50	1.0	480	312	260	240	0.70	25.00	BDL	0.60	BDL	BDL	Absent
13	Buxar	Simari	Dulapur	Khalipatti	Ward-01	Raj Narayan Pandey		7.40	1.0	787	512	440	320	0.10	BDL	40.00	0.40	BDL	BDL	Absent
14	Munger	Jamalpur	Parham	Parham	Parham	Gravita Bank Parham		7.62	8.0	3200	1970	620	426	0.20	41.00	80.00	0.60	BDL	BDL	Absent
15	Munger	Munger Sadar	Parham	Parham	Parham	Shri Manoj		7.39	6.0	1340	871	450	385	0.10	12.00	50.00	0.80	0.016	BDL	Absent
16	Munger	Dharhara	Harnapur	Manuli	Manuli	Angant Center		7.58	3.0	960	624	400	355	0.90	5.00	40.00	0.70	0.008	BDL	Absent
17	Munger	Benapur	Kalyan Tola	Harizan Tola	Harizan Tola	Harizan Das		7.09	4.0	1180	767	460	394	0.30	24.00	80.00	0.60	BDL	BDL	Absent
18	Bhagalpur	Piparniti	Rani dhara	Ranidhara	Ranidhara	Shripal Singh		7.56	1.0	672	415	325	276	0.50	2.43	10.00	0.32	BDL	BDL	Absent
19	Bhagalpur	Kanhalpur	Kisandapur	Barolia	Barolia	Barolia Chok		7.29	1.0	618	381	256	232	2.14	2.65	10.00	0.32	0.004	BDL	Absent
20	Bhagalpur	Sultanganj	Jehangir	Dom Tola	Dom Tola	Dom Tola		6.94	6.0	2280	1414	588	435	0.50	2.54	10.00	0.32	0.006	BDL	Absent
21	Bhagalpur	Nathnagar	Gosandapur	Ward No-07	Ward No-07	Dom Tola		7.69	1.0	450	376	302	285	1.84	2.63	20.00	0.24	BDL	BDL	Absent
22	Bhagalpur	Ismailpur	Parbatta	Choti Parbatta	Choti Parbatta	Near Public Toilet		7.36	1.0	518	320	265	267	1.42	2.48	5.00	0.25	0.042	BDL	Absent
23	Bhagalpur	Nauachhia	Khegra	Khegra More	Khegra More	Harman Mandar		7.36	1.0	455	305	267	248	1.34	3.27	10.00	0.32	BDL	BDL	Absent
24	Bhagalpur	Gopalpur	Dumaria Chaparhat	Dumaria Chowk	Dumaria Chowk	Bajawal Sthan		7.16	1.0	585	362	324	312	2.16	3.54	10.00	0.24	0.011	BDL	Absent
25	Bhagalpur	Rangra	Mufi	NH-31	NH-31	Mufi Chowk		7.39	1.0	453	260	248	228	1.26	3.14	15.00	0.23	BDL	BDL	Absent
26	Bhagalpur	Nauachhia	Jaypur Chaur	Mathapur	Mathapur	Near Masjid		7.22	1.0	544	336	316	287	0.10	3.65	20.00	0.32	BDL	BDL	Absent
27	Bhagalpur	Binpur	Sonbarsa	Binpur Deshlin	Binpur Deshlin	Kelish Das		7.39	1.0	509	314	285	257	0.20	3.65	30.00	0.14	BDL	BDL	Absent
28	Bhagalpur	Khatik	Rasbopur	Choti Alapur	Choti Alapur	Ward No-13		7.16	1.0	763	465	375	285	0.20	5.62	25.00	0.24	BDL	BDL	Absent

