

**NATIONAL MISSION FOR CLEAN GANGA (NMCG)**  
**MINISTRY OF JAL SHAKTI DEPARTMENT OF WATER RESOURCES,  
RIVER DEVELOPMENT & GANGA REJUVENATION, GOVT. OF INDIA**



सत्यमेव जयते

जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग  
MINISTRY OF JAL SHAKTI  
DEPARTMENT OF WATER RESOURCES,  
RIVER DEVELOPMENT & GANGA REJUVENATION

**DEVELOPMENT OF NEW SEWAGE TREATMENT PLANTS,  
REHABILITATION OF EXISTING SEWAGE TREATMENT  
INFRASTRUCTURE AND O&M FOR 15 YEARS IN KANPUR**

**UNDER**

**ONE CITY ONE OPERATOR CONCEPT THROUGH HYBRID ANNUITY  
BASED PPP MODE (HAM – KANPUR)**

**(LOA File Number: Pr-12012/41/2018-PPP/NMCG dated 04.02.2019)**

**Monthly Progress Report**

**Of**

**Project Engineer**

**DECEMBER-2019**



**Executing Agency**  
Uttar Pradesh Jal  
Nigam  
Benajhabar Road,  
Kanpur  
Uttar Pradesh -  
208002



**Funding Agency**  
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MoWR, River  
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**ABBREVIATIONS**

ASP	Activated Sludge Process
BEP	Basic Engineering Package
BOD	Biochemical Oxygen Demand
CETP	Common Effluent Treatment Plant
COD	Chemical Oxygen Demand
COD	Commercial Operation Date
CPs	Condition Precedent
CTE	Consent To Establish
CTO	Consent to Operate
DFGs	Dual Fuel Generators
DPR	Detailed Project Report
ESHS	Environment, Social, Health And Safety
GOI	Government of India
HAM	Hybrid Annuity Model
I&D	Interception & Diversion
IPS	Intermediate Pumping Station
KPIs	Key Performance Indicators
KRMPL	Kanpur River Management Private Limited
LOA	Letter of Award
MOM	Minutes of Meeting
MPS	Main Pumping Station
O&M	Operation and Maintenance
PLC	Programmable Logic Control
PMC	Project Management Consultant
PDD	Proposal Due Date
PDMC	Project Development and Monitoring Consultant
PPP	Public Private Partnership
QAP	Quality Assurance Plan
RFP	Request for Proposal
RTU	Remote Terminal Unit
RTOLMS	Real Time Online Monitoring System
TOR	Terms of Reference
SBR	Sequential Batch Reactors
STP	Sewage Treatment Plant
TEPH	Treated Effluent Pump House
UASB	Up-Flow Anaerobic Sludge Blanket Reactor

# MONTHLY PROGRESS REPORT – HAM KANPUR

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## 1 INTRODUCTION

The Govt. of India, recognizing that long-term rejuvenation of the river Ganga will have significant social and economic benefits on the lives of the 500 million people living along its basin, has identified cleaning of the river Ganga as one of its priorities. For this purpose, in May 2015, the Gol approved the flagship Namami Gange programme for cleaning, rejuvenation, and protection of the river Ganga. In January 2016, the Gol approved a hybrid annuity model to implement STP projects under the Namami Gange programme on a PPP basis.

Subsequently, the MoWR issued the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (Ganga 2016 Order) to constitute various authorities to assist the Gol in achieving its aim of effective abatement of pollution in the river Ganga. The Ganga 2016 Order applies to all states in the catchment of the river Ganga basin, including Uttar Pradesh. The Ganga 2016 Order revised the legal status of NMCG (which was initially constituted as a registered society under the Societies Registration Act, 1860) to an authority constituted under the Environment (Protection) Act, 1986 and designated NMCG as the nodal agency for the implementation of the Ganga 2016 Order.

Rapidly increasing population, rising standards of living and exponential growth of industrialisation and urbanisation have exposed water resources, in general, and rivers, in particular, to various forms of degradation. The mighty Ganga is no exception. The deterioration in the water quality impacts the people immediately. Ganga, in some stretches, particularly during lean seasons has become unfit even for bathing. The threat of global climate change, the effect of glacial melt on Ganga flow and the impacts of infrastructural projects in the upper reaches of the river, raise issues that need a comprehensive response.

The Uttar Pradesh Jal Nigam (Jal Nigam) is a statutory body constituted under the Uttar Pradesh Water Supply and Sewerage Act 1975, and has the power to develop, maintain and regulate water supply and sewerage works in Uttar Pradesh. With a view to implement the Namami Gange programme and the Ganga 2016 order in the State of Uttar Pradesh, the Jal Nigam, in association with NMCG has decided to undertake the development of:

- three new STP facilities (Pankha, Unnao & Shuklaganj) and their O&M for 15 years;
- rehabilitation of existing 130 MLD Jajmau Phase-I STP facility with O&M for 15 years and;
- O&M for three existing STP facilities (Jajmau Phase-II, Bingawan & Sajari) in Kanpur under Hybrid Annuity based PPP mode.

While the Jal Nigam will be the principal executing agency and bidding authority for the Project, NMCG will be responsible for making payments to the Concessionaire and Project Engineer.

## 2 HYBRID ANNUITY MODEL (HAM)

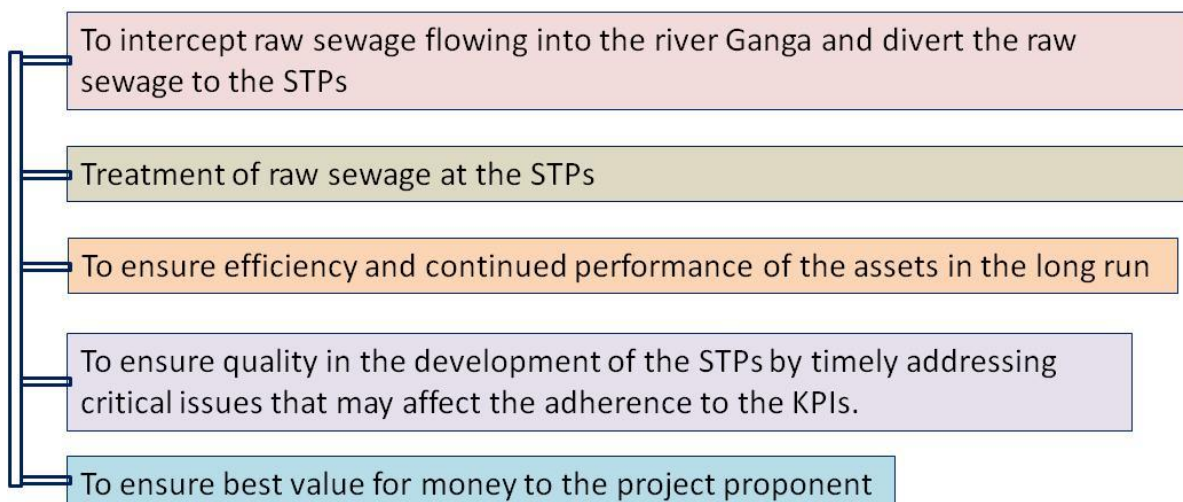
Government of India has approved the Namami Gange program as an integrated approach for effective abatement of pollution in river Ganga and Yamuna. As part of this and to ensure that no untreated domestic sewage flow into the river Ganga and Yamuna, various interventions are planned such as Interception & Diversion works and development & operation of Sewage Treatment Plants (STPs).

Considering various development models in practice for the construction, operation and maintenance of Sewage Treatment Plants, Government of India has approved the Hybrid Annuity based Public Private Partnership (PPP) mode as one of the options for the development & operation of STPs. Under this model, private investor/developer will design, build, finance, construct, rehabilitate, renovate, operate and maintain the asset (STPs, IPS, and MPS) to the Project Executing Agency/Jal Nigam at the end of the Concession Period (15 years). 40% of the Capital cost will be paid to the developer during construction of the STP. Balance 60% along with Operation & Maintenance (O&M) cost will be paid over the Concession Period on achievement of key performance indicators as per the contract. Entire cost of development and operation of the STPs will be 100% funded by the Government of India as central sector scheme.

NMCG & UPJN appointed M/s. Shah Technical Consultant Pvt. Ltd., as third party engineering firm as Project Engineer for this project through tendering process. Letter of Award is issued dated 4<sup>th</sup> February 2019 and agreement signed between the parties on 12<sup>th</sup> April 2019.

## 3 OBJECTIVES

To achieve above objectives effective development of STPs at Unnao, Shuklaganj and Pankha rehabilitation of existing STPs with O&M for 15 years in Kanpur are proposed under this program. The objectives that NMCG and the UP Jal Nigam wish to achieve through the Project are mentioned in Figure 1.



**Figure 1: Objectives of NMCG and UP JAL NIGAM**

#### 4 HAM KANPUR PROJECT AT A GLANCE

Details of HAM Kanpur project are given in the following table:

**Table 2.1: HAM Kanpur Project at a Glance**

Particulars	Description
<b>Name of Project</b>	: Development of new Sewage Treatment Plants and O&M for 15 years, Rehabilitation of existing Sewage Treatment Infrastructure and O&M for 15 years in Kanpur under One City One Operator concept through Hybrid Annuity based PPP mode. (HAM – Kanpur)
<b>Client</b>	: National Mission for Clean Ganga (NMCG), New Delhi and UP Jal Nigam
<b>Execution Agency</b>	: Uttar Pradesh Jal Nigam (UPJN)
<b>Consultant</b>	: Shah Technical Consultants (P) Ltd. as ‘Project Engineer’
<b>LOA</b>	: Pr-12012/41/2018-PPP/NMCG dated 04.02.2019
<b>Concessionaire</b>	: Kanpur River Management Private Limited (KRMPL) an SPV of Shapoorji Pallonji & Company Private Limited, Mumbai
<b>Concessionaire’s Agreement No.</b>	: 14/GM/2018-19
<b>Cost of Project (CAPEX+OPEX)</b>	: ₹ 816.24 Cr
<b>Effective Date</b>	: 11.10.2019
<b>Completion date (as per contract)</b>	: 24 Months from effective date (21 months construction + 3 months running)
<b>O&amp;M period</b>	: 15 years after last Commercial Operation Date (COD)
<b>Description of Work</b>	: <ul style="list-style-type: none"> <li>➤ Construction of three new STPs (SBR) at different locations (30 MLD at Pankha, 15 MLD at Unnao and 5 MLD STP at Shuklaganj) and related infrastructure with 15 years of O&amp;M;</li> <li>➤ Rehabilitation of 130 MLD (Phase-I) STP at Jajmau with construction of 200 MLD TEPS and 173 MLD CCT at Jajmau with O&amp;M for 15 years;</li> <li>➤ O&amp;M of 43 MLD (Phase-II) Jajmau facilities, Renovation and O&amp;M of 210 MLD Bingawan facilities and O&amp;M of 42 MLD Sajari facilities for 15 years;</li> </ul>

## 5 PROJECT WISE DETAILS OF COMPONENTS UNDER HAM KANPUR PROJECT

HAM Kanpur project is divided into 5 districts of the Kanpur city – Pankha (District –III), Unnao & Shuklaganj – (District Unnao), Jajmau – (District I), Bingawan – (District II) and Sajari – (District IV). Under this project, development and O&M for 15 years of three new STP facilities based on SBR technology with associated infrastructure have been proposed for two districts – Pankha and Unnao & Shuklaganj.

