

**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)**

(STC agreement dated 19.04.2019 & LOA: Pr-12012/41/2018-PPP/NMCG dated 04.02.2019)

**Monthly Progress Report**

**Of**

**Project Engineer**

**JULY- 2020**



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



**Funding Agency**  
National Mission for  
Clean Ganga  
MoWR, River  
Development & Ganga  
Rejuvenation,  
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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 GoI approved the flagship Namami Gange programme for cleaning, rejuvenation, and protection of the river Ganga. In January 2016, the GoI 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 GoI 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 (30 MLD Pankha, 15 MLD Unnao & 5 MLD 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 (43 MLD Jajmau Phase-II, 210 MLD Bingawan & 42 MLD 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)

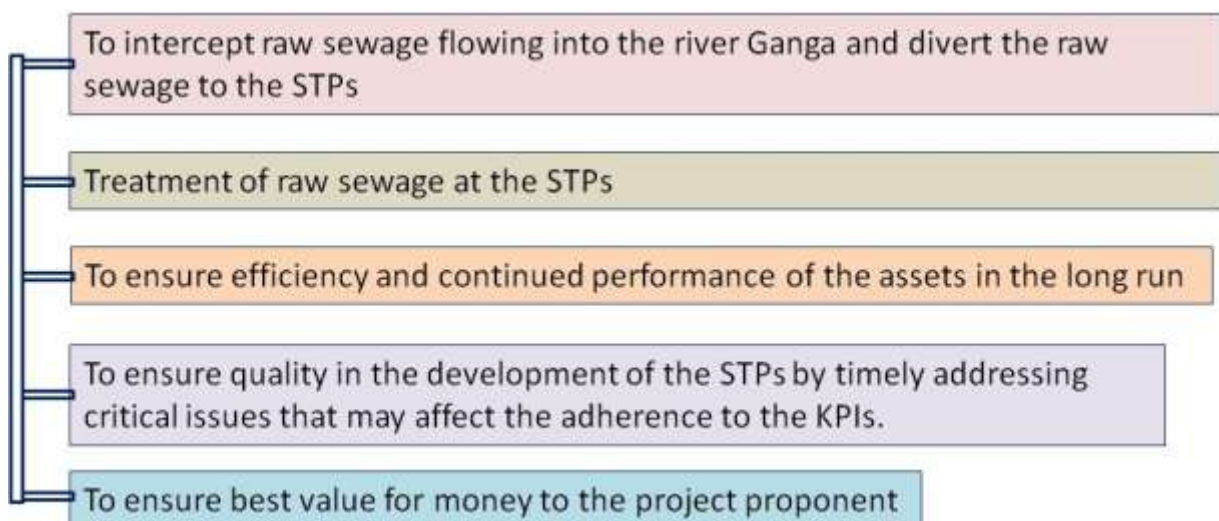
Government of India has approved the Namami Gange program as an integrated approach for effective abatement of pollution in river Ganga and Yamuna. As part of this and to ensure that no untreated domestic sewage flow into the river Ganga and Yamuna, various interventions are planned such as Interception & 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 ‘ <b>Project Engineer</b> ’
<b>Agreement &amp;LOA</b>	: STC Agreement dated 12.04.2019 & LOA: 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</b>	: 14/GM/2018-19 dated 21.12.2018
<b>Cost of Project (CAPEX+OPEX)</b>	: Rs. 816.25 Cr. (CAPEX 255.50 Cr. + OPEX 560.75 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 trial run)
<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, 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– Pankha (District –III, Kanpur), Unnao & Shuklaganj – (District Unnao), Jajmau – (District I, Kanpur), Bingawan – (District II, Kanpur) and Sajari – (District IV, Kanpur).

Under this project, development and O&M work of total seven STP facilities are proposed in which three new STP facilities based on SBR technology with associated infrastructure have been proposed for - 30 MLD Pankha (District III, Kanpur), 15 MLD Unnao&5 MLD Shuklaganj.

Rehabilitation and O&M for 15 years is proposed for 130 MLD Jajmau STP facilities (Phase-I) and O&M of 210 MLD USAB based Bingawan STP facilities, 43 MLD Jajmau Phase-II and for 42 MLD ASP based Sajari STP facilities for 15 years.

### 5.1 PANKHA FACILITIES

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

**Table 5.1: Pankha 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	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-φ	3.634km
		1600 mm-φ	1.596km
		2000 mm-φ	1.948km
<b>1.14</b>	<b>Milestones</b>	<b>Date</b>	<b>Amount in Rs.</b>
	1 <sup>st</sup> Milestone	12-Oct-2019 to 25-Apr-2020	1248,39,750
	2 <sup>nd</sup> Milestone	26-Apr-2020 to 10-Jul-2020	1248,39,750
	3 <sup>rd</sup> Milestone	11-Jul-2020 to 24-Sep-2020	1248,39,750
	4 <sup>th</sup> Milestone	25-Sep-2020 to 09-Dec-2020	1248,39,750
	5 <sup>th</sup> Milestone	10-Dec-2020 to 13-Feb-2021	1248,39,750
	6 <sup>th</sup> Milestone	14-Feb-2021 to 21-Apr-2021	1248,39,750
	7 <sup>th</sup> Milestone	22-Apr-2021 to 22-Jun-2021	1248,39,750
	8 <sup>th</sup> Milestone	23-Jun-2021 to 25-Aug-2021	1248,39,750

## 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 φ	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 φ	100m
<b>1.9</b>	Rising main (bypass)	750mm φ	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>	<b>Amount in Rs.</b>
	1 <sup>st</sup> Milestone	12-Oct-2019 to 24-Feb-2020	478,36,250
	2 <sup>nd</sup> Milestone	25-Feb-2020 to 15-May-2020	478,36,250
	3 <sup>rd</sup> Milestone	16-May-2020to 30-Jul-2020	478,36,250