Sl. No.	District Name	Block Name	Panchayat Name	Village Name	Habitat Name	Location Details	pH	Turb.	EC	TDS	TH	Alk.	Fe	NO ₃	SO ₄	F	As	T. Cell
							Unit	NTU	µmho/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
							Desirable Limit*											
							6.5-8.5	1.00		500	200	200	1.00	45.00	200.00	1.00	0.010	0.10
							NR	5.00		3000	600	600	NR	NR	400.00	1.50	NR	0.30
29	Vaishali	Bihiptur	Saidpur Ganesh	Saidpur Ganesh	Ward No. 13	Pennaschik Limit* in absence of alternate source	6.90	2.0	885	370	316	288	0.10	5.00	15.00	0.20	0.008	BDL
30	Vaishali	Haripur	Nagar Panchayat	Nagar Panchayat	Power House Center		7.10	3.0	1346	875	360	324	0.40	35.00	40.00	0.20	0.008	BDL
31	Vaishali	Haripur	Nagar Panchayat	Nagar Panchayat	Power House Center		7.40	3.0	1615	1050	320	284	0.20	5.00	50.00	0.15	0.007	BDL
32	Vaishali	Mannar	Hasanpur South	Hasanpur South	Hasanpur South		7.30	3.0	1269	825	410	376	0.20	30.00	40.00	0.40	0.004	BDL
33	Vaishali	Desani	Ajampur	Ajampur	Ajampur		7.60	4.0	1731	1125	440	405	0.20	40.00	80.00	0.15	0.007	BDL
34	Vaishali	Sahel Buluq	Nayagaon	Nayagaon	Nayagaon		7.40	3.0	1269	825	400	362	0.10	8.00	40.00	0.10	BDL	2.5
35	Khatwa	Gogri	Gogri	Gogri	Gogri		8.00	2.0	888	595	466	316	1.20	5.00	18.00	0.40	BDL	BDL
36	Khatwa	Gogri	Rampur	Rampur	Rampur		6.50	2.0	975	650	439	338	1.85	15.00	47.00	0.76	BDL	BDL
37	Samaastipur	Vidyaadinagar	Sherpur Depura	Dih Depura	Ward No-07		7.20	3.0	1336	864	712	462	0.31	25.00	50.00	0.37	BDL	BDL
38	Samaastipur	Moharipur	Hardaspur	Hardaspur	Hardaspur		7.70	1.0	464	301	280	228	1.62	13.00	43.00	0.56	BDL	BDL
39	Samaastipur	Petoni	South Dhamain	Madhupurva	Ward No-10		7.70	2.0	916	590	460	324	0.15	32.00	25.00	0.36	BDL	BDL
40	Samaastipur	Mohaviddinagar	Rampur Parashya	Bakepur Sullanpur	Ward No-08		7.50	1.0	595	386	286	240	0.42	19.00	24.00	0.38	BDL	BDL
41	Samaastipur	Samaastipur	Dhampur	Dhampur	Dhampur		7.20	2.0	1020	660	480	364	0.95	3.00	15.00	0.59	BDL	BDL
42	Samaastipur	Samaastipur	Dhampur	Dhampur	Dhampur		7.60	2.0	1072	659	456	404	0.71	1.00	50.00	0.57	BDL	BDL
43	Samaastipur	Pusa	Chandoli	Dorapur	Dorapur		7.70	1.0	651	426	318	204	0.45	BDL	75.00	0.40	BDL	BDL
44	Samaastipur	Rosara	Haripur	Bharain	Bharain		7.80	1.0	544	352	268	172	0.36	BDL	39.00	0.60	BDL	BDL
45	Samaastipur	Hasanpur	Rampur	Rampur	Rampur		7.20	1.0	638	410	347	218	0.72	2.56	25.00	0.60	BDL	BDL
46	Samaastipur	Bihulpur	Bihulpur North	Bihulpur North	Bihulpur North		7.20	1.0	576	374	294	198	0.45	5.03	45.00	0.40	BDL	BDL
47	Samaastipur	Bihulpur	Sohma	Sohma	Sohma		7.40	1.0	446	388	262	248	0.33	BDL	47.00	0.80	BDL	BDL
48	Samaastipur	Bihulpur	Gaura	Gaura	Gaura		7.40	1.0	512	326	258	217	0.19	5.00	10.00	0.19	BDL	BDL
49	Samaastipur	Bihulpur	Near Tola	Near Tola	Near Tola		7.30	1.0	644	402	292	204	0.46	5.00	25.00	0.27	BDL	BDL
50	Saran	Chapra Sadar	Chitrad	Chitrad	Chitrad		7.20	1.0	535	305	274	182	0.10	BDL	16.00	0.10	BDL	BDL
51	Saran	Rivigani	Silab Diyara	Silab Diyara	Silab Diyara		7.40	1.0	528	419	328	244	0.11	10.00	37.00	0.16	BDL	BDL

