

**BEFORE THE LD. NATIONAL GREEN TRIBUNAL, EASTERN ZONE**  
**KOLKATA BENCH**  
**O.A. NO. 132 OF 2023/EZ**

In the matter of:

SIDHNATH TIWARY

...APPLICANT

-Versus-

THE STATE OF BIHAR & Ors.

...RESPONDENTS

INDEX

Sl. No.	Particulars	Annexure	Page No.
1.	Supplementary Affidavit on behalf of Respondent no. 6.		1 - 5
2.	Copies of letter dated 12-08-2025	-R-6/A-	6 - 7
3.	Copies of letter dated 17-11-2025 along with the observation on Draft DPR	-R-6/B-	8 - 20
4.	Copies of the letter dated 04-12-2025	-R-6/C-	21
5.	Copy of the Aadhar Card		22

Date: 30/01/2026

Place: Patna, Bihar.

Filed by:

*Surendra Kumar*  
Advocate

Surendra Kumar,  
Advocate

E: surendra\_kr15@rediffmail.com

M: 9433361866

X



**BEFORE THE NATIONAL GREEN TRIBUNAL  
EASTERN ZONE BENCH, KOLKATA**

**O.A. No.132 of 2023  
(Earlier O.A. No. 441/2022/PB)**

Sl. No. 01 Date 30/01/2026

In the matter of:  
Sidhnath Tiwary

...Applicant

Versus

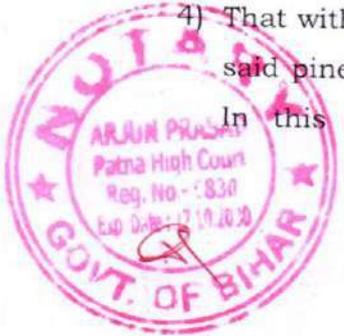
The State of Bihar & Ors.

...Respondents

**SUPPLEMENTARY COUNTER AFFIDAVIT ON BEHALF OF RESPONDENT NO.6**

I, Surabhi Sinha, aged about 30 years, <sup>daughter</sup> ~~son~~ of Jagdamb Kumar, presently working as <sup>Project officer-cum-deputy director</sup> ~~Secretary~~, Urban Development and Housing Department, Government of Bihar, having my office at Vikas Bhawan, Patna, do hereby solemnly affirm and state on oath as under:

- 1) That I am the <sup>Project officer-cum-deputy director</sup> ~~Secretary~~, Urban Development and Housing Department, Government of Bihar and as such I am fully conversant with the facts and circumstances of the present case and competent to swear this Supplementary Counter Affidavit on behalf of Respondent No.6.
- 2) That the instant Supplementary Counter Affidavit is being filed in compliance with the order dated 02.09.2025 passed by this Hon'ble Tribunal in O.A. No.132/2023/EZ, whereby response on the affidavit dated 01.09.2025 filed by Gaya Municipal Corporation (Respondent No.3) has been directed to be filed.
- 3) That I have carefully perused the Counter Affidavit filed by Respondent No.3 and state that the averments contained in paragraphs 6 to 8 thereof pertain to matters falling within the domain of the Urban Development and Housing Department, Government of Bihar, and therefore require clarification and response from the answering Respondent Department.
- 4) That with respect to the concretization of Salempur Pine, I humbly submit that the said pine flows through Ward Nos. 47, 48 and 49 of Gaya Municipal Corporation. In this regard, it is pertinent to mention that Bihar Urban Infrastructure



Development Corporation (BUIDCo), being the executing agency for the project, has already included the said area comprising the wards through which Salempur Kachha Pine flows in the Detailed Project Report (DPR) of Gaya Interception and Diversion and STP Scheme under Namami Gange Programme in Bihar. Pursuant thereto, Gaya Municipal Corporation has issued the requisite No Objection Certificate for the said work to BUIDCo on 30.04.2025.

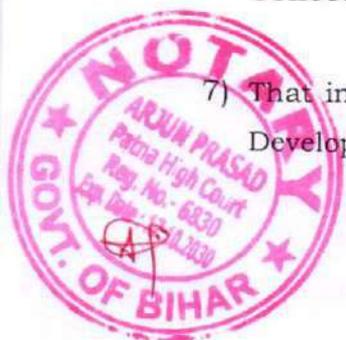
- 5) That insofar as the construction work of Sewage Treatment Plant (STP) is concerned, I submit the updated status as follows. The Director (Project), National Mission for Clean Ganga (NMCG), New Delhi, vide letter dated 12.08.2025, requested the Indian Institute of Technology, Kharagpur to conduct an independent third party appraisal of the DPR for Interception & Diversion and STP schemes for Gaya Town in Bihar. Pursuant to the said request, a team from IIT Kharagpur conducted spot inspections during the first week of November 2025. However, the inspection and appraisal report from IIT Kharagpur is yet to be received by the Department.