4 <sup>th</sup> Milestone	30-Jul-2020to 14-Oct-2020	478,36,250
5 <sup>th</sup> Milestone	15-Oct-2020to 24-Dec-2020	478,36,250
6 <sup>th</sup> Milestone	10-Dec-2020 to 01-Mar-2021	478,36,250
7 <sup>th</sup> Milestone	02-Mar-2021 to 05-May-2021	478,36,250
8 <sup>th</sup> Milestone	06-May-2021to 10-Jul-2021	478,36,250

### 5.3 SHUKLAGANJ STP FACILITIES

Project wise components details of Shuklaganj STP 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 x1m	100m
1.10	<b>Milestones</b>	<b>To be submitted*</b>	

\*CTE for new land has been received in July 2020. Geotech survey is in progress

### 5.4 JAJMAU (PHASE I) 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
<b>A</b>	<b>Phase-I</b>		
	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 (TEPH)	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	GuptarGhat IPS	-	1
1.8	Jajmau CSPA	-	1

### 5.5 JAJMAU PHASE II STP FACILITY

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

SN	STP Facilities	Capacity/ dia. /size	No. of units/length
	Schedule Handing Over Date- 01.10.2019		
	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

### 5.6 BINGAWAN FACILITIES

Project wise component detail of Bingawan is 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	ShisamauNala (tapping)	8MLD	1

### 5.7 SAJARI FACILITIES

Project wise component detail 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 PHYSICAL PROGRESS OF WORK

As per the provision of Concessionaire Agreement, effective date of the project was to be declared before 19<sup>th</sup> April 2019. However, the 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. Jajmau 130 MLD started after effective date.

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 can be monitored as project works have been divided in eight milestones each having progress of 12.5%. The scheduled date of project completion is 10<sup>th</sup> October 2021 i.e. 24 months from the effective date.

### 6.1 MILESTONE WISE ACTIVITIES AND PROGRESS: PANKHA STP FACILITIES

Milestone wise activities and their progress of work for Pankha STP are given in table 6.1:

**Table 6.1: Pankha STP Facilities**

S. No.	Description of Items	BOQ Amount	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against Milestone		Remarks
			%	Amount (Rs.)	Physical	Financial (Rs.)	
<b>A</b>	<b>Design &amp; Drawing &amp; STP &amp; Sewer Laying works</b>						
i	On approval of BEP	249,67,950.00	100%	249,67,950.00	100%	249,67,950.00	Completed
ii	On approval of design & drawings for Civil & Sewerage works	249,67,950.00	100%	249,67,950.00	100%	249,67,950.00	Completed
<b>B</b>	<b>CONSTRUCTION</b>						
<b>1</b>	<b>SBR Basin Area</b>						
i	Site Clearance	2,50,000.00	100%	2,50,000.00	100%	2,37,500.00	Completed
ii	Excavation	98,38,400.00	100%	98,38,400.00	95%	93,46,480.00	work in progress
iii	PCC	147,57,600.00	100%	147,57,600.00	45%	66,40,920.00	work in progress
iv	RCC Foundation/Raft	245,96,000.00	40%	98,38,400.00	0%		Delay at KRMPPL
<b>3</b>	<b>Chlorine Contact Tank Area</b>	-		-			
i	Site Clearance	1,50,000.00	100%	1,50,000.00	100%	1,50,000.00	Completed
ii	Excavation	7,37,880.00	100%	7,37,880.00	100%	7,37,880.00	Completed
iii	PCC	11,06,820.00	100%	11,06,820.00	70%	7,74,774.00	work in progress
<b>4</b>	<b>Chlorination House Area</b>	-					
i	Site Clearance	1,00,000.00	100%	1,00,000.00	100%	1,00,000.00	Completed
ii	Excavation	3,68,940.00	100%	3,68,940.00	100%	3,68,940.00	Completed
iii	PCC	5,53,410.00	100%	5,53,410.00	100%	5,53,410.00	Completed
<b>5</b>	<b>Sludge Thickener Area</b>	-		-			
i	Site Clearance	1,00,000.00	100%	1,00,000.00	100%	1,00,000.00	Completed
ii	Excavation	7,37,880.00	100%	7,37,880.00	0%		Delayed at KRMPPL
iii	PCC	11,06,820.00	100%	11,06,820.00	0%		Delayed at KRMPPL
<b>10</b>	<b>Admin Bldg Area</b>	-		-			

S. No.	Description of Items	BOQ Amount	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against Milestone		Remarks
			%	Amount (Rs.)	Physical	Financial (Rs.)	
i	Site Clearance	1,00,000.00	100%	1,00,000.00	100%	1,00,000.00	Completed
ii	Excavation	3,68,940.00	100%	3,68,940.00	0%		Delayed at KRMPL
iii	PCC	5,53,410.00	100%	5,53,410.00	0%		Delayed at KRMPL
<b>19</b>	<b>EXTERNAL DEVELOPMENT</b>						
	<b>Compound Wall with Gate</b>						
i	Excavation & PCC	61,49,000.00	40%	24,59,600.00	172.77% & 104.40%	24,59,600.00	Excavation 698 m completed and 140 nos. PCC Completed
ii	RCC Column footing	61,49,000.00	40%	24,59,600.00	81.10%	19,94,735.60	109 no. footings completed
iii	RCC Column & Beam	61,49,000.00	40%	24,59,600.00	51.34%	12,62,758.64	69 nos. column completed.
<b>20</b>	<b>MPS-2 ( 115MLD)</b>	-		-			
<b>A</b>	<b>Construction of Raw Sewage Sump</b>	-		-			
i	Site Clearance	1,50,000.00	100%	1,50,000.00	100%	1,50,000.00	Completed
ii	Excavation	34,51,734.00	15%	5,17,760.10	100%	5,17,760.10	Completed
<b>B</b>	<b>Construction of Inlet Chamber &amp; Screen Channel</b>	-		-			
i	Site Clearance	50,000.00	100%	50,000.00	100%	50,000.00	Completed
<b>21</b>	<b>ICI Nala IPS</b>			-			
<b>A</b>	<b>Construction of Raw Sewage Sump</b>			-			
i	Site Clearance	1,50,000.00	100%	1,50,000.00	100%	1,50,000.00	Completed
<b>22</b>	<b>IPS-6 (Sundar Nagar- 20 MLD)-Pankha Area</b>			-			
<b>A</b>	<b>Construction of Raw Sewage Sump</b>			-			
i	Site Clearance	1,50,000.00	100%	1,50,000.00	100%	1,50,000.00	Completed
ii	Excavation	15,33,600.00	11%	1,68,696.00	0%		Delayed at KRMPL