For 130 MLD Jajmau STP facilities (Phase-I) renovation with O&M for 15 years and Phase-II O&M for 15 years is proposed. For 210 MLD USAB based Bingawan STP facilities renovation with O&M for 15 years for and 42 MLD ASP based Sajari O&M for 15 years is proposed.

### 5.1 PANKHA FACILITIES (DISTRICT-III)

Project wise components details of Pankha Facilities are given in table 5.1:

**Table 5.1: Pankha Facilities (District-III)**

SN	STP Facilities	Capacity/dia. /size	No. of units/length
	Date of Start- Effective Date (11.10.2019)		
	Scope of Work- New Construction and O&M		
1.1	STP	30 MLD	1
1.2	MPS	115MLD	1
1.3	ICI Nala IPS	25 MLD	1
1.4	Sundar Nagar IPS	20 MLD	1
1.5	Thermal Nala (A)(tapping)	22 MLD	1
1.6	Thermal Nala (B)(tapping)	8 MLD	1
1.7	ICI Nala(tapping)	7.85 MLD	1
1.8	Common Collection chamber	-	1
1.9	Rising main (ICI Nala IPS to collection chamber)	800mm-φ	6.91km
1.10	Rising main (Sundar Nagar IPS to collection chamber)	800mm-φ	0.651km
1.11	Gravity main (Thermal Nala B Tapping to common collection chamber)		
1.12	Common Gravity main (collection chamber to MPS)	2000mm- φ	1.948Km
1.13	Sewage network	350mm-φ	2.771km
		400 mm-φ	1.359km
		450 mm-φ	1.272km
		500 mm-φ	1.243km
		600 mm-φ	1.778km
		700 mm-φ	1.487km
		800 mm-φ	1.012km
		900 mm-φ	2.170km



		1200 mm- $\phi$	3.634km
		1600 mm- $\phi$	1.596km
		2000 mm- $\phi$	1.948km
		Total	20.74km
<b>1.14</b>	<b>Milestones</b>	<b>Date</b>	
	1 <sup>st</sup> Milestone	11-Oct-2019 to 25-Apr-2020	
	2 <sup>nd</sup> Milestone	26-Apr-2020 to 10-Jul-2020	
	3 <sup>rd</sup> Milestone	11-Jul-2020 to 24-Sep-2020	
	4 <sup>th</sup> Milestone	25-Sep-2020 to 09-Dec-2020	
	5 <sup>th</sup> Milestone	10-Dec-2020 to 13-Feb-2021	
	6 <sup>th</sup> Milestone	14-Feb-2021 to 21-Apr-2021	
	7 <sup>th</sup> Milestone	22-Apr-2021 to 22-Jun-2021	
	8 <sup>th</sup> Milestone	23-Jun-2021 to 25-Aug-2021	

## 5.2 UNNAO FACILITIES

Project wise components details of Unnao Facilities are given in table 5.2:

**Table 5.2: Unnao Facilities**

SN	STP Facilities		Capacity/ dia. /size	No. of units/length
	Date of Start- Effective Date (11.10.2019)	Scope of Work- New Construction and O&M		
<b>1.1</b>	STP		15 MLD	1
<b>1.2</b>	Sump cum Pump house (MPS)		40 MLD	1
<b>1.3</b>	Trunk Sewer		1200mm $\phi$	3.2Km
<b>1.4</b>	I&D works (Nala tapping)		40 MLD	1
<b>1.5</b>	Trash screen		7m-1.7m x 0.8m	1
<b>1.6</b>	Grit chamber		12m-4m x 1m	2
<b>1.7</b>	Collection chamber		3.4m-6.2m x 3m	1
<b>1.8</b>	Rising main (MPS to STP)		750mm $\phi$	100m
<b>1.9</b>	Rising main (bypass)		750mm $\phi$	100m
<b>1.10</b>	Effluent distribution chamber		-	1
<b>1.11</b>	Effluent gravity channel (STP to discharge point )		1.5m x 1.0m	300m
<b>1.12</b>	Effluent disposal drains		-	500m
<b>1.13</b>	<b>Milestones</b>	<b>Date</b>		
	1 <sup>st</sup> Milestone	12-Oct-2019 to 24-Feb-2020		
	2 <sup>nd</sup> Milestone	25-Feb-2020 to 15-May-2020		
	3 <sup>rd</sup> Milestone	16-May-2020 to 30-Jul-2020		

4 <sup>th</sup> Milestone	30-Jul-2020 to 14-Oct-2020
5 <sup>th</sup> Milestone	15-Oct-2020 to 24-Dec-2020
6 <sup>th</sup> Milestone	10-Dec-2020 to 01-Mar-2021
7 <sup>th</sup> Milestone	02-Mar-2021 to 05-May-2021
8 <sup>th</sup> Milestone	06-May-2021 to 10-Jul-2021

### 5.3 SHUKLAGANJ FACILITIES

Project wise components details of Shuklaganj are given in table 5.3:

**Table 5.3: Shuklaganj Facilities\***

SN	STP Facilities	Capacity/dia./size	No. of units/length
	Date of Start- Effective Date (11.10.2019)		
	Scope of Work- New Construction and O&M		
1.1	STP	5 MLD*	1
1.2	Sump cum Pump house (MPS)	20 MLD	1
1.3	Connecting sewer	-	1
1.4	I&D works (Nala tapping)	-	1
1.5	Collection chamber	-	1
1.6	Rising main (MPS to STP)	500mm $\phi$	50m
1.7	Rising main (bypass)	500mm $\phi$	50m
1.8	Retaining wall		1
1.9	Effluent channel (STP to discharge point )	1.5m x 1m	100m
1.10	<b>Milestones</b>	<b>Land not finalized</b>	

\*ABOVE PROPOSALS ARE UNDER REVISION

### 5.4 JAJMAU FACILITIES

Project wise components details of Jajmau are given in table 5.4:

**Table 5.4: Jajmau Facilities**

SN	STP Facilities	Capacity/dia./size	No. of units/length
A	Phase-I		
	Date of Start- Effective Date (11.10.2019)		
	Scope of Work- Renovation and O&M		
1.1	STP 1 on ASP technology with power Generation	130 MLD	1
1.2	Sump cum Pump house (TEPS)	200 MLD	1
1.3	CCT	173 MLD	1
1.4	Nawabganj IPS	-	1
1.5	Parvat IPS	-	1
1.6	Baba Ghat/Muar mill IPS	-	1

1.7	Guptar Ghat IPS	-	1
1.8	Jajmau CPCS	-	1
<b>B</b>	<b>Phase-II</b>		
	Schedule Handing Over Date- 01.10.2019	<b>Capacity/dia. /size</b>	<b>No. of units/length</b>
	Scope of Work- O&M		
1.1	STP 2 on ASP technology with power Generation	43 MLD	1
1.2	Sanjaypuram IPS	-	1
1.3	Khalisa lane IPS	-	1
1.4	Jajmau MPS	-	1

## 5.5 BINGAWAN FACILITIES

Project wise components details of Bingawan are given in table 5.5:

**Table 5.5: Bingawan Facilities**

SN	STP Facilities	Capacity /dia. /size	No. of units/length
	Schedule Handing Over Date- 01.04.2019		
	Scope of Work- Renovation and O&M for 15 years		
1.1	STP on UASB Technology with power generation	210 MLD	1
1.2	Installation of online monitoring system (RTOLMS)		L.S.
1.3	Bingawan MPS	200 MLD	1
1.4	Rakhimandi IPS	100 MLD	1
1.5	Halwakhanda IPS	20 MLD	1
1.6	Munshipurwa IPS	67 MLD	1
1.7	Shisamau Nala (tapping)	8MLD	1

## 5.6 SAJARI FACILITIES

Project wise components details of Sajari is given in table 5.6

**Table 5.6: Sajari Facilities**

SN	STP Facilities	Capacity/dia. /size	No. of units/length
	Schedule Handing Over Date- 11.10.2019		
	Scope of Work- O&M for 15 years		
1.1	STP on ASP technology	42 MLD	1
1.2	MPS	42 MLD	1
1.3	Chakeri IPS	14 MLD	1
1.4	Sanigawan IPS	14 MLD	1

## 6 PRE CONSTRUCTION ACTIVITIES /CONDITION PRECEDENTS

As per the provision of Concessionaire Agreement, effective date of the project was to be declared before 19<sup>th</sup> April 2019. Effective date for work execution under HAM Kanpur project was declared on 11<sup>th</sup> October 2019. Hence, work related to construction / execution of new STP facilities and related infrastructure i.e. Pankha, Unnao & Shuklaganj and renovation of existing facilities i.e. 130 MLD Jajmau & O&M of existing facilities i.e. 210 MLD Bingawan, 42 MLD Sajari and 43 MLD Jajmau (Phase II) started after effective date.

### 6.1 CONDITIONS PRECEDENT TO BE SATISFIED BY THE CONCESSIONAIRE

SN	Facilities that need to be constructed or renovated	Name of the Site	Status/Remarks
	Submit the Phase I Designs and Drawings to the Jal Nigam for its approval in accordance with Article 7;	Pankha	Pankha STP BEP excluding structural and electrical incorporating STC comments approved by IITR. Stamped approval expected to be done in near future.
			GA, Data Sheet & QAP of submersible pump <b>Pankha- vetted</b> . Sent for approval on 10.12.19 GA, Data Sheet & QAP of centrifuge pump <b>Pankha - Vetted</b> . Asked to submit stamped copies on 31.12.19 Pankha Structure design & drawing- approved on 08.11.19 BEP Pankha Str. Design-vetted on 07.10.19 Pankha BEP (structure) - appraisal and discussion with KRMPL on 12/10/2019 Boundary wall drgs approved by UPJN by 31.08.19 Process design including GAs on Pankha Facilities approved by UPJN by 31.08.19.
			BEP drawings excluding structural and electrical duly approved by IITR (16.08.19). To be approved by UPJN.
			GA, Data Sheet & QAP of submersible pump <b>Unnao - vetted</b> . Sent for approval on 10.12.19 GA, Data Sheet & QAP of centrifuge pump <b>Unnao - Vetted</b> . Asked to submit stamped copies on 31.12.19 BEP Unnao structure design-vetted on 03.10.19