**Copy of the letter dated 12.08.2025 from NMCG is annexed herewith and marked as Annexure R-6/A.**

- 6) That subsequently, the team from IIT Kharagpur led by Dr. A.K. Gupta, Professor (HAG) in Environmental Engineering, submitted their observations on the Draft DPR for "Preparation of Detailed Project Report of Gaya Interception and Diversion and STP Scheme under Namami Gange in Bihar, India" vide email dated 17.11.2025 to the Director (Project), NMCG. A copy of the said observations has also been forwarded to the Urban Development and Housing Department, Government of Bihar. Upon perusal of the observations made by the IIT Kharagpur team, it is evident that certain deficiencies have been identified in the DPR. The team has recommended incorporation of their observations and submission of a revised DPR at the earliest.

**Copies of the email dated 17.11.2025 along with the observations on Draft DPR are collectively annexed herewith and marked as Annexure R-6/B Collectively.**

- 7) That in pursuance of the aforesaid observations, the Additional Secretary, Urban Development and Housing Department, Government of Bihar, vide departmental



letter bearing No.504 dated 04.12.2025, has requested the Managing Director, BUIDCo, Patna to prepare and submit a revised DPR after incorporating the observations made in the report of IIT Kharagpur.

**Copy of the departmental letter No.504 dated 04.12.2025 is annexed herewith and marked as Annexure R-6/C.**

- 8) That with regard to the Gaya STP construction project, I submit that the Respondent Department is regularly monitoring the progress of the same through the executing agency, BUIDCo. As soon as administrative approval and expenditure sanction is obtained from NMCG, New Delhi, the executing agency BUIDCo shall immediately initiate the tender process. After publication of tender, approximately 24 months will be required for completion of construction work. Therefore, the entire procedure from obtaining administrative approval to completion of construction is estimated to require approximately 36 months.
- 9) That the contents of the affidavit dated 01.09.2025 filed by Respondent No.3, to the extent they relate to matters not specifically addressed hereinabove, are not denied and the same may kindly be read as part and parcel of this Supplementary Counter Affidavit.
- 10) That the Answering Respondent submits that all necessary steps are being taken expeditiously for implementation of the Gaya Interception and Diversion and STP Scheme in accordance with the directions of this Hon'ble Tribunal and in compliance with environmental norms. The delay in finalization of the DPR is on account of the mandatory third party appraisal process being undertaken by IIT Kharagpur as directed by NMCG, which is now at an advanced stage.
- 11) That the Answering Respondent most humbly prays that this Hon'ble Tribunal may kindly be pleased to take the present Supplementary Counter Affidavit on record and pass such orders as may be deemed fit and proper in the facts and circumstances of the case and in the interest of justice.
- 12) I state that the statements contained in Paragraphs no. 1 to 11 are true to the best of my knowledge and belief derived from official records and nothing material has been concealed therefrom.



Prepared in my office

Suresh Kumar  
Advocate

Surabhi Sinha  
DEPONENT 30/01/26

BEFORE ME

NOTARY PUBLIC

I identify the signature/L.T.I. who  
has signed in my presence

Shivam Prasad,  
Adv. - 30/01/26, Adv.  
ADVOCATE

Shri/Smt. Surabhi Sinha  
who is identified by S. Preema Adv.  
Advocate/Representative, solemnly  
affirm & declare before me

Arjun Prasad 30/01/2026  
Arjun Prasad  
Notary Patna High Court  
Govt. of Bihar



VERIFICATION

Verified at Patna by the deponent above named on this the 30 day of January 2026, and say that the contents of paragraphs 1 to 3 are true to my knowledge and the contents of paragraphs 4 to 12 are based on official records and legal advice and believed to be true.

Surabhi Sinha  
DEPONENT 30/01/26



## Annexure R-6/A

No.: Pr-12014/1/2023 – O/o Project Development (Jharkhand & Bihar) NMCG

भारत सरकार, जल शक्ति मंत्रालय

जल संसाधन, नदी विकास एवं गंगा संरक्षण विभाग

राष्ट्रीय स्वच्छ गंगा मिशन

प्रथम तल, मेजर ध्यानचंद नेशनल स्टेडियम,

इंडिया गेट, नई दिल्ली

दिनांक: 12<sup>th</sup> August 2025

सेवा में,

Shri Ashok Kumar Gupta,

Associate Professor, Department of Civil Engineering,

Indian Institute of Technology – Kharagpur,

Kharagpur, West Bengal - 721302

13 AUG 2025

**Subject: Appraisal of DPR for "I&D and STP scheme for Gaya town in Bihar" for consideration under Namami Gange – reg.**

महोदय,

This has reference to the Detailed Project Report (DPR) for the project "*I&D and STP scheme for Gaya town, Bihar*" submitted by Bihar Urban Infrastructure Development Corporation (BUIDCo) for consideration under Namami Gange. The DPR (soft copy) is enclosed herewith. SPMG Bihar/ BUIDCo is being advised to send a hard copy of the DPR to you directly for the appraisal, if desired.

2. We request you to kindly undertake the independent Third-Party Appraisal of the project and submit a comprehensive independent appraisal report incorporating the salient features of the project at the earliest, preferably within 2 weeks from the receipt of this letter. It may please be noted that the project is time-bound; therefore, it is requested to kindly send a line of confirmation on acceptance of the proposal.