S. No.	Description of Items	BOQ Amount	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against Milestone		Remarks
			%	Amount (Rs.)	Physical	Financial (Rs.)	
<b>25</b>	<b>Sewer System Area (RCC Pipes-NP3 Types)</b>			-			
i	Supply of pipes	1604,54,272.00	16%	256,72,683.52	2.88%	4621083..03	Out of 16624 rmt 16% comes 2660. Out of 2660, 480 rmt received
	<b>Total Achieved out of 12.5%</b>	<b>2897,48,606.00</b>		<b>124842339.62</b>	<b>8.0%</b>	<b>80401741.37</b>	<b>4.0% work is remaining</b>

**PHOTOGRAPHS OF PANKHA STP SITE**



**Boundary Wall work**



**PCC work of SBR**





**Ongoing Excavation work**



**Ongoing work of Labour Kitchen**

## 6.2 MILESTONE WISE ACTIVITIES AND PROGRESS: UNNAO STP

Milestone wise activities and their progress of work for Unnao STP are given in table 6.2.

**TABLE 6.2: UNNAO FACILITIES (DISTRICT UNNAO)**

SN	Activity	Milestone 1 (12.5%)		Achieved		Remaining	Remarks
		Due on 25.09.2020		Till 31.07.20			
		Physical	Financial (Rs)	Physical	Financial (Rs)		
I	<b>Design &amp; Drawing &amp; STP &amp; Sewer Laying works</b>						
1	On approval of BEP	100%	191,34,500.00	100%	191,34,500.00	0%	Completed
2	On approval of design & drawings for Civil & Sewerage works	25%	47,83,625.00	25%	47,83,625.00	0%	Completed
I	<b>SBR Basin Area</b>						
1	Site Clearance	100%	5,00,000.00	40.00%	2,00,000.00	60%	Work in progress
2	Excavation wall footing	100%	22,46,137.60	20.00%	4,49,227.52	80%	Work in progress
3	PCC wall footing	100%	27,46,137.60	20.00%	5,49,227.52	80%	Work in progress
ii	<b>Sludge Thickener Area</b>						
1	Site Clearance	100%	1,50,000.00	0.00%	-	100%	Delay at KRMPPL
2	Excavation	100%	3,64,900.80	0.00%	-	100%	Delay at KRMPPL
3	PCC	50%	2,57,450.40	0.00%	-	50%	Delay at KRMPPL
iii	<b>Supernatant Sump Area</b>						
1	Site Clearance	100%	1,00,000.00	0.00%	-	100%	Delay at KRMPPL
2	Excavation	100%	1,14,422.40	0.00%	-	100%	Delay at KRMPPL
3	PCC	100%	1,14,422.40	0.00%	-	100%	Delay at KRMPPL
4	RCC Foundation wall/base slab	100%	1,28,844.80	0.00%	-	100%	Delay at KRMPPL
iv	<b>Chlorine Contact Tank Area</b>						
1	Site Clearance	100%	1,50,000.00	100.00%	1,50,000.00	0%	Completed
2	Excavation	100%	4,22,112.00	100.00%	4,22,112.00	0%	Completed
3	PCC	100%	5,72,112.00	40.00%	2,28,844.80	60%	Work in progress
4	RCC Foundation/Raft	100%	9,15,000.00	40.00%	3,66,000.00	60%	Work in progress
V	<b>Air Blower Room Area</b>						

SN	Activity	Milestone 1 (12.5%)		Achieved		Remaining	Remarks
		Due on 25.09.2020		Till 31.07.20			
		Physical	Financial (Rs)	Physical	Financial (Rs)		
1	Site Clearance	100%	2,50,000.00	0.00%	-	100%	Delay at KRMPPL
2	Excavation	100%	3,43,267.20	0.00%	-	100%	Delay at KRMPPL
3	PCC	100%	3,43,267.20	0.00%	-	100%	Delay at KRMPPL
<b>Vi</b>	<b>Staff Quarter Area (G+1)</b>						
1	Site Clearance	100%	50,000.00	0.00%	-	100%	Delay at KRMPPL
2	Excavation	100%	71,000.00	0.00%	-	100%	Delay at KRMPPL
3	PCC	100%	71,000.00	0.00%	-	100%	Delay at KRMPPL
4	RCC Foundation/column footing	100%	92,000.00	0.00%	-	100%	Delay at KRMPPL
<b>Vii</b>	<b>Guard Room Area</b>						
1	Site Clearance	100%	50,000.00	100.00%	50,000.00	0%	Completed
2	Excavation	100%	82,211.20	100.00%	82,211.20	0%	Completed
3	PCC	100%	82,211.20	100.00%	82,211.20	0%	Completed
4	RCC Foundation/column footing	100%	1,14,422.40	100.00%	1,14,422.40	0%	Completed
5	Column & Beam	100%	1,14,422.40	50.00%	57,211.20	50%	Delay at KRMPPL
6	RCC Ground Floor Slab	100%	1,14,422.40	0.00%	-	100%	Delay at KRMPPL
<b>Viii</b>	<b>Chlorination Room Area</b>						
1	Site Clearance	100%	150000	0.00%	-	100%	Delay at KRMPPL
2	Excavation	100%	4,57,689.60	0.00%	-	100%	Delay at KRMPPL
3	PCC	50%	2,28,844.80	0.00%	-	50%	Delay at KRMPPL
<b>Xviii</b>	<b>EXTERNAL DEVELOPMENT</b>						
	<b>Boundary Wall with Gate</b>						
1	Site Clearance	100%	-			100%	Completed
2	Excavation	40%	1,33,900.00	51.00%	68,289.00	0%	Completed
3	PCC	40%	2,00,850.00	71.00%	1,42,603.50	0%	Completed
4	RCC Column footing	40%	2,00,850.00	71.00%	1,42,603.50	0%	Completed
5	RCC Column & Beam	40%	2,00,850.00	44.00%	88,374.00	0%	Completed
6	Brickwork	15%	75,318.75	5.00%	3,765.94	10%	Completed
<b>C</b>	<b>MPS</b>						