			<p>Unnao Structure design- vetted by STC on 15.10.19</p> <p>Boundary wall drgs approved by UPJN by 31.08.19.</p> <p>Rest in progress.</p>
		Shuklaganj	<p>BEP drawings excluding structural and electrical duly approved by IITR (08.08.19). To be approved by UPJN.</p> <p>Shuklaganj site has been changed by UPJN on 19.08.19 in view of objection from UPPCB on the selected location by UPJN for its proximity to river Ganga</p>
		Jajmau STP 1	<p>Consensus compliance duly signed with hard copies of drawings submitted to UPJN on 23.07.19 for forwarding to IITR.</p> <p>IITR has indicated in writing that they would not be able to review any drawing and design beyond STPs at Shuklaganj, Unnao and Pankha till they receive advance or NMCG writes to Director of IITR. This constitutes only approx. 25% of the total estimated construction value wise.</p>
			Under process
i.	Prepare the Construction / renovation Plan for these Facilities within 30 days from the Appointed Date and submit the Construction Plan to the Jal Nigam for its approval in accordance with Article 7.3;	<p>Pankha</p> <p>Unnao</p> <p>Shuklaganj</p> <p>Jajmau STP 1</p>	Approved by UPJN for Pankha and Jajmau STP 1 on 30.08.19. Recommended by STP for approval on 30.08.19 for Unnao and Shuklaganj, under approval at UPJN, Lucknow.
ii.	Submit the ESHS Documents 45 days before the Effective Date to the Jal Nigam for its approval in accordance with Article 7.4;	<p>Pankha</p> <p>Unnao</p> <p>Shuklaganj</p> <p>Jajmau STP 1</p>	Approved for all Facilities by UPJN on 30.08.19. Recommended by STP on 30.08.19 for Shuklaganj and Unnao, under approval at UPJN Lucknow.
iii.	Execute and provide copy(ies) to the Jal Nigam of the technology license agreement(s) executed with the		

	Selected Bidder or the third party technology supplier(s) for setting up the Pankha, Unnao and Shuklaganj Facilities;		Agreement executed.
iv.	Submit to the Jal Nigam a certificate, duly attested by a Director, certifying due and satisfactory inspection/verification Of Jajmau STP 1 to be renovated and expressing its unconditional undertaking to renovate/repair the same without any defects/defaults under this Agreement.		Contractors workers at Jajmau plant are not allowing concessionaire personnel to visit the plant for inspection and survey since 29.07.19  KRMPL informed that it Shall be provided by 4.09.19
<b>B</b>	<b>For Jajmau Phase 1 Facilities and Sajari Facilities, before Effective Date</b>	<b>Submission</b>	<b>Status/Remarks</b>
i.	Submit O&M Manual 30 days before the Effective Date for these facilities for obtaining Jal Nigam's written approval in accordance with Article 8.2;		
a	Jajmau	Not needed before effective date. Needed before COD	
b	Sajari	O&M Manual sent for approval to UPJN by STC on dated 28.05.19	Manual on Sajari approved on 10.06.19
c	Bingawan	Submitted on 31.05.19 by the Concessionaire. Comments by STC on 07.06.19.  Reminders on 2nd July, 10th July and 14th Aug. Concessionaire committed to resubmit	Bingawan RTOLMS - Reviewed & found in order. Recommended for approval on 03.12.19 RTU Bingawan - Reviewed & found in order. Recommended for approval on 19.12.19 Level transmitter & flow metre - vetted & approved on 27.12.19

		on 06.09.19	
	Submit the ESHS Documents 45 days before the Effective Date to the Jal Nigam for its approval in accordance with Article 7.4;		
a	Jajmau	Submitted and principally found OK by STC with some comments.	Sent to UPJN
b	Sajari	Submitted and principally found OK by STC with some comments.	Sent to UPJN
	Submit to the Jal Nigam a certificate, duly attested by a Director, certifying due receipt of the above mentioned Facilities in a satisfactory condition latest by Effective Date;		
a	Jajmau	Awaited (Taken over for O&M wef 30.05.19 conditionally as per jointly signed mom)	
b	Sajari		Taken over for O&M wef 30.05.19 conditionally as per mom signed jointly
c	(Bingawan)*	Critical work including closing of boundary wall, construction of corridor for Mazar which is inside the plant and repair of DGF is pending. Trial run done	Submitted on 31.05.19 by the Concessionaire. Bingawan manual may be approved subject to incorporation of few points which has been complied and letter sent to UPJN on 17.08.19. Concessionaire committed to resubmit on 06.09.19.

		on 18th and 19th June. TSS was not met within guaranteed level during trial run. Plant conditionally taken over from 8.8.19 Certificate to be issued after completion of balance work. Currently the plant is under renovation.	
	Any other condition or obligation mutually agreed to be treated as Concessionaire's Condition Precedent;	-	
	Prepare the Construction/renovation Plan, if any, for these Facilities within 30 days from the Appointed Date and submit the Construction Plan to the Jal Nigam for its approval in accordance with Article 7.3.	-	
<b>C</b>	<b>Additionally, for the overall infrastructure in Kanpur</b>		<b>Status/Remarks</b>
i.	Execute the Substitution Agreement with the Jal Nigam, NMCG and the Lenders the agreed form set out at Schedule 3;		Submitted to NMCG on 02.09.19 for signature of NMCG and UPJN
ii.	Submit to the Jal Nigam certified true copies of all resolutions adopted by the board of directors of the Concessionaire, authorizing execution, delivery and performance of this Agreement, Substitution Agreement and the Escrow Agreement by the Concessionaire;		Submitted on 08.05.19
iii.	Any other condition or obligation mutually agreed to be treated as Concessionaire's Condition Precedent;		-do-



iv.	<p>Obtain all Concessionaire Applicable Permits that are required for achieving Financial Close and for commencement of construction/renovation of the Facilities at its own cost and expense and if such Concessionaire Applicable Permits are subject to any conditions, then, to the extent relevant, comply with all such conditions, such that the Concessionaire Applicable Permits are and shall be kept in full force and effect for the entire Construction Period, or such longer period as may be required under Applicable Laws;</p> <ul style="list-style-type: none"> <li>• Temporary power supply</li> <li>• Consent for storage of hazardous material</li> <li>• Consent Fire fighting system</li> </ul>	<ul style="list-style-type: none"> <li>• Application to EB submitted. In the meantime, construction work is being planned to be undertaken using DG sets.</li> <li>• Not applicable</li> <li>• Not applicable</li> </ul>
v.	<p>Achieve Financial Close and submit a copy of the Financing Documents and the Financial Package to the Jal Nigam, duly certified by a director of the Concessionaire within 120 days of the Appointed Date;</p>	<p>Sanction letter from lender with T&amp;C submitted on 18.04.19. Signed Agreement soft copy submitted on 30.08.19</p>
vi.	<p>Execute a Shareholders' Agreement amongst the shareholders of the Concessionaire, and deliver to the Jal Nigam a certified true copy of the Shareholders' Agreement (attested by a director of the Concessionaire);] 2</p>	<p>Submitted on 05.08.19</p>
vii.	<p>Execute the Escrow Agreement with the Jal Nigam, NMCG, and the Escrow Bank in the agreed form set out at Schedule 4;</p>	<p>Signed by Concessionaire on 04.07.19</p>
viii.	<p>Submit to the Jal Nigam certified true copies of the constitutional documents of the Concessionaire;</p>	<p>Submitted on 18.04.19</p>
ix.	<p>Submit to the Jal Nigam a legal opinion stating that:</p> <ol style="list-style-type: none"> <li>i. this Agreement, the Substitution Agreement and the Escrow Agreement have been duly executed and are legally valid, binding and enforceable in accordance with their terms against the Concessionaire; and</li> <li>ii. all actions, conditions and things required by Applicable Laws to be taken, fulfilled and done (including the obtaining of any necessary Concessionaire Applicable Permits and resolutions of the board of directors) in order for the Concessionaire to enter into and comply with its obligations under this Agreement, the Substitution Agreement and the Escrow Agreement have been taken, fulfilled or done.</li> </ol>	<p>Shall be submitted by 09.09.19 (after signing of Substitution Agreement)</p>
x.	<p>Submit to the Jal Nigam a certificate, duly attested by a director, certifying the shareholding pattern of the Concessionaire.</p>	<p>Submitted on 18.04.19</p>

## 6.2 BASIC ENGINEERING PACKAGE (BEPs) AND OTHER DETAILS

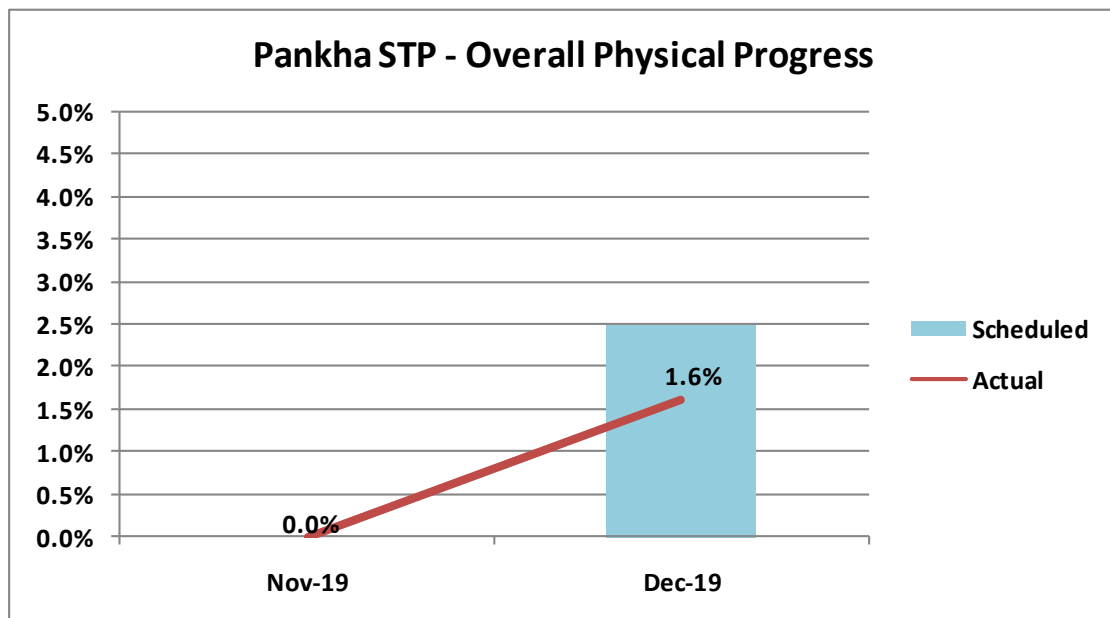
Detail Status of BEPs & other are given in following table 6.2:

**Table 6.2: BEPs and other details**

SN	Particulars	Status
1.	<b>BEPs (except structure design &amp; drawings)</b>	GA, Data Sheet & QAP of submersible pump <b>Pankha &amp; Unnao - vetted</b> . Sent for approval on 10.12.19 GA, Data Sheet & QAP of centrifuge pump <b>Pankha &amp; Unnao - Vetted</b> . Asked to submit stamped copies on 31.12.19
	• Process	
	• Mechanical	
	• Electrical & instrumentation	
2.	<b>BEP Structure Design &amp; Drawings</b>	Compound wall, MPS, PTU, C-Tech basin, CCT, Sludge Thickener, Supernatant sump, Centrifuge building, admin building, Staff quarters, Guard room)
3.	<b>Construction Plan</b>	ESHS approval-Already vetted by STC. Approved by UPJN on 26.09.19
4.	<b>Sewer Network/Line Design</b>	
5.	<b>Topo, Geo tech &amp; survey reports</b>	
6.	<b>ESHS Plan</b>	
7.	<b>Scope of Work- O&amp;M</b>	