3. Appraisal fees would be governed by the extant NMCG OM No. T-3/2014-15/662/NMCG dated 14.06.2018 (copy attached), in this regard. In case of any clarification/ support, please get in touch with the undersigned or Mr. Ashok Kumar, Project Director, BUIDCo, Gaya - Mobile: +91-8292763916 or Mr. Neel Kumar, Deputy Project Director, BUIDCo, Gaya - Mobile: +91-94176365.

4. Accordingly, it is requested to kindly examine the DPR and submit an independent appraisal report, including recommended cost breakup (in the enclosed format), preferably within 2 weeks from the receipt of this letter.

5. This has the approval of the Director General, NMCG.

Encl: As above

जानकारी के लिए प्रतिलिपि:



(सहल द्विवेदी)

निदेशक (परियोजनाएं), एनएमसीजी

11234  
14/08/25

293

214

1. Principal Secretary (UD&HD)/ Project Director, SMPG – Bihar/ BGCMS, Government of Bihar, Room No. 1, 1<sup>st</sup> Floor, Vikash Bhawan, New Secretariat, Bailey Road, Patna, Bihar – 800001.
2. Managing Director, BUIDCo, Rajapur Pul, West Boring, Canal Road, Patna, Bihar – 800001 - **With a request to facilitate appraisal and field visits.**
3. PS to DG/ ED (Projects)/ Director (Technical), NMCG.



Annexure R-6/B

Re: Appraisal of DPR for "I&D and STP scheme for Gaya town in Bihar" for consideration under Namami Gange - reg



Handwritten initials 'JS (MK)' and a signature line. A date stamp '17 NOV 2025' is also visible.

33

Dr A. K. Gupta < agupta@civil.iitkgp.ac.in

Mon 17 Nov 2025 9:41:19 AM +0530

To "Rahul Dwivedi" <director.projects@nmcg.nic.in>

Cc "urbansec-bih" <urbansec-bih@nic.in>, "MD BUIDCo" <md-buidco-bih@nic.in>, "mdbuidco" <mdbuidco@gmail.com>, "ATTUL KUMAR" <ps.dg@nmcg.nic.in>, "Sumit" <sumit.singh18@govcontractor.in>, "Vikas Kumar" <ps.edt@nmcg.nic.in>, "spmgbihar" <spmgbihar@gmail.com>, "anujkushwaha61" <anujkushwaha61@gmail.com>

Dear Sir,

Greetings from IIT Kharagpur!

Handwritten notes: 'S.O-14', 'Ref 19/11/25'.

I am attaching the draft observation on the project entitled "I&D and STP scheme for Gaya town in Bihar" for consideration under Namami Gange, as desired.

Kindly incorporate the observations and submit the revised report at the earliest.

Kindly let me know if any clarification needed.

With Regards  
Ashok K Gupta

Handwritten notes: 'S.O-14', 'Ref 19/11/25', '11/11/25'.

Dr.A.K.Gupta, PhD, FNAE, FNASc, FFAST  
Professor (HAG) (Environmental Engineering)  
Dean Infrastructure (Civil and Mechanical)  
Former Head, School of Water Resources  
Former Uday Agnihotri Chair Professor  
Department of Civil Engineering  
Indian Institute of Technology Kharagpur  
Kharagpur (W.B.)-721 302 India  
Phone: +91-3222-283428 (O) / 283429 (R)  
Fax: +91-3222-255303  
Email: [agupta@civil.iitkgp.ac.in](mailto:agupta@civil.iitkgp.ac.in)  
[akgupta@iitkgp.ac.in](mailto:akgupta@iitkgp.ac.in)

Handwritten notes: 'S.O-14', 'Ref 19/11/25'.

निदेशानुसार के  
सचिव के विशेष कार्य पदाधिकारी  
नगर विकास एवं आवास विभाग  
बिहार, पटना

14663  
18/11/25

From: "Rahul Dwivedi" <director.projects@nmcg.nic.in>  
To: "Dr A. K. Gupta" <agupta@civil.iitkgp.ac.in>  
Cc: "urbansec-bih" <urbansec-bih@nic.in>, "MD BUIDCo" <md-buidco-bih@nic.in>, "mdbuidco" <mdbuidco@gmail.com>, "ATTUL KUMAR" <ps.dg@nmcg.nic.in>, "Sumit" <sumit.singh18@govcontractor.in>, "Vikas Kumar" <ps.edt@nmcg.nic.in>  
Sent: Wednesday, August 13, 2025 11:42:29 AM  
Subject: Appraisal of DPR for "I&D and STP scheme for Gaya town in Bihar" for consideration under Namami Gange - reg.

Handwritten notes: 'SPM', '13/11/25'.

Dear Sir,

Please find attached NMCG letter dated 12.08.2025 with enclosures, regarding the above subject.