SN	Activity	Milestone 1 (12.5%)		Achieved		Remaining	Remarks
		Due on 25.09.2020		Till 31.07.20			
		Physical	Financial (Rs)	Physical	Financial (Rs)		
	<b>Civil Works</b>						
i	<b>Construction of Raw Sewage Sump</b>						
1	Site Clearance	100%	5,00,000.00	0.00%	-	100%	Completed
iii	<b>Construction of Inlet chamber &amp; Screen channel</b>						
1	Site Clearance	100%	1,50,000.00	0.00%	-	100%	Delay at KRMPL
ix	<b>SEWER SYSTEM AREA (3.2 Km)</b>						
1	Site Clearance	100%	-	0		100%	Delay at KRMPL
2	Supply of pipes	20%	110,60,057.85	10%	11,06,005.79	10%	Work in progress
	<b>Total achieved out of 12.5%</b>		<b>478,36,250.00</b>	<b>7.37%</b>	<b>282,21,234.56</b>	<b>5.13%</b>	

**PHOTOGRAPHS OF UNNAO STP SITE**



**Site inspection by DM**



**Unloading of steel**



**Funny bag wrapping and Curing of BW columns**



**CCT wall foundation**



**Guard Room excavation**



**CCT Raft work**

## 7 PRESENT STATUS AND ISSUES OF HAM PROJECT KANPUR

### 7.1 PANKHA 30 MLDSTP:

- Approval of design & drawings completed except IPS;
- Revised project schedule submitted by Concessionaire is under vetting. Six months time extension is proposed by the Concessionaire;
- Manpower deployment by the Concessionaire has been done but is not sufficient at all STP facilities. Total no. of workers deployed at site are 30-35 (as on 31.07.20) whereas 100-150 labours are required to speed up the works to attain targets. Construction work for SBR, BW, CCT, MPS and Sundar Nagar IPS works are under progress;
- Electric poles has been shifted;
- Quality analysis report from HBTU is to be submitted;

### 7.2 UNNAO 15 MLD STP FACILITIES:

- Approval of design & drawings completed except MPS and I&D design work. MPS drawing need to be revised and resubmitted for vetting/approval after incorporating UPJN comments. Land allotment for I&D works is pending at district administration due to land acquisition;
- Manpower deployment by the Concessionaire has been done but is not sufficient. Total nos. of workers deployed at site 30 (as on 31.07.20) whereas 100-150 labours are required to speed up the works to attain targets.
- Construction work for SBR, BW, labour hutment facilities and lab establishment under progress;
- Electricity connection yet not obtained by Concessionaire;
- Quality analysis report from HBTU to be submitted;
- I&D design and drawings need to be submitted after incorporating the changes discussed with STC.

### 7.3 SHUKLAGANJ 5 MLD STP FACILITIES:

CTE was not granted by UPPCB on the previously allotted land. Now new site, about 400m away from previous site is selected. CTE has been obtained on 10.07.2020. At present, Geotech investigations and site layout finalization works are in progress.

### 7.4 JAJMAU (PHASE – 1) 130 MLD STP AND IPS REHABILITATION

- Handing over is planned by UPJN by 19.07.2020 as agreed by concessionaire but could not materialised due to labour issue.
- CTO received on 10.06.2020
- **Control Philosophy (Instrumentation and RTOLMS design) of IPSs and CSPS:**  
Concessionaire has submitted the Jajmau Renovation design and drawing (Instrumentation and RTOLMS design of IPSs and CSPS) vide their letter no.502 dated 07.07.2020. In reply, PE submitted the observations vide their letter no. STC/425/Jajmau dated 22.07.2020. A reminder letter of the same has been submitted by PE vide their letter no. STC/PE/KNP/434/Jajmau dated 29.07.2020. KRMPPL has submitted compliance report and



revised drawing & documents of same on 29.07.2020 vide their letter no. UPJN/KRMPL/Kanpur/2020-21/541 dated 29.07.2020.

➤ **Drawing & Datasheet along with QAP for PST, SST, Surface Aerators, Grit Mechanism, Screen & Thickener:**

Concessionaire has submitted the drawing and datasheet along with QAP for PST, SST, Surface Aerators, Grit Mechanism, Screen & Thickener vide their letter no.548 dated 30.07.2020.

### **7.5 43 MLD JAJMAU PHASE II**

- The plant is ready to be handed over to the Concessionaire. UPJN has written to the Concessionaire to deploy adequate staff for operation of the plant immediately;
- All designs & drawings and other documents has been provided to the Concessionaire;
- Joint inspection and hand over activities are planned by 19.07.2020.
- CTO applied.

### **7.6 210 MLD BINGAWAN FACILITIES**

The schedule date of handover of 210 MLD Bingawan Facilities as per CA was 01/04/2019 but actually could be handed over on 08/07/2019. From handover date itself it was observed and informed from time to time to Concessionaire that the operation and maintenance of the plant was not up to the mark.

Following points need to be addressed:

#### **i. Compliance of Inspection Reports**

PE inspected 67 MLD Munshipurwa IPS on 06.07.2020 & Bingawan STP on 07.07.2020 and issued inspection reports of both on 14th July 2020. Compliance report on Inspection done at 210 MLD STP Bingawan on 07.07.2020 has been submitted by KRMPL on 30.07.2020. Copy of Inspection reports of Bingawan site is enclosed.

#### **ii. O&M Manual**

Revised O&M manual of Bingawan incorporating the points decided in the meeting dated 16.12.2019 has been submitted by the Concessionaire on 31.07.2020 which is under review for approval.