## 7 PROGRESS OF WORK IN DECEMBER 2019

The overall physical progress of the facilities have been taken in the same proportion as financial progress as per milestones in approved Construction Plan. Overall progress has been divided in eight milestones each having progress of 12.5%. Therefore month wise schedule of progress is divided equally in the tenure of the milestones. For example; first milestones tenure is 5 months i.e. from 26<sup>th</sup> November 2019 to 25<sup>th</sup> April 2020 and per month progress works out to 2.5% per month (12.5% ÷ 5 months). In the same way overall progress has been derived by assigning equal weight to each activity as shown in the following graphs:



## **7.1 MILESTONE WISE ACTIVITIES AND THEIR PROGRESS**

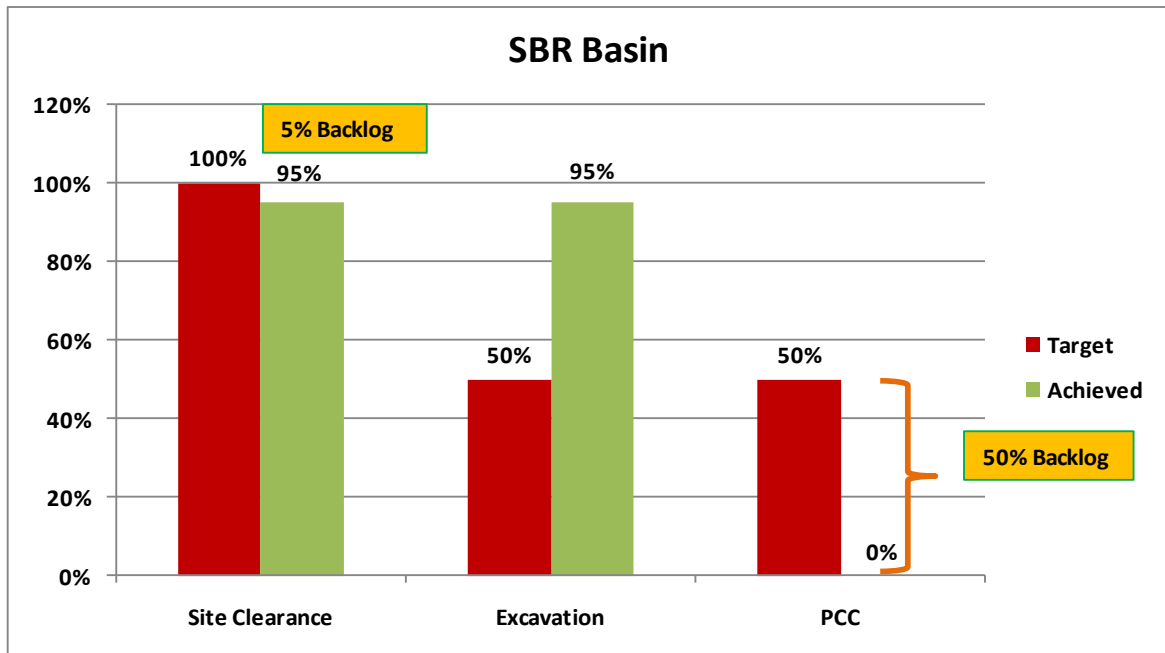
Milestone wise activities and their progress of work are given in following table 7.1(a) & (b):

**Table: 7.1(A) - Pankha Facilities (District III)**

SN	Description	Duration (days)	Start Date	Finish Date	1 <sup>st</sup> Milestone (due on 25.04.2020)	Proportionate Targets (as on 31.12.2019 )	Achieved	Backlog	Remarks
A	STP								
1	SBR Basin Area								
i	Site Clearance	1	26-Nov-19	26-Nov-19	100.00%	100%	95%	5%	Electric pole should be removed
ii	Excavation & PCC	70	27-Nov-19	04-Feb-20	100.00%	50%	95% Excavation 0% PCC	0% Excavation 100% PCC	Pole shifting is pending at UPPCL & KRMPL to pursue
19	Compound Wall								
i	Excavation & PCC	538	26-Nov-19	18-May-21	28.00%	7%	44% Excavation & 22% PCC	0%	Excavation 450m out of 1010m & only 76 pillar out of 352 PCC is done

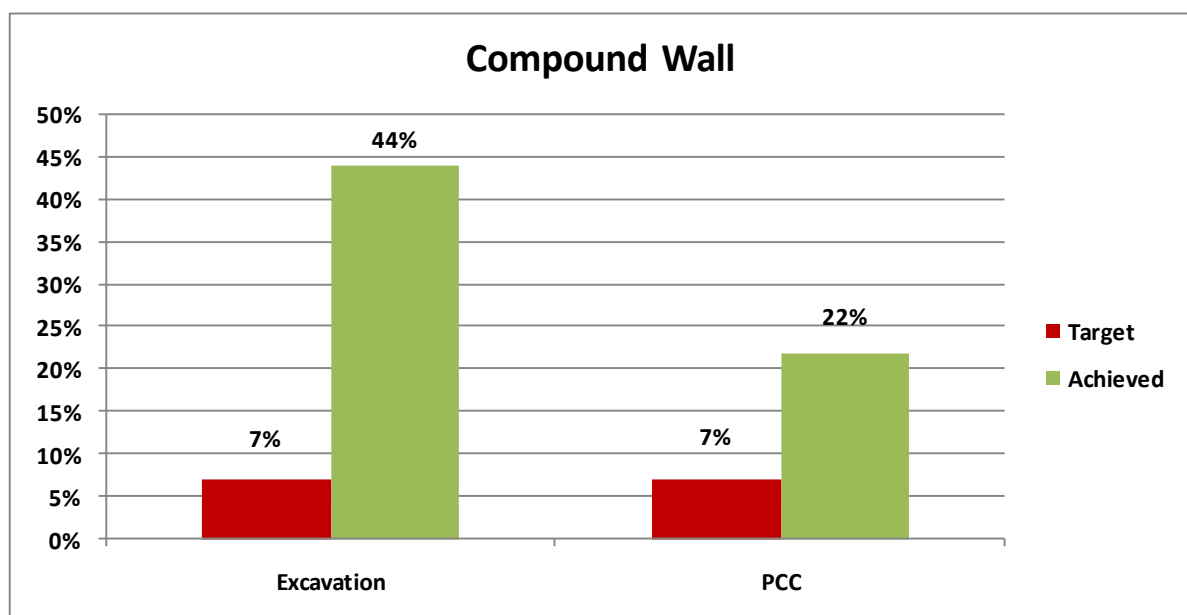
### 7.1.1 SBR BASIN – PANKHA FACILITY

For SBR basin of Pankha facility, site clearance activity was to be completed in November 2019. This activity is almost completed except few electric poles need to be removed / shifted. Excavation work is completed but PCC has not been done. Following graph shows the progress of work:



### 7.1.2 COMPOUND WALL– PANKHA FACILITY

Following graph shows the progress of work compound wall at Pankha facility:



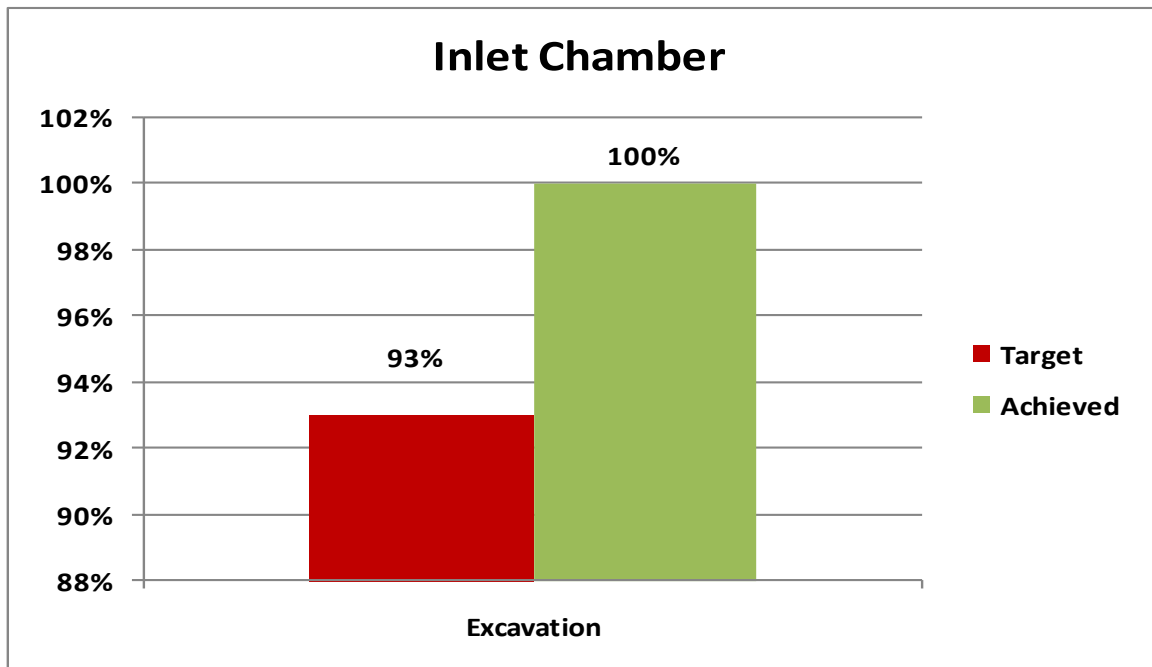
**Table: 7.1(B) - UNNAO FACILITIES**

SN	Description	Duration (days)	Start Date	Finish Date	First Milestone (due on 24.02.2020)	Proportionate Targets (as on 31.12.2019 )	Achieved	Backlog	Remarks
<b>1</b>	<b>STP</b>								
<b>A</b>	<b>Inlet chamber Area</b>								
	Site Clearance	1	12-Oct-19	12-Oct-19	100.00%	100.00%	100.00%	Nil	<b>Completed</b>
	Excavation	70	26-Oct-19	04-Jan-20	<b>100.00%</b>	<b>93%</b>	<b>Nil</b>	<b>100.00%</b>	Geo-Tech report under review
<b>B</b>	<b>Fine Screen Area</b>								
	Site Clearance	1	01-Nov-19	01-Nov-19	<b>100.00%</b>	100.00%	<b>100.00%</b>	<b>Nil</b>	Completed
	Excavation	70	02-Nov-19	10-Jan-20	<b>100.00%</b>	<b>86%</b>	<b>Nil</b>	<b>100.00%</b>	Geo-Tech report under review
<b>C</b>	<b>Grit Chamber Area</b>								
	Site Clearance	1	11-Nov-19	11-Nov-19	100.00%	100.00%	100.00%	Nil	Completed
	Civil work	104	12-Nov-19	24.Feb.20	<b>100.00%</b>	<b>48%</b>	<b>Nil</b>	<b>100.00%</b>	Geo-Tech report under review
<b>D</b>	<b>Parshall Flume Channel Area</b>								
	Site Clearance	1	28-Nov-19	28-Nov-19	100.00%	100.00%	100.00%	Nil	Completed
	PCC & Raft Work	104	29 Nov-19	12-Mar-20	84%	<b>30%</b>	<b>Nil</b>	<b>84.00%</b>	Geo-Tech report under review
<b>E</b>	<b>SBR Basin Area</b>								