Copy forwarded for land information for

(i) Consultant Water Quality Cell, PHED, Govt. of Bihar, (ii) Director, Water Quality Cell, PHED, Govt. of Bihar, (iii) Engineer-in-Chief cum Special Secretary, PHED, Govt. of Bihar

The results are reported based on the materials received. Sample will be preserved after 15 days from the date of issue of the certificate unless otherwise specified. Sample will be preserved according to standard method. The test report shall not be reproduced except in full, without the written permission of Laboratory.

Signature of the Lab Incharge

STATE LEVEL WATER TESTING LABORATORY (SLWTL)
PHED, GOVT. OF BIHAR, CHHAJUBAGH, PATNA-800001
 Technical Consultancy by: Scientific Research Laboratory, 90, Lake East (4th Road), Santoshpur, Jadavpur, Kolkata-700075

TEST CERTIFICATE

Report No: SLWTL2019CSW - 26921 - 26930
 Name of the Organisation: Departmental
 Date of Sampling: 24.12.2019 to 26.12.2019
 River Name: Poxipun
 Source of Sample: Drinking Water
 Date of Reporting: 03.01.2020
 Sample Collected By: SLWTL
 Sample Received on: 27.12.2019

PHYSICO-CHEMICAL & BACTERIOLOGICAL TEST REPORT

Sl. No.	District Name	Block Name	Panchayat Name	Village Name	Habitation Name	Location Details	Physico-Chemical and Bacteriological Parameters																
							pH	Turb.	EC	TDS	TH	Ca	Mg	Cl	Alka.	Fe	NO ₃	SO ₄	F	As	Mn	T.Coli	
						Unit	6.5-8.5	NTU	µmohm/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	MPN/100ml
						Desirable Limit																	
						Permissible Limit in absence of alternate source	NR	5.00	-	2000	600	200.00	100.00	1000.00	500	NR	NR	400.00	1.50	NR	0.30	-	-
1	Patna	Fatua	Alawalpur	Alawalpur	Alawalpur	Suresh Das	7.05	1.0	399	268	216	46.65	13.39	49.80	202	0.27	0.33	18.80	0.32	BDL	BDL	Absent	
2	Patna	Fatua	Dumri	Dumri	Nathupur	Nathupur	7.34	1.0	495	382	282	42.85	15.21	25.03	268	0.32	0.80	15.01	0.28	BDL	BDL	Absent	
3	Patna	Fatua	Fatua	Fatua	Makaudpur	Utkarmit M. S.	6.72	1.0	457	355	312	71.41	18.20	25.00	295	0.24	1.00	15.78	0.16	BDL	BDL	Absent	
4	Patna	Fatua	Gaunpunda	Balua	Gaunpunda	Ram Vilas Singh	6.78	1.0	416	363	294	59.34	15.81	29.90	272	0.19	2.02	14.38	0.26	BDL	BDL	Absent	
5	Patna	Punpun	Akauna	Maranchi	Maranchi	Sudhe Manjhi	7.09	1.0	359	243	204	45.54	11.95	40.50	184	0.23	1.06	16.99	0.27	BDL	BDL	Absent	
6	Patna	Punpun	Barel	Kutubpur	Kutubpur	Dinesh Thakur	7.05	1.0	465	358	318	21.71	5.66	25.10	288	0.24	0.38	7.85	0.29	BDL	BDL	Absent	
7	Patna	Punpun	Behrava	Behrava	Behrava	Jaiar Miya	7.08	1.0	426	367	322	26.71	9.29	32.40	308	0.25	1.19	15.20	0.36	BDL	BDL	Absent	
8	Patna	Punpun	Chakiya	Chakiya	Chakiya	Dhendra Das	6.77	1.0	489	383	334	35.04	10.68	35.30	299	0.16	1.07	18.30	0.42	BDL	BDL	Absent	
9	Patna	Sadar	Fatehpur	Fatehpur	Fatehpur	Near SDV Public School	7.48	1.0	471	305	264	52.90	20.41	31.98	242	0.12	2.20	15.80	0.17	BDL	BDL	Absent	
10	Patna	Sadar	Fatehpur	Fatehpur	Fatehpur	Near Durga Mandir	7.53	1.0	719	458	357	35.27	12.49	77.96	325	0.19	3.80	22.70	0.27	BDL	BDL	Absent	