#### **iii. Insurance Policies**

Only All Risk Industrial Insurance Policy has been submitted and remaining policies are not submitted after so many reminders. Comprehensive General Liability Policies submitted by concessionaire is not acceptable.

#### **iv. Performance of Plant**

##### **a. Cleaning and reactivation of UASB Reactors:**

All the KPIs are not being met during the month of July 2020. UASB reactor no. 8 has been filled on 30.05.2020 for reactivation after cleaning and reactor no. 4 is under trail run. Reactor no. 1 & 3 has been taken up for cleaning. The Concessionaire has not submitted the action plan

for cleaning and reactivation of UASB reactors but taking randomly for cleaning and reactivation. Performance report of July 2020 enclosed.

- b. BFP:** All 3 Bed filter press are not operational during the month of July 2020. The Concessionaire had promised to that atleast 1 no. BFP operational by 10<sup>th</sup> July 2020 but no filter press was found operational by the end of July 2020.

**v. Joint Sampling and Testing by IIT Kanpur**

It was decided in the meeting of GM GPCU UPJN on 16-12-2019 (MOM issued vide letter no. 3847/M-2A/116 dated 18-12-2019) that at least once in a month joint sampling of raw sewage and treated effluent will be done by UPJN and KRMPL and testing to be done by IIT Kanpur. KRMPL has taken the sample jointly on 30.05.2020 and 23.07.2020 for testing. Testing report from IIT Kanpur of the Joint sample taken on 30.05.2020 is still awaited.

**7.7 42 MLD SAJARI STP**

As per CA, Schedule Handing over date for Sajari is effective date (11.10.2019) but plant was handed over to the KRMPL on 29.05.2019. O&M expenditure from 29.05.2019 until effective date 11.10.2019 has been paid to KRMPL separately which is not covered under CA. Till Dec. 2019 KPIs (especially COD) of treated effluent was not under control and KRMPL was asked by NMCG to suggest improvements for COD to be within prescribed limit. KRMPL proposed to add one additional Aeration Tank on 07.12.2019.

Mr. Madhav Kumar NMCG requested Mr. S. Kamaraju Process Expert STC to visit the Sajari Plant to give his recommendations. Mr. S. Kamaraju Process Expert visited the Sajari Plant on 27-28 Dec 2019 and concluded that the Sajari Plant is designed for all 12 aerators to run without any standby but the plant was being run with 8 aerators only keeping 4 aerators as stand by. He submitted calculations for available aeration on dated 28.12.2019 (in discussion with GM, UPJN Kanpur) and found that sufficient aeration is available to reduce COD from 250 to 100. Therefore there is no need for any improvement as suggested by KRMPL. **Commercial Operation Date of Sajari facility was declared by UPJN on 20.06.2020.**

Following Points needs to be addressed:

**i) Compliance of Inspection Reports**

Compliance report of Inspection held on 23.06.2020 by PE, STC on Sajari 42 MLD STP site and issued inspection report on 04.07.2020 has not been submitted by KRMPL. Also, Inspection of both 14 MLD Sanigawan IPS and 14 MLD Chakeri IPS was done on 13.07.2020 and inspection reports issued on 14.07.2020. Copy of Inspection reports of Sajari site is enclosed.

**ii) O&M Manual**

O&M Manual already approved by UP Jal Nigam.

**iii) Insurance Policies**

Only All Risk Industrial Insurance Policy has been submitted and remaining policies are not submitted after so many reminders. Comprehensive General Liability Policies submitted by concessionaire is not acceptable.

**iv) Performance of Plant:**

All KPIs are within prescribed limit for the month of July 2020 except the dates when the parameters of raw sewage are beyond prescribed limit for which concessionaire is not responsible. Performance Report of July 2020 Enclosed.

**a) Mechanical Screens**

Auto System of Both Mechanical Screens and need to be repaired.

**b) Gas Generators**

All 3 no's of Gas Generators installed are not operational since handover date.

**v) Joint Sampling and Testing by IIT Kanpur**

It was decided in the meeting of GM GPCU UPJN on 16-12-2019 (MOM issued vide letter no 3847/M-2A/116 dated 18-12-2019) that at least once in a month joint sampling of raw sewage and treated effluent will be done by UPJN and KRMPL and testing to be done by IIT Kanpur. KRMPL has took the sample jointly on 27.07.2020 and sent it for testing. Testing reports from IIT Kanpur of the Joint sample taken on 20.05.2020 & 25.06.2020 are still awaited.

**vi) Power backup and Online Monitoring System**

DG set for power backup has been made operational by UP Jal Nigam on 14.07.2020. Also, Installation of Online monitoring system is under progress.

**General Issues:**

- 1) Power Back- up to be provided at all locations as per Article 8.7 (b) which is not being accepted by KRMPL.
- 2) As per Article 8.8 (a): At each STP/Pumping Station (new or existing) of all locations, the Concessionaire shall install and maintain an online monitoring system, in accordance with the Technical Specifications and Applicable Laws (including specifically, the EPA) to monitor the volume, specifications and characteristics of the incoming Sewage and the Treated Effluent, as applicable.
- 3) As per Article 11.2: During the O&M Period of the Facilities, the Concessionaire shall obtain and maintain insurance policies including but not limited to the following:
  - (i) loss, damage or destruction of the Facilities, at replacement value;
  - (ii) comprehensive third party liability insurance including injury to or death of personnel of the Jal Nigam or NMCG or others caused by the Project;
  - (iii) the Concessionaire's general liability arising out of the Project;
  - (iv) liability to third parties for goods or property damage;
  - (v) Workmen's compensation insurance; and
  - (vi) any other insurance that may be necessary to protect the Facilities, the Concessionaire and its employees, including for all Force Majeure Events that are insurable at commercially reasonable premiums and not otherwise covered in items (i) to (v) above.