	Site Clearance	1	16-Dec-19	16-Dec-19	100.00%	100.00%	<b>100.00%</b>	<b>Nil</b>	Completed
	PCC & Raft Work	104	17-Dec-19	30-Mar-20	67%	<b>13%</b>	<b>Nil</b>	<b>100.00%</b>	Geo-Tech report under review
<b>F</b>	<b>Chlorination Tank Area</b>								
	Site Clearance	1	25-Dec-19	25-Dec-19	100.00%	100.00%	<b>100.00%</b>	<b>Nil</b>	Completed
	PCC & Raft Work	86	26-Dec-19	21-Mar-20	70.00%	<b>6%</b>	<b>Nil</b>	<b>100.00%</b>	Geo-Tech report under review
<b>G</b>	<b>Sludge Thickener Area</b>								
	Site Clearance	1	25-Dec-19	25-Dec-19	100.00%	100.00%	<b>100.00%</b>	<b>Nil</b>	Completed
	PCC & Raft Work	86	26-Dec-19	21-Mar-20	70.00%	<b>6%</b>	<b>Nil</b>	<b>100.00%</b>	Geo-Tech report under review
<b>J</b>	<b>External Development</b>								
	Boundary Wall	434	12-Oct-19	19-Dec-20	31.00%	18.00%	<b>5.00%</b>	<b>13.00%</b>	Stopped on 10.12.19 as increased water table was detected.

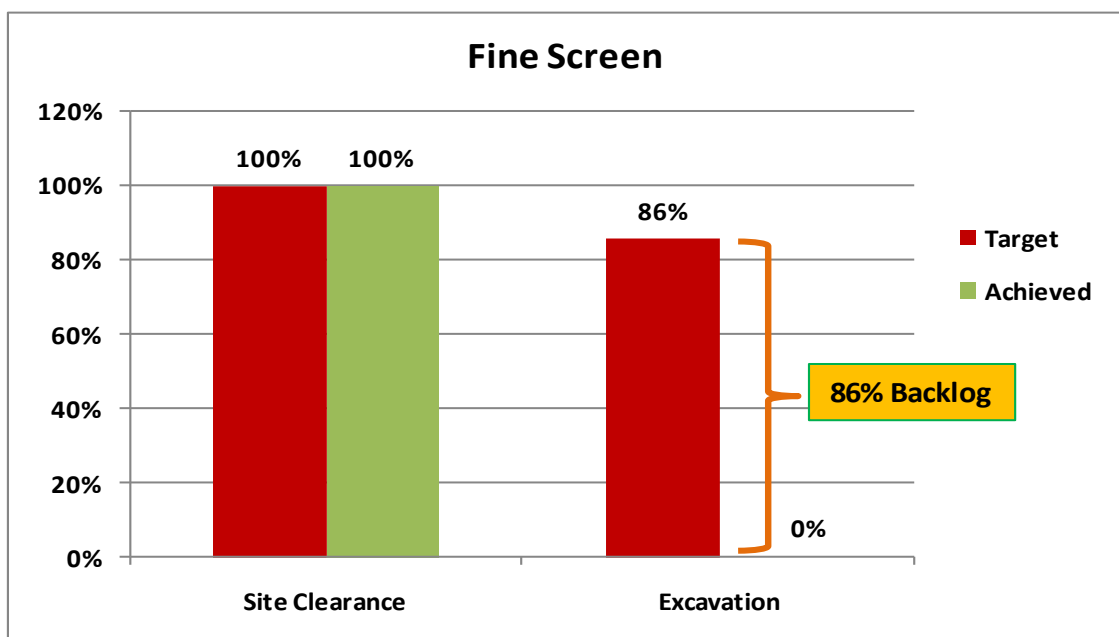
### 7.1.3 INLET CHAMBER- UNNAO FACILITIES

The proportionate target of for Inlet chamber of Unnao facility in the month of December 2019 was excavation 93%. Excavation work has been done. Following graph shows the progress of work:



### 7.1.4 FINE SCREEN - UNNAO FACILITIES

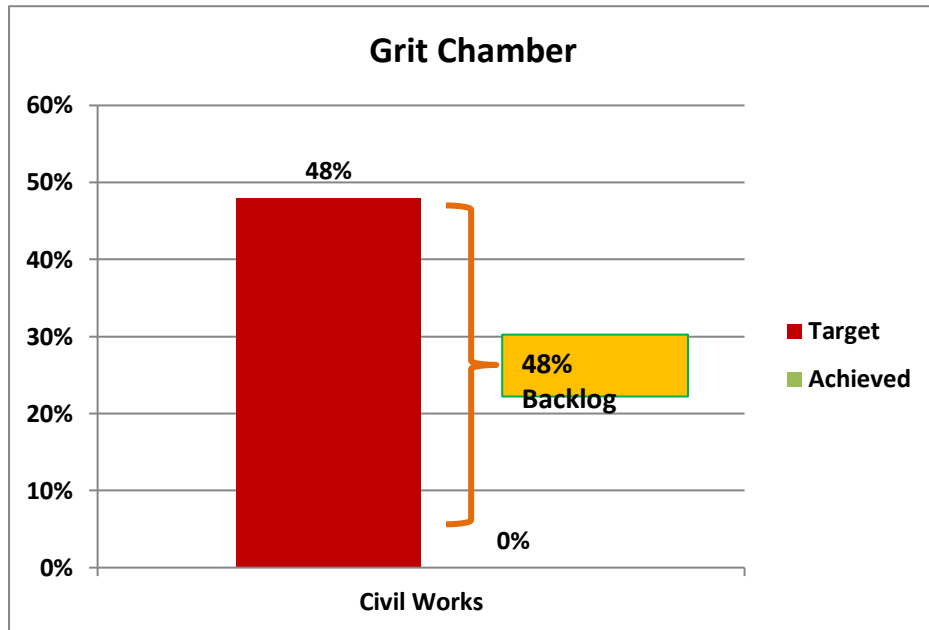
The proportionate target of for fine screen of Unnao facility in the month of December 2019 was site clearance (100%) and excavation (86%). Excavation work has not been started. Following graph shows the backlog of work:





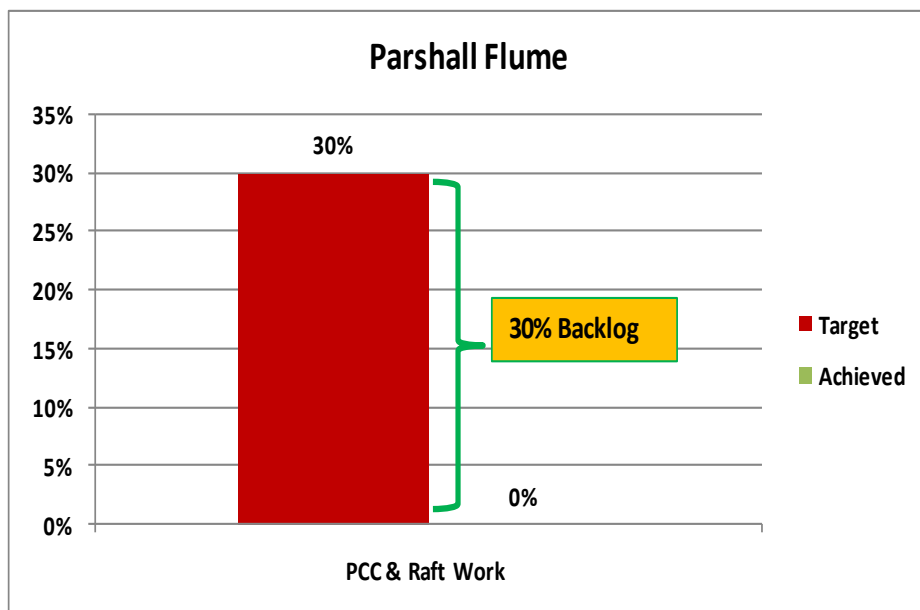
### 7.1.5 GRIT CHAMBER - UNNAO FACILITIES

The proportionate target of for grit chamber of Unnao facility in the month of December 2019 was civil works 48%. Civil works work has not been started. Following graph shows the backlog of work:



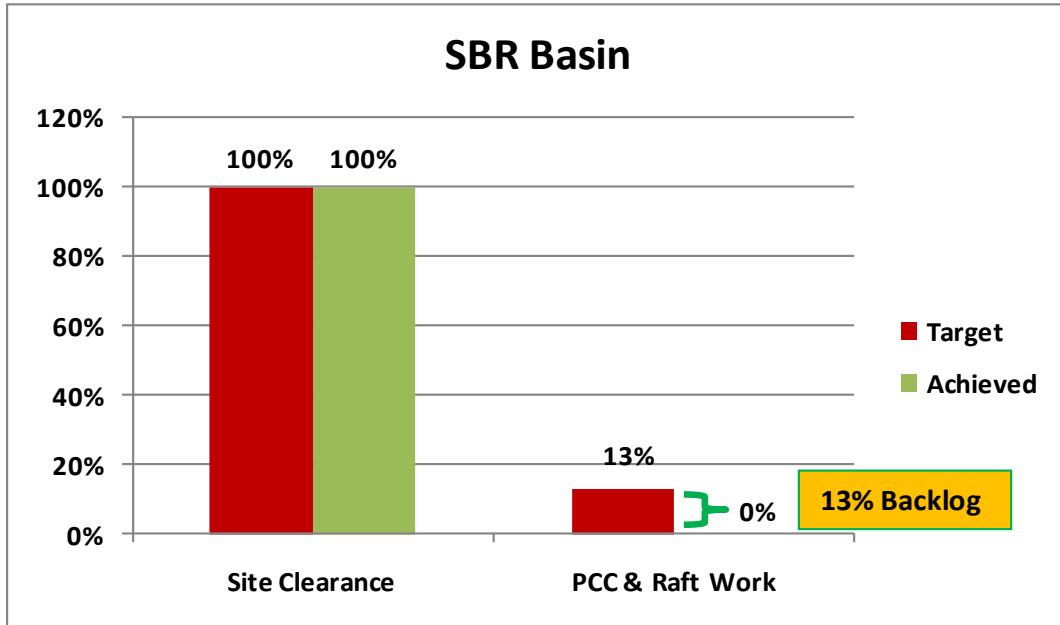
### 7.1.6 PARSHALL FLUME - UNNAO FACILITIES