Observations on Draft DPRFor"PREPARATION OF DETAILED PROJECT REPORT OF GAYA INTERCEPTION AND DIVERSION AND STP SCHEME UNDER NAMMIGANGE IN BIHAR, INDIA"

S. No.	Chapter	Observation dated 16/11/2025 from IIT Kharagpur
1	Salient Features	<ul style="list-style-type: none"> <li>The total STP capacity is indicated as 87 MLD (73 MLD + 14 MLD). Since there are two separate STPs, the data table should clearly distinguish the capacity and details of each plant individually to avoid ambiguity.</li> <li>SBR technology has been mentioned at the start. Please add a short explanation of why it was chosen in comparison to other technologies. For example, better effluent quality, smaller land area, lower energy use, and modular design. Also refer to the detailed design criteria in Chapters 6 and 7.</li> <li>The 2 MLD CETP is shown together with the municipal I&amp;D works. Please explain who will manage it, the industrial association or the ULB/BUIDCo, and why it has been included in the same project (In the Salient Features Table, an explanation is not required, but its placement alongside municipal I&amp;D components needs to be clearly justified.).</li> <li>The report shall include details regarding the existing, under-construction, and proposed sewerage network within the city.</li> <li>Strategies to prevent the disposal of solid and biodegradable waste into water bodies are not clearly outlined.</li> <li>The legends and other details in the figures should be clearly presented. For example, Fig. 4 legends appear blurred.</li> <li>All nallahs should be clearly marked in a schematic figure, showcasing flow direction.</li> <li>The statement clarity is required. For example, point number 4.2.2.</li> <li>In the open drain collection system for domestic sewage, the total flow often does not reach the STP location, which affects its proper functioning. Therefore, designers need to include provisions to ensure that the quantity of domestic sewage conveyed through these NALAs or drainage channels matches the design capacity of the STP. The</li> </ul>





7/25, 12:52 PM

		<p>conveyance of sewage and stormwater should be kept separate. A study of the existing condition of the drains, along with flow measurements, would be useful in assessing their suitability for carrying stormwater from the area.</p> <ul style="list-style-type: none"> <li>• The construction of the drainage channels should be treated as a top priority in the project. In many cases, the Sewage Treatment Plant (STP) is constructed first due to the availability of open land and fewer restrictions. However, by the time the drainage channels are completed, the operation and maintenance period of the STP is already exhausted. To ensure effective utilization and timely commissioning of the STP, the drainage channel network must be completed in parallel with or before the STP construction.</li> <li>• The exponential increase method was adopted for population forecasting. Justification of the selection of this method is not clearly stated.</li> <li>• What is the basis for adopting 45 LPCD for the floating population? Is this sourced from a specific manual?</li> <li>• There is no mention of a separate sewerage and stormwater system; only stormwater drains can remain open, not sewage drains.</li> <li>• The write-up is ambiguous and needs editing. The sentence is too long, spans five lines, and contains unnecessary repetition.</li> <li>• Please include the characteristics table with corresponding values within the report for better clarity and reference.</li> <li>• The reference to FAB / MBR / MBBR is unclear. One treatment technology should be selected and named consistently throughout the report.</li> <li>• The statement on sewage system status is inconsistent. Replace "Sewage – Non-Exist" with a clearer statement: "No functional underground sewerage network exists; wastewater is currently carried through the open drainage system."</li> <li>• The STP capacity needs justification. Please provide a clear explanation for how the proposed capacity is based on the base year and projected flows.</li> <li>• For the CETP, how was the 2 MLD capacity worked out? The growth projection, etc., is not clear. The number of drains</li> </ul>
--	--	---



		<p>proposed for interception and diversion should be mentioned clearly and consistently. Were the consent conditions from the SPCB taken into account while planning the treatment?</p> <ul style="list-style-type: none"> <li>• Since the Sewage Treatment Plant (STP) is situated at a significant distance from the source, and the wastewater is being transported through open drains, there is a considerable risk of seepage into the ground and evaporation losses during conveyance. Please note that separate stormwater drains and sewerage drains are required.</li> <li>• In the absence of a proper sewerage network, substantial conveyance losses are expected through open drains, the STP project. Capacity may differ substantially from the design value, impacting the performance.</li> </ul>
2	Introduction	<ul style="list-style-type: none"> <li>• A clear statement of implementing/O&amp;M responsibilities (ULB vs. BUIDCo) through construction, 15-year O&amp;M, and handover is missing/not stated.</li> <li>• The narrative cites NMCG/CPHEEO guidance; add a compliance matrix summarizing which specific clauses/tables are adopted.</li> <li>• On Page 13, the population projection values differ from those used in later sections. Ensure projections for 2020, 2035, and 2050 are consistent throughout the report.</li> <li>• On Page 9 (last line), the term environmental flows is used but not defined in the document. It should also be clarified how the treated wastewater will contribute to maintaining these flows.</li> <li>• In Section 2.2, the terms 'primary objective and secondary objectives' are used. A clear statement of objectives planned, to be stated.</li> <li>• On Page 12 – Include the current septage handling practices and proposed improvement measures.</li> <li>• On Page 12 – For the last paragraph clear statement is required. Rewrite for continuity and ensure it aligns with NMCG guidelines.</li> <li>• Two STPs and two CETPs have been proposed, but the details are not presented. Please specify the number of pumping stations for each and provide clarity on the</li> </ul>