## 8 STATUS OF BEPs & OTHER DETAILS

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

**Table 6.2: BEPs and other details**

SN	Particulars	Status	
		Approved	Pending
1.	<b>BEPS (Process, Mechanical &amp; Electrical)</b>	<p>GA, Data Sheet and QAP of centrifuge, submersible pump and mechanical grid collection system, Unnao- reviewed &amp; recommended for approval on 25.02.2020</p> <p>GA, Data Sheet and QAP of centrifuge, submersible pump and mechanical grid collection system, Pankha- reviewed &amp; recommended for approval on 28.02.2020</p>	<p>BEP of Jajmau STP rehabilitation, waiting for KRMPL compliance</p> <p>BEP of Jajmau IPS rehabilitation, waiting for KRMPL compliance</p>
2.	<b>BEP Structure Design &amp; Drawings</b>	<p>SBR Rev Structural design drawing, Unnao- recommended for approval on 30.06.20</p> <p>Guard Room design, Unnao- recommended for approval on 01.04.20</p> <p>SBR REV-RCC design drawing, Unnao- recommended for approval on 11.04.20</p> <p>PTU Rev Structural design drawing, Unnao- recommended for approval on 11.04.20</p> <p>Staff Quarters Revised RCC design of Unnao STP- recommended for approval on 15.04.20</p> <p>Rev Structure design of Blower Room of Unnao STP- recommended for approval on 16.04.20</p> <p>ADMIN build drawing, Unnao- recommended for approval on 10.04.20</p> <p>Sludge thickener &amp; Sludge re-circulation Sump Rev. Structural drawing, Unnao- recommended for approval on 11.04.20</p> <p>CCT Rev Structure design drawing, Unnao- recommended for approval on 10.04.20</p> <p>Blower Room Structure drawing and design of Pankha STP- recommended for approval on 30.04.20</p> <p>Structure drawing of CCT &amp; TEPH, Jajmau- recommendations for approval on 06.03.2020</p> <p>Electrical drawing, Pankha- recommendations for approval on</p>	<p>RCC drawing 20MLD, IPS Sundar Nagar, Pankha. Geo tech report is not proper.</p> <p>RCC drawing 25 MLD IPS ICI Nala, Pankha. KRMPL is not complied with STC comments.</p>

		17.03.2020 Structure drawing, Unnao MPS-recommended for approval on 29.02.2020 Revised drawing of boundary wall, Unnao-recommended for approval on 29.02.2020	
3.	<b>Construction Plan</b>	Revised construction plan Pankha-recommended for approval on 18.06.20 & 29.07.20 without extending completion date. Revised construction plan Unnao-recommended for approval on 18.06.20 29.07.20 without extending completion date	
4.	<b>Sewer Network/Line Design</b>	Design and drawings of sewer work Pankha- recommended for approval On 10.02.20 Design and drawings of sewer work Unnao- recommended for approval On 20.02.20	
5.	<b>ESHS Plan</b>	ESHS approval-Already vetted by STC. Approved by UPJN on 26.09.19	
6.	<b>O&amp;M</b>	Bingawan RTOLMS - Reviewed & found in order. Recommended for approval on 03.12.19 Level transmitter & flow metre - vetted & approved on 27.12.19 Bingawan O&M manual - approved Sajari O&M manual – Approved	Only All Risk Industrial Insurance Policy has been submitted and remaining policies are not submitted after so many reminders. Comprehensive General Liability Policies submitted by concessionaire is not acceptable.

## 9 MEETINGS HELD / MINUTES OF MEETING

- i. Video conference meeting was held by NMCG on dated 10.07.2020 to discuss progress of HAM Project Kanpur. Draft MOM given below.
- ii. Video conference meeting with CE, Lucknow, STC and Concessionaire was done on dated 23.07.2020 to discuss I&D issue of Unnao STP facilities. CE, UPJN Lucknow instructed to speed up the land acquisition process otherwise work of STP facilities should be on hold.

**Draft Minutes of the Meeting for review of progress of work for Kanpur STP projects under HAM on 10<sup>th</sup> July 2020 under the Chairmanship of Shri Ashok Kumar Singh, Executive Director (Projects), NMCG**

1. List of participants who participated in the video conferencing is enclosed in Annexure 1.
2. ED (Projects) enquired about the compliance of the minutes of previous meeting held on dated 4<sup>th</sup> June 2020. UP Jal Nigam (UPJN) made a power point presentation regarding the compliance of minutes of previous meeting and status of work progress of HAM Project Kanpur.
3. Time extension due to COVID-19 pandemic was rejected and the Concessionaire was directed to submit revised construction plan adhering to the stipulated date of completion of work for all eight milestones by Monday. 25<sup>th</sup> September 2020 will be first milestone date.
4. It was informed by the UPJN that manpower deployment has been done by the Concessionaire but is not adequate to achieve the target as per milestones on stipulated time.
5. For Bingawan STP, cleaning of reactors need to be done to improve the plant performance. Rehabilitation date of Bingawan STP was 15<sup>th</sup> July 2020, the Concessionaire proposed 25<sup>th</sup> July 2020.
6. For 130 MLD Jajmau SP handover has not been done due to existing labour problem. UPJN was asked to solve the matter with district administration.
7. For 42 MLD Sajari STP, UPJ informed that COD has been declared. Proposal/recommendation shall be submitted to NMCG within a week. Concessionaire was directed to follow comments given by process expert of PE to improve the performance of the plant.
8. For 15 MLD Unnao STP, I&D work has not been completed due to land/design issue. UPJN and Concessionaire were asked to finalize it with joint discussion with PE.
9. For 5 MLD Shuklaganj STP, CTE has been received. Geo-tech investigation to be done by the Concessionaire. Approach road need to be widened within 3 months.
10. Website link of HAM Project Kanpur was shared by PE, STC.
11. The meeting ended with vote of thanks to the chair.