Note: * (i) Drinking Water Specification Second Revision - IS 10500:2012, (ii) All the testing methods are taken from APHA 22nd Edition 2012, (iii) BDL means Below Detection Limit, (iv) NR means no reaction, (v) ** Shall not be detectable in any 100 ml sample

Copy forwarded for kind information to:

(i) Consultant Water Quality Cell, PHED, Govt. of Bihar, (ii) Director, Water Quality Cell, PHED, Govt. of Bihar, (iii) Engineer-in-Charge, Special Secretary, PHED, Govt. of Bihar

The results are reported based on the methods received. Sample will be destroyed after 15 days from the date of issue of the certificate unless otherwise specified. Sample will be preserved according to standard method. The test report shall not be reproduced except in full, without the written permission of Laboratory.

Signature of the Lab Incharge

STATE LEVEL WATER TESTING LABORATORY (SLWTL)
PHED, GOVT. OF BIHAR, CHHALLIUBAGH, PATNA-800001

Technical Consultancy by: Scientific Research Laboratory, 90, Lake East (4th Road), Santoshpur, Jadavpur, Kolkata-700075

TEST CERTIFICATE

Report No: SLWTL2019/GW - 28931 - 28934

Name of the Organisation: Departmental

Date of Sampling: 26.12.2019

River Name: Ram Rekha

Source of Sample: Drinking Water

Date of Reporting: 03.01.2020

Sample Collected By: SLWTL

Sample Received on: 27.12.2019

PHYSICO-CHEMICAL & BACTERIOLOGICAL TEST REPORT

Sl. No.	District Name	Block Name	Panchayat Name	Village Name	Habitation Name	Location Details		Physico-Chemical and Bacteriological Parameters													
						pH	Turb.	EC	TDS	TH	Ca	Mg	Cl	Alkal.	Fe	NO ₃	SO ₄	F	As	Mn	LCob
						Unit		µmho/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
						Distillable Limit															
						Permissible Limit															
1	West Champaran	Ramnagar	Nagar Panchayat	Chhat Ghat	Ward No-08	6.94	2.0	612	524	316	67.52	25.62	64.35	278	0.54	2.68	24.35	0.34	BDL	BDL	Absent
2	West Champaran	Ramnagar	Nagar Panchayat	Thana Campus	Thana Campus	7.10	1.0	487	345	296	34.68	12.34	38.24	274	0.35	1.69	14.26	0.28	BDL	BDL	Absent
3	West Champaran	Ramnagar	Nagar Panchayat	Chhat Ghat	Ward No-08	7.20	1.0	534	368	236	42.65	18.45	51.38	204	0.39	2.46	19.84	0.31	BDL	BDL	Absent
4	West Champaran	Ramnagar	Nagar Panchayat	Nagar Panchayat	Ward No-08	6.89	1.0	600	422	368	51.90	19.64	24.35	314	0.34	2.34	23.30	0.64	BDL	BDL	Absent

Note: (i) Drinking Water Specification Second Revision - IS:10500-2012. (ii) All the testing methods are given in IS:10500-2012. (iii) All the testing methods are given in IS:10500-2012. (iv) All the testing methods are given in IS:10500-2012. (v) All the testing methods are given in IS:10500-2012.