The proportionate target of for Parshall flume of Unnao facility in the month of December 2019 was PCC & Raft work 30%. Following graph shows the backlog of work:



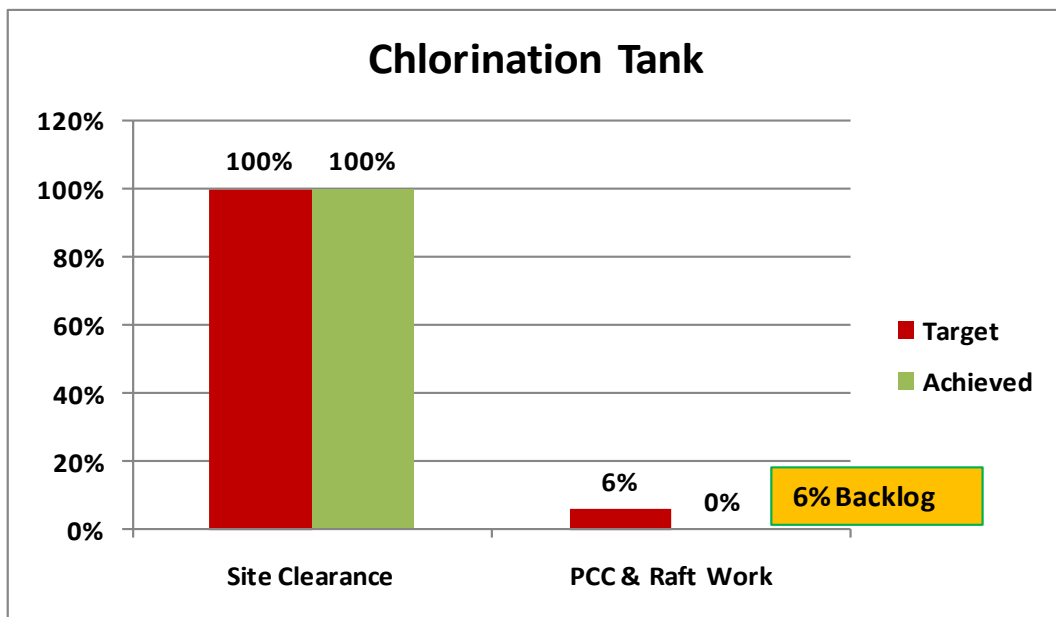
### 7.1.7 SBR BASIN - UNNAO FACILITIES

The proportionate target of for SBR basin of Unnao facility in the month of December 2019 was PCC & Raft work 13%. It has not been completed. Following graph shows the backlog of work:



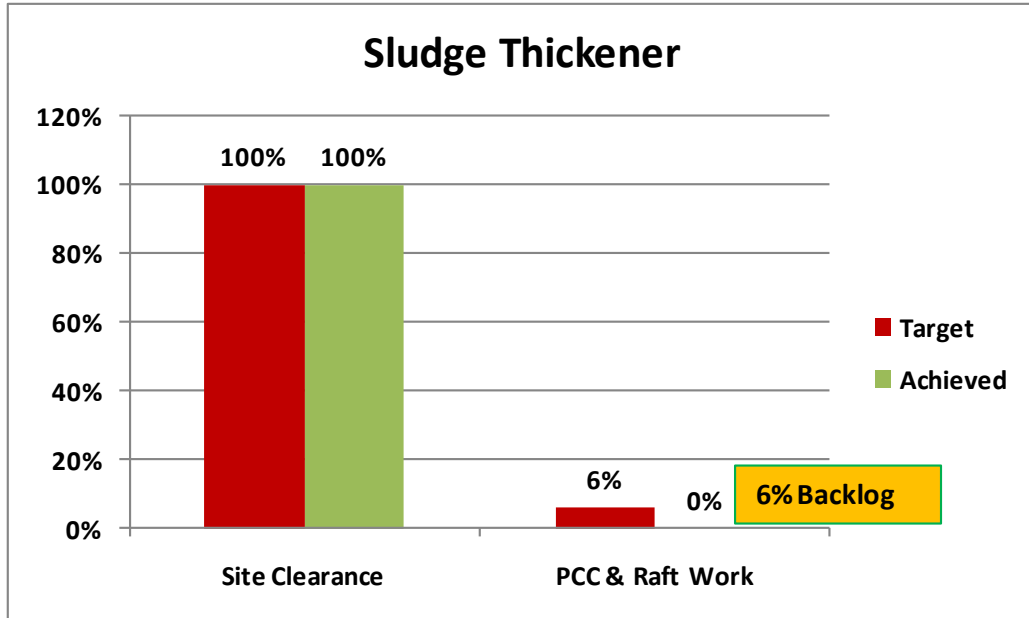
### 7.1.8 CHLORINATION TANK - UNNAO FACILITIES

The proportionate target of for chlorination tank of Unnao facility in the month of December 2019 was PCC & Raft work 6%. It has not been completed. Following graph shows the backlog of work:



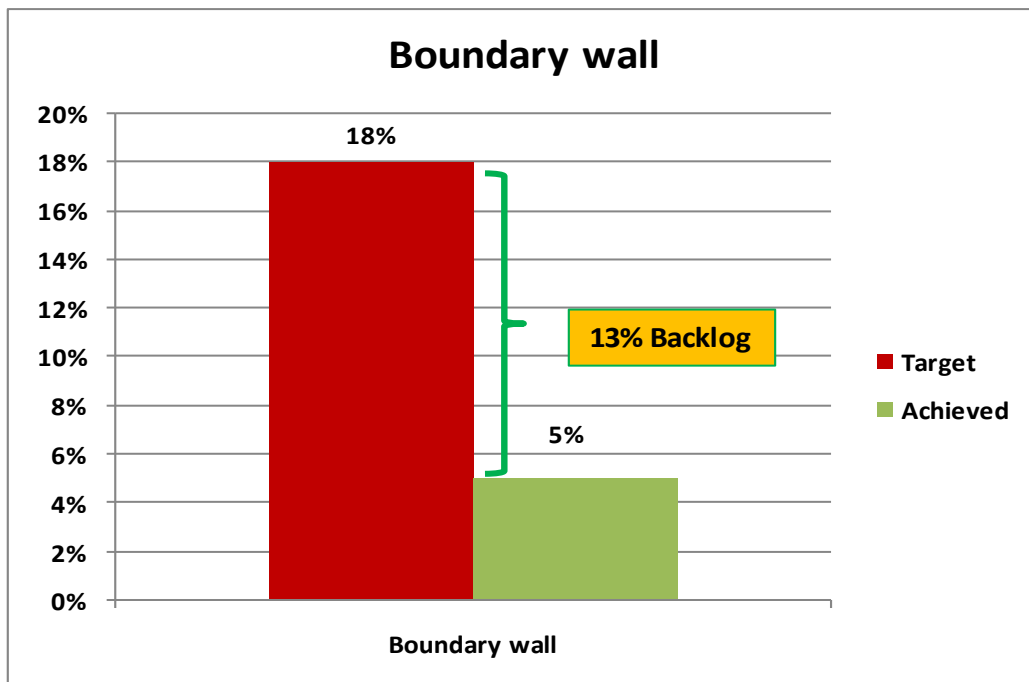
### 7.1.9 SLUDGE THICKENER - UNNAO FACILITIES

The proportionate target for sludge thickener of Unnao facility in the month of December 2019 was PCC & Raft work 6%. It has not been completed. Following graph shows the backlog of work:



### 7.1.10 BOUNDARY WALL - UNNAO FACILITIES

The proportionate target for boundary wall of Unnao facility in the month of December 2019 was 18%. It has not been completed. Following graph shows the backlog of work:



**Table 7.2: Progress of Work – HAM Kanpur Project (on NMCG Performa)**

Date	Name of Activity#	Date of Receipt	Date of Approval (Vet / Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessi onaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
01.12.19	<b>SUNDAY</b>												
02.12.19	Attended office	-	-	0	20	-	-	Mr. CM Dimri	1	-	-	-	Discussion on various issues in project
03.12.19	Bingawan RTOLMS	J-104/ 06.12.19  K-248/ 28.11.19	06.12.19 S-243	0	20	-	-	Mr. CM Dimri	1	-	-	-	Reviewed & found in order. Recommended for approval
	I&D works Unnao		03.12.19 S-237	0	20	-	-	Mr. CM Dimri		-	-	-	Expert comments sent
	I&D works Pankha		03.12.19 S-236	0	20	-	-	Mr. CM Dimri		-	-	-	comments sent for necessary action
04.12.19	Attended office	-	-	0	20	-	-	Mr. CM Dimri	1	-	-	-	Discussion on various issues in project
05.12.19	Bingawan O&M manual	J-95/ 07.12.19  K-251/ 02.12.19	10.12.19 S-249	3	20	-	-	Mr. JP Tripathi	1	-	-	-	Proposed a joint meeting to discuss the issue
	handing over hard copies of Str. Design of Unnao		05.12.19 S-241	0	20	-	-	Mr. CM Dimri		-	-	-	hard copies of 9 units sent

06.12.19	transformer & DG calculation Pankha	09.12.19 J-482	NA	0	20	-	-	Mr. CM Dimri	1	-	-	-	for office record
	improvement proposed in Sajari STP		06.12.19 S-243	0	20	-	-	Mr. JP Tripathi		-	-	-	information about improvement proposed in Sajari STP to UPJN
07.12.19	O&M payment for Sajari before ED	09.12.19 K-257	NA	0	20	-	-	Mr. JP Tripathi	1 +1	-	-	-	for office record
	improvement plan for Sajari	09.12.19 K-258	09.12.19 S-248	0	20	-	-	Mr. JP Tripathi		-	-	-	inform UPJN to direct Concessionaire for compliance for our earlier letter S-227
	Jajmau electrical drawings	07.12.19 K-255	13.12.19 S-253	6	20	-	-	Mr. CM Dimri		-	-	-	Comments sent for compliance
08.12.19	<b>SUNDAY</b>												
09.12.19	construction of Pankha facility		09.12.19 S-245	0	20	-	-	Mr. CM Dimri	1	-	-	-	comments sent for necessary action
	construction of Unnao facility		09.12.19 S-246	0	20	-	-	Mr. CM Dimri		-	-	-	asked UPJN to direct KRMPL for referred submission