# ANNEXURE

**ANNEXURE 1: Progress of Work – HAM Project Kanpur**

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 Concessionaire	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)
01.07.20	Inspection note on Shuklaganj facility new proposed site AhmadnagarBaigya dated 28th June	-	1.07.20 S-397	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr.Priyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. AK Seth Mr. Lokesh Mr. LK Rao Mr. Viviek	1+1+1+1+ 1+1+1+1+ 1+1+1	-	-	-	Point-wise issues of Shuklaganj new facility under Ham Project Kanpur
02.07.20	Vetting & Approval of design and drawings for various component of 15 MLD STP Unnao	27.06.20 K-476	02.07.20 S-398	06	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr.Priyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. Ak Seth Mr. Lokesh Mr. Basutkar Mr. Viviek	1+1+1+1+ 1+1+1+1+ 1+1+1	-	-	-	Unnao STP drawings has been vetted by PE office and found ok.
02.07.20	Compliance of STC Inspection report	01.07.20 K-490 28.05.20 S-366	02.07.20 S-399	01	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr.Priyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. Lokesh Mr. LK Rao Mr. Viviek	1+1+1+1+ 1+1+1+1+ 1+1	-	-	-	Providing the details of required compliance report against the inspection note point wise





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. ofdays) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	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)
02.07.20	Inspection note of Unnao STP dated 01.07.20	-	02.07.20 S-400	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr.Priyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. Lokesh Mr. LK Rao Mr. Viviek	1+1+1+1+1+1+1+1+1+1	-	-	-	It is instructed to Concessionaire to submit the Point-wise compliance of Inspection done at 01.07.20 at Unnao facility under Ham Project Kanpur
02.07.20	Pankha STP facilities Revised Project Schedule	-	02.07.20 S-401	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr.Priyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. Lokesh Mr. Viviek	1+1+1+1+1+1+1+1+1	-	-	-	It is recommended to UPJN for approval.
03.07.20	Reminder Unnao STP- Revised RCC design drawing of Centrifuge Building		03.07.20 S-402	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr.Priyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. AK Seth Mr. Lokesh Mr. Basutkar Mr. LK Rao Mr. Viviek	1+1+1+1+1+1+1+1+1+1	-	-	-	Concessionaire is directed to redesign the centrifuge building foundation as per SBC report of HBTU
03.07.20	List of additional manufacturer	KRMPL Email dated 23.06.20	03.07.20 S-403	10	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr.Priyesh MrVikas Mr. Satyendra Mr. Basutkar	1+1+1+1+1+1+1+1+1	-	-	-	Comments from STC experts has been enclosed with this letter



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 Concessionaire	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)
06.07.20	Pankha Sewerage network design	-	06.07.20 S-409	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr. Priyesh Mr. Vikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. Lokesh Mr. Viviek	1+1+1+1+1+1+1+1+1	-	-	-	Some documents have not been received in this office with Pankha documents
06.07.20	Handing over of Jajmau 130 MLD STP for rehabilitation & O&M	03.07.20 K-492 29.06.20 K-481 23.06.20 K-475	06.07.20 S-410	03	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr. Priyesh Mr. Vikas Mr. Satyendra Mr. AK Seth Mr. Sundar Mr. Prasoon Mr. LK Rao Mr. Viviek	1+1+1+1+1+1+1+1+1+1+1	-	-	-	Requested UPJN, to direct concessionaire to take needful action on our compliances at the earliest
07.07.20	Attended office	-	-	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr. Priyesh Mr. Vikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. AK Seth Mr. Lokesh Mr. LK Rao Mr. Viviek	1+1+1+1+1+1+1+1+1+1+1	-	-	-	Visited 15 MLD STP Unnao Site
08.07.20	Unnao STP Design & Drawing for centrifuge Building	27.06.20 K-476	08.07.20 S-412	11	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr. Priyesh Mr. Vikas Mr. Satyendra Mr. Kapil Mr. Sundar	1+1+1+1+1+1+1+1+1+1+1	-	-	-	Unnao STP Design & Drawing for centrifuge Building has vetted and recommended for approval

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 Concessionaire	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)
								Mr. Lokesh Mr. Ak Seth Mr. P.Walunjkar Mr. Viviek					
09.07.20	Attended office	-	-	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi MrPriyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. AK Seth Mr. Lokesh Mr. Viviek Mr. LK Rao	1+1+1+1+ 1+1+1+1+ 1+1+1	-	-	-	Visited 30 MLD Pankha STP Site
10.07.20	Regarding Safety Inspection Reports and compliance Reminders.	-	10.07.20 S-412	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi MrPriyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. Lokesh Mr. Ak Seth Mr. LK Rao Mr. P. Walunjkar Mr. Viviek	1+1+1+1+ 1+1+1+1+ 1+1+1	-	-	-	Requested UPJN, to direct concessionaire to take needful action on our compliances at the earliest
11.07.20	<b>Second Saturday</b>												
12.07.20	<b>Sunday</b>												
13.07.20	Attended office	-	-	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi MrPriyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Ak Seth	1+1+1+1+ 1+1+1+1+ 1+1	-	-	-	Visited 42 MLD STP Sajari Site

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 Concessionaire	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)
								Mr. Sundar Mr. Lokesh Mr. Vivek Mr. LK Rao					
14.07.20	Additional manufacturing list/ vender pannel : Kanpur HAM project	K-mail dated 13.07.20	-	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr.Priyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Ak Seth Mr. Sundar Mr. Basutkar Mr. Lokesh Mr. Vivek	1+1+1+1+ 1+1+1+1+ 1+1	-	-	-	Additional manufacturing list/ vender panel: Kanpur HAM project is under review.
15.07.20	Rehabilitation of 130 MLD STP Jajmau: Regarding Installation of DG set as Power backup	07.07.20 K-502	15.07.20 S-413	8	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr.Priyesh MrVikas Mr. Satyendra Mr. AK Seth Mr. Sundar Mr. Lokesh Mr. Vivek	1+1+1+1+ 1+1+1+1	-	-	-	Requested UPJN, to direct concessionaire to arrange DS set as power backup
16.07.20	Revised O&M Manual for 210 MLD Bingawan Facilities	K-mail dated 09.07.20	16.07.20 S-421	7	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr.Priyesh Mr. Satyendra Mr. AK Seth Mr. Sundar Mr. Lokesh Mr. Vivek	1+1+1+1+ 1+1+1	-	-	-	Requested UPJN, to direct concessionaire to submit the details of incorporating points
17.07.20	Attended office	-	-	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi Mr. Priyesh	1+1+1+1+ 1+1+1+1+1	-	-	-	Visited 130 MLD Jajmau, STP site