7/25, 12:52 PM

		interconnections between the STPs, CETPs, and pumping stations.
3	Project Area	<ul style="list-style-type: none"> <li>• Seismic zone is stated as III in the text; confirm against the latest BIS zoning and reflect in structural design notes (Chapter 5).</li> <li>• Drainage description is qualitative; include a GIS map of sub-catchments with areas, outlet RLs, and outfall IDs used in I&amp;D design.</li> <li>• Flood-prone areas near the Falgu River are mentioned. Attach data from the concerned Department showing the High Flood Level (HFL), and mark the HFL clearly on the layout and site drawings.</li> <li>• Add a land-ownership summary for STP/SPS/NALA/drainage channel plots to de-risk acquisition.</li> <li>• On Page 14 - Include a reference to river water quality data in the narrative.</li> </ul>
4	Assessment of Existing System	<ul style="list-style-type: none"> <li>• Describe how wastewater is currently disposed of and compare how much comes from septic tanks versus drains to decide the right STP size.</li> <li>• Connect the groundwater levels shown in the maps with foundation type and waterproofing decisions for SPS and wet wells.</li> <li>• Provide a table that compares the Urban Local Body's (ULB) total water production, non-revenue water (NRW), billed water consumption, and estimated sewage generation to confirm and validate the design flow assumptions.</li> <li>• State the present condition of the existing drainage channel, i.e., dimensions and slope.</li> <li>• On Page 19: Clarify the difference between the municipal boundary area and DPR project area, as the values differ.</li> <li>• On Page 19: Confirm whether the area shown in the DPR tables represents municipal limits or service coverage area.</li> <li>• The population for 2011 on page 8 differs from the table on page 11. Similarly, the area of town also differs in the above table.</li> </ul>



28

		<ul style="list-style-type: none"> <li>Spelling of the Phalgu/Falgu river is not consistent in the document. Rectify.</li> <li>The statement that waste disposal has stopped contradicts another sentence indicating debris dumping continues. Rewrite with factual clarity.</li> </ul>
5	Need for the Project	<ul style="list-style-type: none"> <li>Clearly state pollution load to Falgu (kg/day BOD &amp; COD) for with- and without-project scenarios, with baseline and target values.</li> <li>A clear statement is required on 135 lpcd water, as there is no data on groundwater utilization.</li> <li>State alignment with state/city sanitation plans and Namami Gange program indicators.</li> <li>Please include a concise yet comprehensive risk register covering key project risks such as land availability, flooding, power reliability, and utility conflicts. Each identified risk should indicate its likelihood, potential impact, and proposed mitigation measures.</li> </ul>
6	Design Criteria	<ul style="list-style-type: none"> <li>On the population side, a mid-range value has been taken. Although the report states that the population does not follow any specific trend, the estimation has been done using a formula.</li> <li>Population projections for 2027, 2042, and 2057 are given elsewhere; There is a change in year &amp; population. Consistency in data presentation is required.</li> <li>Present hydraulic design velocities (min self-cleansing, max erosion) and pipe material choices with standards.</li> <li>The O&amp;M section appears copied from manuals. It must explain why the selected process reduces O&amp;M costs in comparison to alternatives.</li> </ul>
7	Detail Design of Proposed Work	<ul style="list-style-type: none"> <li>Topo survey basis and benchmarks need to be stated (GTS/Sol), including the vertical datum used in all RL tables.</li> <li>Provide one hydraulic profile showing the flow from each outfall through the sewage pumping station (SPS), rising main, and sewage treatment plant (STP) to the final outlet, including hydraulic grade line (HGL) checks at high points.</li> </ul>





		<ul style="list-style-type: none"> <li>• Intercepting gravity main design: add Manning/Hazen-Williams sheets, slopes, and self-cleansing checks at minimum flows.</li> <li>• Outfall structures: detail sluice/check arrangements to shed storm surges and protect STPs from hydraulic overload.</li> <li>• Include SPS design sheets covering pump curves, best efficiency point (BEP), efficiency bands, total dynamic head (TDH) breakdown (static head, friction losses, and minor losses), and electrical cable sizing.</li> <li>• The details of the sludge handling system (covering thickeners, drying beds, or mechanical dewatering units), along with a complete solids balance and documented agreements for end-use or final disposal routes.</li> <li>• Add notes covering traffic management at road and utility crossings, required utility diversions, and planned work-front sequencing for smooth project execution.</li> </ul>
8	Common Effluent Treatment Plant (CETP) in Manpur, Gaya, Bihar	<ul style="list-style-type: none"> <li>• CETP process selection (flow/equalization, primary, biological, tertiary) justified vs. influent variability.</li> <li>• Effluent conveyance network to CETP: provide route, materials, connection conditions, and industrial pre-treatment requirements.</li> <li>• For the effluent conveyance network to the CETP, provide the route layout, pipe materials, connection details, and specified industrial pre-treatment requirements.</li> <li>• State how CETP compliance (CPCB/SPCB limits) will be achieved and monitored (frequency, responsibility).</li> <li>• TDS (Total Dissolved Solids) has not been addressed. Reconsent.</li> </ul>
9	Prediction of Impacts	<ul style="list-style-type: none"> <li>• The construction-phase Environmental Management Plan (EMP) should quantify expected emissions and noise levels, and specify detailed mitigation measures, including equipment standards and work scheduling.</li> <li>• The operation-phase impact assessment should model river DO and BOD improvements resulting from treated effluent discharges under both dry- and wet-season flow conditions.</li> </ul>