10.12.19	submission of monthly activity report for Sajari	10.12.19 K-259	NA	0	20	-	-	Mr. JP Tripathi	1 +1	-	-	-	for office record
	improvement plan for Sajari	10.12.19 K-263	11.12.19 S-251	1	20	-	-	Mr. JP Tripathi		-	-	-	asked to submit required design calculation to vet the improvement plan
	monthly report for Sajari	21.12.19 K-259	NA	0	20	-	-	Mr. JP Tripathi		-	-	-	for office record
	submission of monthly activity report for Bingawan	10.12.19 K-260	NA	0	20	-	-	Mr. JP Tripathi		-	-	-	for office record
	GA, Data Sheet & QAP of submersible pump Pankha	10.12.19 K-261	28.12.19 S-265/268	18	20	-	-	Mr. CM Dimri		-	-	-	Vetted. Asked to submit stamped copies
	Drawing/data sheet Unnao	12.12.19 J-01	13.12.19 S-254	1	20	-	-	Mr. CM Dimri		-	-	-	vetted. Sent for approval
11.12.19	Hard copies of BEP R2 Unnao		11.12.19 S-252	0	20	-	-	Mr. CM Dimri	1	-	-	-	handed over 2 signed copies of BEP R2
12.12.19	Attended office	-	-	0	20	-	-	Mr. CM Dimri	1	-	-	-	Discussion on various issues in project
13.12.19	Hard copies of BEP R2 Unnao		13.12.19 S-252	0	20	-	-	Mr. CM Dimri	1	-	-	-	handed over 3 signed copies of BEP R2

	CP Unnao	13.12.19 K-264	13.12.19 S-255	0	20	-	-	Mr. CM Dimri		-	-	-	Asked to submit CP in place of manual
14.12.19	RTOLMS Bingawan	16.12.19 k-265	28.12.19 S-264	12	20	-	-	Mr. JP Tripathi	1	-	-	-	Reviewed & found in order. Recommended for approval
15.12.19	<b>SUNDAY</b>												
16.12.19	Attended office	-	-	0	20	-	-	Mr. CM Dimri	1	-	-	-	Discussion on various issues in project
17.12.19	Sajari trunk sewer line	26.12.19 J-131	NA	0	20	-	-	Mr. JP Tripathi	1 +1	-	-	-	for office record
	construction of Pankha facility	24.12.19 J-111	NA	0	20	-	-	Mr. CM Dimri		-	-	-	for office record
	BEP Rehabilitation Jajmau	21.12.19 K-270	24.12.19 S-261	3	20	-	-	Mr. CM Dimri		-	-	-	asked to refer our letter S-232/23.11.19 & S-202/14.10.19
19.12.19	RTU Bingawan	24.12.19 J-108	28.12.19 S-264	4	20	-	-	Mr. JP Tripathi	1	-	-	-	Reviewed & found in order. Recommended for approval
20.12.19	pipe bedding & manhole details- Pankha/Unnao	21.12.19 K-271	24.12.19 S-262	3	20	-	-	Mr. CM Dimri	1 +1	-	-	-	comments sent
	disposal of treated sewage- Bingawan	23.12.19 K-272	NA	0	20	-	-	Mr. JP Tripathi		-	-	-	for office record (soft copy not received)

21.12.19	Attended office	-	-	0	20	-	-	Mr. CM Dimri	1	-	-	-	Discussion on various issues in project
22.12.19	<b>SUNDAY</b>												
23.12.19	Silt disposal	26.12.19 J-132	NA	0	20	-	-	Mr. JP Tripathi	1+1	-	-	-	for office record
	Sajari facilities	26.12.19 K-273	NA	0	20	-	-	Mr. JP Tripathi		-	-	-	for office record
24.12.19	improvement proposed in Sajari STP		24.12.19 S-259	0	20	-	-	Mr. CM Dimri	1+1	-	-	-	sent specific comments for improvement to UPJN
	BEP Rehabilitation in Jajmau		Reminder to UPJN / KRMPPL	0	20	-	-	Mr. CM Dimri		-	-	-	Reminder to comply our comments dated 23/23.11.19 & 20/14.10.19
25.12.19	Attended office	-	-	0	20	-	-	Mr. CM Dimri	1	-	-	-	Discussion on various issues in project
26.12.19	improvement plan for Sajari implementation	26.12.19 K-277	NA	0	20	-	-	Mr. JP Tripathi	1+1	-	-	-	for office record
	Sajari trunk sewer line	26.12.19 K-275	NA	0	20	-	-	Mr. JP Tripathi		-	-	-	for office record
	I&D works Pankha		26.12.19 S-263	0	20	-	-	Mr. CM Dimri		-	-	-	asked for compliance of S-236/03.12.19
27.12.19	Level transmitter & flow metre	28.12.19 K-279	31.12.19 S-271	3	20	-	-	Mr. JP Tripathi	1	-	-	-	vetted & approved



	PDS for RTU-Bingawan	27.12.19 K-278	01.01.20 S-274	5	20	-	-	Mr. JP Tripathi		-	-	-	comments sent for compliance
28.12.19	Bingawan site safety inspection	31.12.19 J-55	NA	0	20	-	-	Mr. JP Tripathi	1	-	-	-	for office record
	GA, Data Sheet & QAP of submersible pump	28.12.19 K-261	28.12.19 S-266	0	20	-	-	Mr. JP Tripathi		-	-	-	Signed & Stamped copy not submitted
29.12.19	<b>SUNDAY</b>												
30.12.19	Sajari aeration System for COD removal		30.12.19 S-267	0	20	-	-	Mr. CM Dimri	1	-	-	-	sent specific comments for improvement to UPJN and asked to direct concessionaire for compliance of comments
	GA, Data Sheet & QAP of submersible pump Unnao	28.12.19 K-262	30.12.19 s-269	2	20	-	-	Mr. CM Dimri		-	-	-	asked for revised submission after incorporating the comments
31.12.19	GA, Data Sheet & QAP of centrifuge pump Unnao	15.12.19 K-217	31.12.19 S-272	16	20	-	-	Mr. CM Dimri	1	-	-	-	Vetted. Asked to submit stamped copies
	GA, Data Sheet & QAP of centrifuge Pankha	24.10.19 K-217	31.12.19 S-272	7	20	-	-	Mr. CM Dimri		-	-	-	Vetted. Asked to submit stamped copies
<b>Total</b>									<b>3+31+2+28+15+30+6+31</b>				



## 8 LIST OF LETTER

Details of letters during December 2019 are given in below table:

**Table 7.1: Inward Letter**

SN	DATE	LETTER NO.	SUBJECT	RECEIVED
1.	02-12-19	k/251	development of STP O&M manual for Bingawan facilities	02-12-19
2.	06-12-19	W-10/104	Renovation of Bingawan RTOLMS development of STP	06-12-19
3.	05-12-19	w-49/95	O&M manual Bingawan facility	07-12-19
4.	07-12-19	k/255	Submission of electrical drawings for 130 MLD STP Jajmau	07-12-19
5.	05-12-19	k/253	submission of Submission of revised electro mechanical items manufacturer/vender/supplier for Unnao STP	09-12-19
6.	07-12-19	k/256	Request for carry out RCC Mix design	09-12-19
7.	07-12-19	k/257	O&M payment for Sajari before effective date	09-12-19
8.	07-12-19	k/258	improvement plan for Sajari	09-12-19
9.	06-12-19	w-20/482	Vetting & approval of design and drawing various components of sewage works in Kanpur	09-12-19
10.	07-12-19	k/336	Vetting & approval of design and drawing various components of sewage works	07-12-19
11.	10-12-19	k/259	Submission of monthly activity report of 42 MLD Sajari plant for the Month Nov.	10-12-19 & 21-12-19
12.	10-12-19	k/260	Submission of monthly activity report of 210 MLD Bingawan plant for the Month Nov.	10-12-19 & 21-12-19
13.	10-12-19	k/261	Submission of GA. Technical data & QAP of submersible pump for 30 MLD Pankha.	10-12-19
14.	10-12-19	k/262	Submission of GA. Technical data & QAP of submersible pump for 15 MLD Unnao & 5 MLD Shuklaganj.	10-12-19
15.	10-12-19	k/263	improvement plan for Sajari	10-12-19
16.	10-12-19	M-51/01	15 MLD, STP drawing & data sheet	12-12-19
17.	12-12-19	k/264	Construction plan Unnao	13-12-19
18.	14-12-19	k/265	Renovation of Bingawan RTO LMS	16-12-19
19.	07-12-19	k/268	submission of environment & social impact assessment progress report for HAM, Kanpur	18-12-19
20.	17-12-19	k/269	reply to comments of BEP rehabilitation of Jajmau facilities	18-12-19
21.	18-12-19	w-49/112	Construction of Pankha facilities	19-12-19
22.	18-12-19	k/270	Reply to comments of BEP for rehabilitation of Jajmau facilities	21-12-19
23.	20-12-19	k/271	Submission of drawing regarding pipe bedding & manhole details for Unnao and Pankha	21-12-19
24.	20-12-19	k/272	Disposal of treated sewage from Bingawan 210 MLD STP	23-12-19
25.	17-12-19	w-2A/131	Trunk sewer line	26-12-19
26.	23-12-19	w-2A/132	Land accusation for Sajari 42mld	26-12-19
27.	23-12-19	k/273	Sajari facilities	26-12-19
28.	25-12-19	k/274	RTOLMS Bingawan	26-12-19
29.	26-12-19	k/276	Insurance policies	26-12-19
30.	26-12-19	k/275	Trunk sewer Sajari	26-12-19
31.	26-12-19	k/277	Sajari improvement plan implementation	26-12-19
32.	27-12-19	k/278	PDS for RTU for Bingawan RTOLMS	27-12-19
33.	28-12-19	k/279	Level treatment and flow meter RTOLMS, Bingawan	28-12-19

34.	06-12-19	w-5A/335	Regarding approval of structural design of works proposed under NMCG, Unnao	28-12-19
35.	28-12-19	w-10/520	Pankha STP construction site inspection report	31-12-19
36.	28-12-19	w-20/521	Submission of drawing regarding pipe bedding & manhole details for Unnao and Pankha facilities	31-12-19
37.	28-12-19	w-37/54	O&M Bingawan STP site safety inspection	31-12-19
38.	27-12-19	w-10/109	45 MLD RSPH and 3.5 MLD Permit, 3.5 MLD Guptar Ghat	03-01-2020
39.	31-12-19	w-5-79/366	Development of at Nagar Palika Parishad Unnao	07-01-2020