Copy forwarded for your information to: (i) Consultant Water Quality Cell, PHED, Govt. of Bihar, (ii) Director, Water Quality Cell, PHED, Govt. of Bihar, (iii) Engineer-in-Charge, Special Secretary, PHED, Govt. of Bihar.

The results are reported based on the materials received. Sample will be destroyed after 15 days from the date of issue of the certificate unless otherwise specified. Sample will be preserved according to standard method. The last report shall not be reproduced except in full, without the written permission of Laboratory.

Signature of the Lab Incharge

STATE LEVEL WATER TESTING LABORATORY (SLWTL)
PHED, GOVT. OF BIHAR, CHHAJUBAGH, PATNA-800001
Technical Consultancy by: Scientific Research Laboratory, 90, Lake East (4th Road), Santoshpur, Jodhpur, Kolkata-700075

TEST CERTIFICATE

Report No: SLWTL2019/GW - 26935 - 26938
 Name of the Organisation: Departmental
 Date of Sampling: 24.12.2019

Date of Reporting: 03.01.2020
 Sample Collected By: SLWTL
 Sample Received on: 27.12.2019

River Name: Sakrahna
 Source of Sample: Drinking Water

PHYSICO-CHEMICAL & BACTERIOLOGICAL TEST REPORT

Sl. No.	District Name	Block Name	Panchayat Name	Village Name	Habitation Name	Location Details	Physico-Chemical and Bacteriological Parameters															
							pH	Turb.	EC	TDS	TH	Ca	Mg	Cl	Alk.	Fe	NO ₃	SO ₄	F	As	Mn	T.Coll
						Unit	-	NTU	µmhos/cm	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
						Desirable Limit	6.5-8.5	-	500	200	75.00	30.00	250.00	200	1.00	45.00	200.00	1.00	0.010	0.10	-	-
						Permissible Limit in absence of alternate source	MP	5.00	-	7000	600	200.00	100.00	400.00	400	MP	MP	400.00	1.50	MP	0.10	-
1	West Champaran	Narkatyaganj	Dhurnagar	Nariya Tola	Ward No-03	Shambhu Singh	7.36	1.0	453	362	218	38.00	12.00	19.00	198	0.14	2.45	4.86	0.32	BDL	BDL	Absent
2	West Champaran	Narkatyaganj	Dhurnagar	Dhurnagar	Gadhyani Tola	School	7.12	1.0	602	472	307	73.20	19.90	25.00	282	0.18	3.65	8.64	0.34	BDL	BDL	Absent
3	West Champaran	Narkatyaganj	Dhurnagar	Dhurnagar	Ward No-04	Dhurnagar Chowk	7.20	1.0	454	389	272	96.20	20.50	17.60	258	0.14	4.80	7.48	0.16	BDL	BDL	Absent
4	West Champaran	Narkatyaganj	Dhurnagar	Nariya Tola	Ward No-03	Rajbansi Chaudhury	7.40	1.0	486	378	237	46.35	15.62	26.00	216	0.24	2.16	6.54	0.38	BDL	BDL	Absent

Only to be used for field information for:
 (i) Consultant Water Quality Cell, PHED, Govt. of Bihar, (ii) Director, Water Quality Cell, PHED, Govt. of Bihar, (iii) Engineer-in-Chief cum Special Secretary, PHED, Govt. of Bihar
 Note: (i) Drinking Water Specifications Standard Revision IS: 10500/2012, (ii) All the testing methods are taken from APHA 22nd Edition 2012, (iii) BCL means Below Detection Limit, (iv) MP means no value, (v) - Shall not be detectable in any 100 ml sample
 The results are reported based on the materials received. Sample will be destroyed after 15 days from the date of issue of the certificate unless otherwise specified. Sample will be preserved according to standard method. The test report shall not be reproduced except in full without the written permission of Laboratory.

Signature of the Lab Incharge