26

		<ul style="list-style-type: none"><li>• Include an emergency response plan addressing flood event, prolonged power outages, and plant non-working conditions, such as bypass or partial treatment scenarios.</li></ul>
10	Cost estimate	<ul style="list-style-type: none"><li>• Provide an O&amp;M 15-year breakup: power (kWh/MLD), chemicals, manpower (shift-wise), consumables, maintenance, sludge handling, and laboratory.</li></ul>



**REPORT OF SITE VISIT AND DISCUSSIONS WITH BUIDCO ON DRAFT DPR  
FOR INTERCEPTION & DIVERSION AND STP SCHEME OF  
GAYA, BIHAR DURING NOV 4-5, 2025**

A visit to Gaya city was undertaken during November 4-5, 2025, by Prof. Ashok Kumar Gupta from the Civil Engineering Department, IIT Kharagpur, for discussions on the present status, proposals under review, and visits to the locations of open drains carrying sewage, drain outfalls into the Phalgu River, and the sites of proposed STPs. Discussions were held with the team of engineers/project directors from the Bihar Urban Infrastructure Development Corporation Ltd. (BUIDCO).

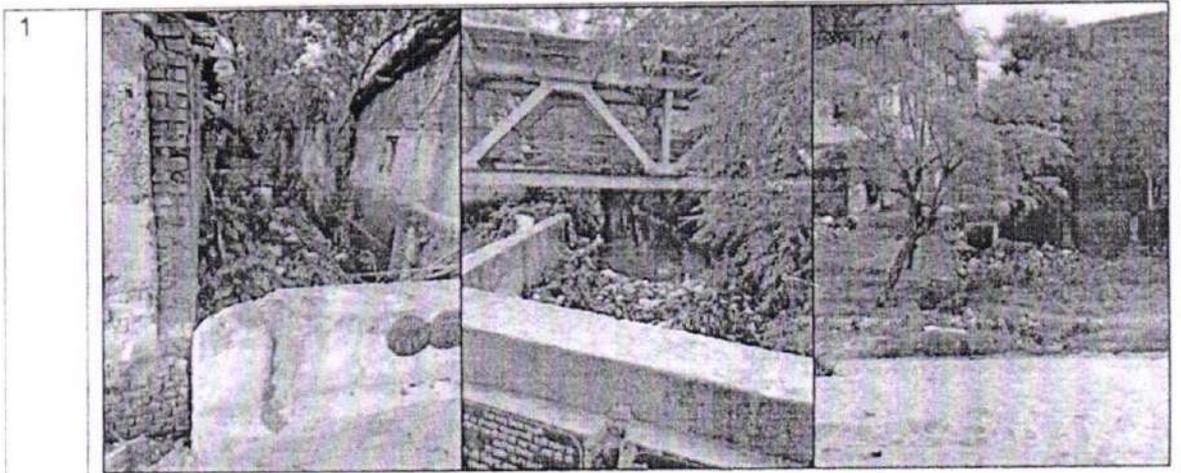
*The following points were discussed with the engineers/project directors of BUIDCO, and requested to provide the details:*

1. The main concern is whether the STP will actually receive the design flow, as the wastewater is conveyed through open drains where the visible flow appears lower than the expected quantity. Additionally, seepage and evaporation losses are likely, which may further reduce the volume reaching the STP.
2. A properly designed and well-connected sewerage system is essential for the city: Sole reliance on open drains (without lining) is not advisable for long-term wastewater conveyance.
3. If the existing drains are not pucca, significant seepage and evaporation losses will occur, and it is highly unlikely that the wastewater flow reaching the STPs will match the designed capacities.
4. Disposal of solid waste and other debris near or within drains continues to be a concern and may obstruct flow and affect the performance of interception and diversion works.
5. Mixing of stormwater with sewage will create operational difficulties and affect treatment efficiency; therefore, separate conveyance systems are required.
6. The inclusion of treated wastewater reuse provisions in the DPR should be clarified, as no requirement for its storage or supply appears to have been planned.
7. An assessment should be conducted on the quality and quantity of wastewater in the city's drains at their outfall points, following the NMCG Guidelines and the CPHEEO manual.
8. Conclusively, the city needs an integrated plan addressing sewage generation, transport, treatment, and disposal/reuse in an engineered manner to ensure that no untreated wastewater is discharged into the Phalgu River.