**Table: Outward Letter**

SN	Date	To Whom Sent	Place	Subject
1.	03.12.19	G.M, UPJN	Kanpur	comments over I&D work Pankha
2.	03.12.19	SE-3rd Circle	Lucknow	comments over I&D work Unnao
3.	26.11.19	Madhava Kr. NMCG	New Delhi	submission of invoices with MPR
4.	29.11.19	G.M, UPJN	Kanpur	insurance policy Sajari
5.	03.12.19	G.M, UPJN	Kanpur	submission of revised electro mechanical items manufacturer/ supplier/ vender
6.	05.12.19	SE-3rd Circle	Lucknow	handing over the hard copies of structural design Unnao
7.	05.12.19	G.M, UPJN	Kanpur	submission of revised electro mechanical items manufacturer/ supplier/ vender
8.	06.12.19	G.M, UPJN	Kanpur	renovation of Bingawan RTOLMS
9.	09.12.19	G.M, UPJN	Kanpur	daily report of Bingawan facility
10.	09.12.19	G.M, UPJN	Kanpur	construction of Pankha facility
11.	09.12.19	SE-3rd Circle	Lucknow	construction of Unnao facility
12.	09.12.19	SE-3rd Circle	Lucknow	handing over the hard copies of structural design Unnao
13.	09.12.19	G.M, UPJN	Kanpur	improvement plan for Sajari STP
14.	10.12.19	G.M, UPJN	Kanpur	O&M manual Bingawan facility
15.	11.12.19	SE-3rd Circle	Lucknow	handing over the hard copies of BEP R-2 Unnao
16.	11.12.19	G.M, UPJN	Kanpur	improvement plan for Sajari STP
17.	13.12.19	SE-3rd Circle	Lucknow	handing over the hard copies of BEP R-2 Unnao
18.	13.12.19	G.M, UPJN	Kanpur	electrical drawing Jajmau
19.	13.12.19	PM IV, UPJN	Lucknow	electrical drawing Unnao
20.	13.12.19	SE-3rd Circle	Lucknow	construction plan Unnao
21.	18.12.19	G.M, UPJN	Kanpur	Site safety inspection Sajari
22.	21.12.19	G.M, UPJN	Kanpur	construction of Pankha facility ESIA
23.	21.12.19	G.M, UPJN	Kanpur	site inspection report Pankha
24.	24.12.19	PM II, UPJN	Kanpur	proposal for improvement Sajari STP
25.	24.12.19	G.M, UPJN	Kanpur	site inspection of Bingawan STP
26.	24.12.19	G.M, UPJN	Kanpur	BEP for rehabilitation of Jajmau facility
27.	24.12.19	G.M, UPJN	Kanpur	Manhole details & pipe bedding Pankha & Unnao facility
28.	26.12.19	G.M, UPJN	Kanpur	I&D works comments Pankha
29.	28.12.19	G.M, UPJN	Kanpur	comments over RTOLMS Bingawan
30.	28.12.19	G.M, UPJN	Kanpur	signed copy of GA, data sheet & QAP of pump, Pankha
31.	28.12.19	SE-3rd Circle	Lucknow	signed copy of GA, data sheet & QAP of pump, Unnao &

				Shuklaganj
32.	30.12.19	G.M, UPJN	Kanpur	aeration system for COD removal Sajari
33.	30.12.19	G.M, UPJN	Kanpur	signed copy of GA, data sheet & QAP of submersible, Pankha
34.	30.12.19	SE-3rd Circle	Lucknow	signed copy of GA, data sheet & QAP of submersible, Unnao & Shuklaganj
35.	30.12.19	SE-3rd Circle	Lucknow	Site inspection report, Unnao
36.	31.12.19	G.M, UPJN	Kanpur	RTOLMS level transmitter & flow meters
37.	31.12.19	G.M, UPJN	Kanpur	signed copy of GA, data sheet & QAP of centrifuge, Pankha, Unnao & Shuklaganj

## 9 MINUTES OF MEETING

Minutes of meetings are annexed in Annexure 4.

## 10 MOBILIZATION PLAN

Mobilization plan for Oct 2019 is given below:

### Present

Name	Designation	Joining Date
NA	NA	NA

### Next Month

Name	Designation	Joining Date
NA	NA	NA

# ANNEXURES

### Annexure 1: Site Visit Photographs



**Pankha STP Site**



**Pankha STP Site**



**Unnao STP Site**



**Unnao STP Site**

**Site Visit Photographs**



**Bingawan STP**



**Bingawan STP**



**Sajari STP**



**Sajari STP**



STP facilities Site Photographs: Pankha

Pankha Boundary Wall



Excavation work of SBR

STP facilities Site Photographs: Unnao

Unnao Boundary Wall



## Annexure 2: Minutes of Meeting

OFFICE OF THE GENERAL MANAGER, GANGA POLLUTION CONTROL UNIT,  
U.P. JAL NIGAM, KANPUR

Minutes of meeting held on 16.12.2019 with representatives of M/S Kanpur River Management Pvt. Limited, Engineers of M/S Shah Technical Consultants Pvt. Limited, Concerning Project Managers & Project Engineers of Ganga Pollution Control Unit, U.P.Jal Nigam for discussion on following points and suggested Actions

The meeting was attended by officers/representative of U.P. Jal Nigam/ STC/ KRMPL as per the attendance sheet enclosed herewith.

Sl.No.	Points for discussion	Suggested Actions
1.	Last six months performance at Bingawan and Jajmau for O&M performance during renovation.	For Bingawan it will be given by P.M.-III and for Jajmau it will be given by P.M.-I within a week.
2.	Bingawan Insurance – Confirmation on replacement cost.	Bingwan value for replacement cost shall be given by P.M.-III in a week.
3.	UPJN representative after effective date	Shri Pankaj Yadav, P.M-I is nominated as representative after effective date as per caluse 7.8 (a).
4.	Bingawan DFG repair – schedule for the same. Interim performance in view of non-availability of one DFG.	DFG repair will be done by P.M.(E&M) maximum in a month time.
5.	Sajari O&M payments.	Sajari O&M payments as per sanction given by NMCG as discussed in meeting shall be processed by P.M.-2 & P.M.(E&M) in 3-4 days.
6.	Finalization of Improvement plan at Sajari.	KRMPL has to submit calculations required for Additional Aeration Tank as discussed with both STC & GPCU.
7.	Disposal of sludge from Sajari Facilities.	P.M-2 has to do necessary action to find out a place through Nagar Nigam within 10 km of plant.
8.	Higher than contractual COD in the incoming at Bingawan and Sajari Facilities.	Inlet parameters of COD are to be checked jointly at least 4 times in a month by KRMPL and respective staff of U.P.Jal Nigam.
9.	Entry permits for Jajmau plant on continuous basis for	P.M.-I will issue permit for 3 people on request of KRMPL with proper I.D. etc.

Seen

24/12/19  
O&M Engg

Seen

M-  
21/12/19J  
18/12Seen  
P.M.  
18/12  
24/12

1/3

	renovation team.	
10.	Uploading of cross section drawing for piping work for permission from NHA and Railways	Mr. Atif, P.E. (P.M-III) will do the necessary action in a week time.
11.	Repair of Boundary wall at Bingawan Plant.	Under execution by P.M.-III. They are trying their best to sort out the issues of land dispute.
12.	Dealing with PCB for Bingawan Plant.	KRMPL will deal with the issues related to PCB.
13.	Approval of piping drawing for Panka.	Approval will be processed within 3-4 days by P.M.-III.
14.	Schedule for completion of approach road for pank and Unnao STP.	P.M.-III assured that approach road for Panka will be completed upto March-April 2020.
15.	Schedule for providing DG set and on line Facilities at Sajari.	P.M.(E&M) has to complete the supply of DG set up to 31.01.2020 and online monitoring facilities up to 15.02.2020.
16.	CTO for Bingawan, Sajari and Jajmau Facilities.	CTO has been applied by concerned P.M.'s. They have been directed to follow up please.
17.	Approval of sub contractors.	KRMPL may submit the proposal for subletting the particular work instead of subletting the whole scope of work.

Besides above Mr J.P.Tripathi, O & M Engineer, Mr. Dimri, Team Leader from STC and PM III GPCU also put up some issues for which decisions have been taken as below:-

- a) KRMPL is to incorporate in the O&M manual submitted for Bingawan
  - (i) Provision and methodology of sludge disposal at a place decided by UPJN within 10 Km.
  - (ii) The procedure of yearly maintenance of the plant without threatening to environment of river Pandu.
  - (iii) Details of On Line Monitoring System to be submitted separately after installation of the system which will be part of O & M Manual.
  - (iv) revised list of manpower to be deployed as per Labour Laws.
- b) ESAMP QPR to be submitted by KRMPL at the earliest.

*J.P.Tripathi*  
18/12

2/3

- c) At least once in a month joint sampling of raw sewage and treated effluent to be done by KRMPL and UPJN and testing to be get done by IIT Kanpur.
- d) Handing Over of I & D Bakarmandi to be done after joint inspection within a week.
- e) KRMPL is to insure repair of all the Pumping Plants installed at MPS and IPSs of all the facilities to insure 100% availability.
- f) The maintenance of trunk sewers for Bingawan & Sajari is in the scope of KRMPL, so they should take over it at the earliest.



(H.K.Kansal)  
General Manager

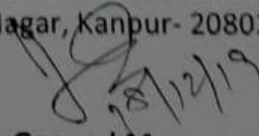
OFFICE OF THE GENERAL MANAGER, GANGA POLLUTION CONTROL UNIT,  
U.P. JAL NIGAM, KANPUR

Letter No.- 3847 / M.2A / 116

Date- 18-12-2019

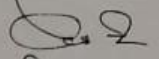


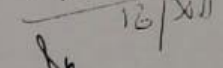
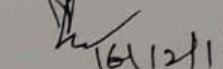

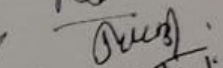
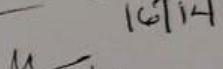
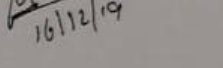
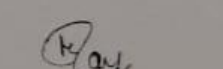
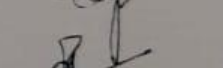
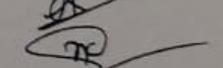
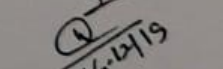
Copy forward to the following for information and necessary action with enclosure -

1. Chief Engineer (Kanpur Zone), UPJN, Benajhaber Road, Kanpur.
2. Project Manager (I/III/E&M), Ganga Pollution Control Unit, U.P. Jal Nigam, Kanpur.
3. Project Manager, Construction Unit-2, U.P. Jal Nigam, Kanpur.
4. Project Manager, Kanpur River Management Pvt. Ltd, Flat No. 101, First Floor, 3/83, Vishnupuri, Kanpur.
5. Project Engineer, NMCG Kanpur, STC Pvt. Limited. 117/426-14-O Block, Geeta Nagar, Opp. Anurag Hospital, Sharda Nagar, Kanpur- 208025.



General Manager

Meeting held on 16.12.2019 with KRMPL,  
STC & GPCU officials

1. H. K. KANSAL	GM GPCU	
2. Devenendra Singh	RM 2 GPCU	
3. C. M. D. Desai	TZ/SEC	 16/12/19
4. J. P. Tripathi	O&M Engr	 16/12/19
5. M. Ahsan	P. M G. P. C. U. Kanpur	 16/12/19
6. Mohd. Maaz	P.M (E/M), Kanpur	 16/12/19
7. P. C. Shankle	Director, SPCL	 16/12/19
8. Atif Hussain Khan	P.E, (M.III)	 16/12/19
9. Manobendra Ray	Project Manager - KRMPL	 16/12/19
10. Amit Bharambe	Mgr - O&M KRMPL	 16/12/19
11. Rajesh Kumar	PE GPCU	 16/12/19
12. Vinay Kumar	P.E (U-II)	 16/12/19
13. PANKAJ K. YADAV	PM-I / GPCU Kanpur	 16/12/19 PM