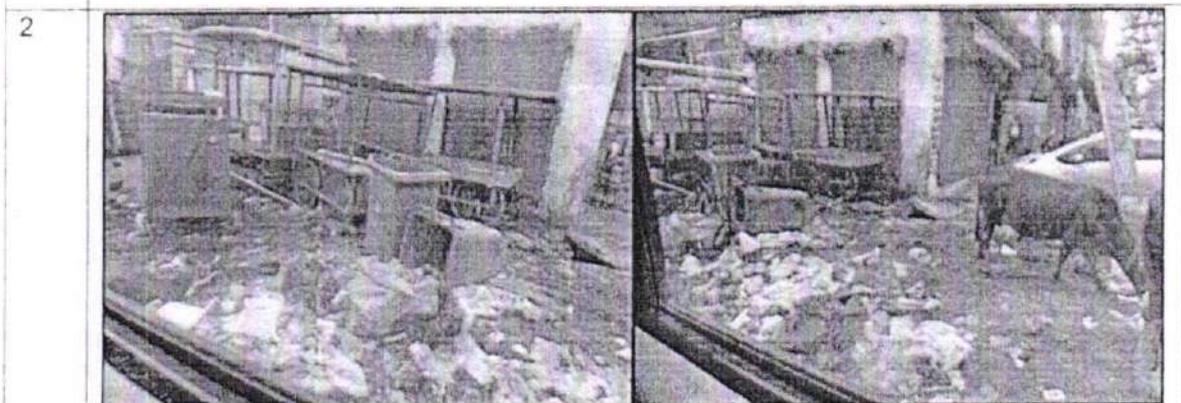


23

Photographs taken during the site visit, and related observations:



The open drains carrying sewage were observed to have reduced discharge capacities because of sediment deposition and solid waste accumulation. They showed improper slope and hydraulic gradient that resulted in stagnant conditions along several stretches. The locations showed clear evidence of waste disposal into the drains, further obstructing flow and contributing to localized pollution. The unlined sections indicate a high potential for seepage into the surrounding soil, which may lead to contamination of shallow groundwater. In addition, exposure to atmospheric conditions makes these drains susceptible to evaporation losses.



Although in the market area, some drains were found to be partially covered, at several locations, the slab covers were broken or missing, allowing direct entry of waste into the drains. Solid waste accumulation along the roadside and near the drain openings was observed to be significant, indicating poor waste management and inadequate maintenance. In many locations, drain cross-sections were found to be encroached and



size reduced by adjacent residential/commercial structures, thereby restricting conveyance capacity.

3



The drains are overgrown with dense vegetation, restricting flow and access. There is no adequate side space available for proper cleaning or maintenance operations. Clearing of vegetation is essential to restore drainage efficiency.

4



At various locations in residential areas, the drains present alongside houses were found to be covered with concrete slabs. However, in many places, the slabs were broken, displaced, or missing, leaving the drains uncovered. This condition increases the chances of debris entering the drains and poses a safety hazard for the general public.



22

5



The drains carrying septic tank effluent from households were found to be heavily silted, with flow occurring only in the upper portion.

6



The outfall drains discharging into the Phalgu River were found to be heavily choked with solid waste and debris, severely restricting the flow. The riverbanks and adjoining areas were also observed to be littered with garbage, indicating that much of the solid waste from surrounding settlements is directly entering the drains and being carried into



1/17/25, 12:52 PM

the river. This poses a severe threat to the Phalgu River, necessitating proper waste management, regular cleaning of outfalls, and preventive measures to stop solid waste from entering the drains and ultimately reaching the river. Otherwise, the purpose of sanitation is lost.



पत्रांक:—BGCMS/2025/Gaya-I&D and STP <sup>504</sup> /न० वि० एवं आ० वि०

बिहार सरकार

नगर विकास एवं आवास विभाग

**बिहार राज्य गंगा नदी संरक्षण कार्यक्रम प्रबंधन सोसाइटी (BGCMS)**

प्रेषक,

मनोज कुमार  
अपर सचिव,  
नगर विकास एवं आवास विभाग।

सेवा में,

प्रबंध निदेशक,  
बुडको, पटना।

पटना, दिनांक:— 04/12/2025

विषय:— गया I&D and STP का TPA के फलस्वरूप Observations का अनुपालन प्रतिवेदन के संबंध में।

प्रसंग:— IIT KGP से प्राप्त ई-मेल, दिनांक—17.11.2025

महाशय,

उपर्युक्त प्रासंगिक विषय के सम्बन्ध में कहना है कि गया I&D and STP का Third Party Appraisal IIT Kharagpur द्वारा किया गया है। प्राप्त Observations को Incorporate करते हुए पुनरीक्षित प्रतिवेदन की माँग यथाशीघ्र की गई है।

अतः निदेशानुसार अनुरोध है कि गया I&D and STP का TPA के फलस्वरूप प्राप्त Observations को incorporate करते हुए पुनरीक्षित प्रतिवेदन यथाशीघ्र उपलब्ध कराने हेतु संबंधित को निदेशित करने की कृपा की जाय।

अनुलग्नक:—यथोक्त।



विश्वासभाजन

4/12/2025  
अपर सचिव

नगर विकास एवं आवास विभाग।



भारत सरकार  
Government of India



आधार

भारत सरकार  
Government of India

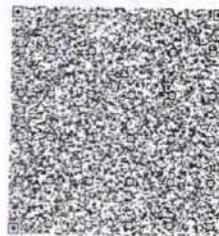
भारतीय विशिष्ट पहचान प्राधिकरण  
Unique Identification Authority of India

नामांकन क्रम/ Enrolment No.: 2189/20713/00262

To  
सुरभि सिन्हा  
Surabhi Sinha  
D/O: Jagdamb Kumar,  
Subhash Nagar,  
Main Road,  
West of khemnichak,  
VTC: New Jaganpura,  
PO: New Jaganpura,  
Sub District: Patna Sadar,  
District: Patna,  
State: Bihar,  
PIN Code: 800027,  
Mobile: 9973015900

Signature Not Verified

Digitally signed by Surabhi Sinha  
Unique Identification Authority of India  
DN  
Date: 2024.07.19 16:29:47  
GMT+05:30



आपका आधार क्रमांक / Your Aadhaar No. :

7216 7077 9524

VID : 9124 2410 5328 0623

मेरा आधार, मेरी पहचान



भारत सरकार  
Government of India



आधार

Aadhaar no. issued: 11/07/2016



सुरभि सिन्हा  
Surabhi Sinha  
जन्म तिथि/DOB: 28/07/1994  
महिला/ FEMALE

आधार पहचान का प्रमाण है, नागरिकता या जन्मतिथि का नहीं।  
इसका उपयोग सत्यापन (ऑनलाइन प्रमाणीकरण, या क्यूआर कोड/  
ऑनलाइन एक्सप्लेन की स्कैनिंग) के साथ किया जाना चाहिए।  
Aadhaar is proof of identity, not of citizenship  
or date of birth. It should be used with verification (online  
authentication, or scanning of QR code / offline XML)

7216 7077 9524

मेरा आधार, मेरी पहचान



Government of India



AADHAAR

सूचना / INFORMATION

- आधार पहचान का प्रमाण है, नागरिकता या जन्मतिथि का नहीं। जन्मतिथि आधार नंबर धारक द्वारा प्रस्तुत सूचना और विनियमों में विनिर्दिष्ट जन्मतिथि के प्रमाण के दस्तावेज पर आधारित है।
- इस आधार पत्र को यूआईडीएआई द्वारा नियुक्त प्रमाणीकरण एजेंसी के जरिए ऑनलाइन प्रमाणीकरण के द्वारा सत्यापित किया जाना चाहिए या ऐप स्टोर में उपलब्ध एमआधार या आधार क्यूआर कोड स्कैनर ऐप से क्यूआर कोड को स्कैन करके या [www.uidai.gov.in](http://www.uidai.gov.in) पर उपलब्ध सुरक्षित क्यूआर कोड रीडर का उपयोग करके सत्यापित किया जाना चाहिए।
- आधार विशिष्ट और सुरक्षित है।
- पहचान और पते के समर्थन में दस्तावेजों को आधार के लिए नामांकन की तारीख से प्रत्येक 10 वर्षों में कम से कम एक बार आधार में अपडेट कराना चाहिए।
- आधार विभिन्न सरकारी और गैर-सरकारी फायदों/सेवाओं का लाभ लेने में सहायता करता है।
- आधार में अपना मोबाइल नंबर और ईमेल आईडी अपडेट करें।
- आधार सेवाओं का लाभ लेने के लिए एमआधार ऐप डाउनलोड करें।
- आधार/बायोमेट्रिक्स का उपयोग न करने के समय सुरक्षा सुनिश्चित करने के लिए आधार/बायोमेट्रिक्स लॉक/अनलॉक सुविधा का उपयोग करें।
- आधार की मांग करने वाले सहमति लेने के लिए बाध्य हैं।
- Aadhaar is proof of identity, not of citizenship or date of birth (DOB). DOB is based on information supported by proof of DOB document specified in regulations, submitted by Aadhaar number holder.
- This Aadhaar letter should be verified through either online authentication by UIDAI-appointed authentication agency or QR code scanning using mAadhaar or Aadhaar QR Scanner app available in app stores or using secure QR code reader app available on [www.uidai.gov.in](http://www.uidai.gov.in).
- Aadhaar is unique and secure.
- Documents to support identity and address should be updated in Aadhaar after every 10 years from date of enrolment for Aadhaar.
- Aadhaar helps you avail of various Government and Non-Government benefits/services.
- Keep your mobile number and email id updated in Aadhaar.
- Download mAadhaar app to avail of Aadhaar services.
- Use the feature of Lock/Unlock Aadhaar/biometrics to ensure security when not using Aadhaar/biometrics.
- Entities seeking Aadhaar are obligated to seek consent.



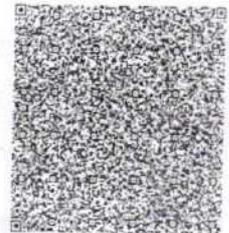
भारतीय विशिष्ट पहचान प्राधिकरण  
Unique Identification Authority of India



AADHAAR

पता:  
आत्मजा: जगदम्ब कुमार, सुभाष नगर, मेन रोड, वेस्ट ऑफ  
खेमनीचक, न्यू जगनपुर, पटना,  
बिहार - 800027

Address:  
D/O: Jagdamb Kumar, Subhash Nagar, Main Road,  
West of khemnichak, New Jaganpura, PO: New  
Jaganpura, DIST: Patna,  
Bihar - 800027



7216 7077 9524

VID : 9124 2410 5328 0623

help@uidai.gov.in

www.uidai.gov.in