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. ofdays) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	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)
								Mr. Vikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. Lokesh Mr. Vivek Mr AK Seth	1+1				
18.07.20	Attended office	-	-	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi MrPriyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. Lokesh Mr. S.kamaraju Mr. Vivek	1+1+1+1+ 1+1+1+1+ 1+1	-	-	-	Visited 43 MLD Jajmau, STP site
19.07.20	<b>Sunday</b>												
20.07.20	HAM project List of manufacture for approval	14.07.20 K-513	20.07.20 S-420	6	20	-	-	Mr. CM Dimri Mr. JP Tripathi MrPriyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. Lokesh Mr. Basutkar Mr. S.Kamaraju Mr. Vivek	1+1+1+1+ 1+1+1+1+ 1+1+1	-	-	-	Reviewed and recommended for approval
21.07.20	Revised O & M Manual Bingawan	18.07.20 K-523	21.07.20 S-424	3	20	-	-	Mr. CM Dimri Mr. JP Tripathi MrPriyesh MrVikas Mr. Kapil Mr. Sundar Mr. Lokesh	1+1+1+1+ 1+1+1+1+ 1	-	-	-	Requested UPJN, to instruct KRMP to submit required information

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. ofdays) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	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)
								Mr. Vivek Mr. LK Rao					
22.07.20	Attended office	-	-	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi MrPriyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. Lokesh Mr. Vivek Mr. LK Rao	1+1+1+1+ 1+1+1+1+ 1+1	-	-	-	Review the new layout plan for Shuklaganj STP
23.07.20	Jajmau Renovation design and drg approvals CSPS and IPSs instrumentation and RTOLMS design	07.07.20 K-502	22.07.20 S-425	15	20	-	-	Mr. CM Dimri Mr. JP Tripathi MrPriyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Basutkar Mr. Sundar Mr. Lokesh Mr. Prasoon Mr. Vivek	1+1+1+1+ 1+1+1+1+ 1+1	-	-	-	After reviewing the CSPS and IPSs instrumentation and RTOLMS design, our comments sent to UPJN.
24.07.20	Payment for O & M Bingawan due to Covid lockdown	23.07.20 K-534	24.07.20 S-428	1	20	-	-	Mr. JP Tripathi MrPriyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. Lokesh Mr. Vivek	1+1+1+1+ 1+1+1+1+ 1	-	-	-	Informed UPJN that the Concessionaire's claim for O & M charges for lockdown period is not acceptable.
25.07.20	Plan layout of Shuklaganj (new location)	20.07.20 K-530	25.07.20 S-430	5	20	-	-	Mr. CM Dimri Mr. JP Tripathi MrPriyesh MrVikas	1+1+1+1+ 1+1+1+1+ 1+1+1	-	-	-	Advised UPJN to direct KRMPL to mention the size and area of the new site at Shuklaganj.

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 Concessionaire	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)
								Mr. Satyendra Mr. Basutkar Mr. Kapil Mr. Sundar Mr. Lokesh Mr. S.kamaraju Mr. Vivek					
26.07.20	<b>Sunday</b>												
27.07.20	Submission of piping GAD for 15 MLD & 30 MLD for approval	K-mail dated 27.07.20	-	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi MrPriyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. Basutkar Mr. Vivek MrPrasson	1+1+1+1+ 1+1+1+1+ 1+1	-	-	-	piping GAD for 15 MLD & 30 MLD for approval is under review
28.07.20	Submission of Quality control plan & work method statement for approval	K-494	28.07.20 S-431	-	20	-	-	Mr. CM Dimri Mr. JP Tripathi MrPriyesh MrVikas Mr. Satyendra Mr. Kapil Mr. Sundar Mr. Lokesh Mr. Vivek	1+1+1+1+ 1+1+1+1+ 1	-	-	-	Requested UPJN, to instruct KRMPL to resubmit the Quality control plan as per CA.
29.07.20	Revised O & M Manual of Bingawan Facilities	26.07.20 K-537	29.07.20 S-435	3	20	-	-	Mr. JP Tripathi MrVikas Mr. Kapil Mr. Lokesh Mr. P.walunjkar Mr. Vivek	1+1+1+1+ 1+1+1	-	-	-	Requested UPJN to instruct KRMPL to submit 4 bind hard copies of the O & M Manual of Bingawan duly signed on each page with CD of soft Copy to this office ASAP to complete the activity of formal approval.
30.07.20	submission of revised project schedule for Pankha facilities	20.07.20 K-525	30.07.20 S-437	10	20	-	-	Mr. CM Dimri Mr. Mr Priyesh Mr Vikas	1+1+1+1+ 1+1+1+1+ 1	-	-	-	revised project schedule for Pankha facilities is reviewed and recommended for approval



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. ofdays) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	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)
								Mr. Satyendra Mr. kapil Mr. Basutkar Mr. Walunjkar Mr. Vivek Mr. LK Rao					
31.07.20	Shuklaganj STP Layout and BEP	20.07.20 K-530	29.07.20 S-438	9	20	-	-	Mr. CM Dimri Mr. Vikas Mr. Kapil Mr. Satyendra Mr. Basutkar Mr. S.kamaraju Mr. Vivek Mr. LK Rao	1+1+1+1+ 1+1+1+1	-	-	-	Requested UPJN to instruct KRMPL to go ahead with Geo tech survey
Total									31+31+ 31+31+ 31+31+ 31+29+ 29+15+ 12+4+11+ 4+2				

**Note:** Man-days and respective inputs of experts for the month of July 2020 are:

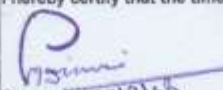
SN	Name	Designation	Total Man-days	Input
1.	Mr. Chandra Mauleshwar Dimri	Senior Civil Engineer	31	Timesheet attached
2.	Mr. Jai Prakash Tripathi	O&M Engineer	31	Timesheet attached
3.	Mr. Anil Kumar Seth	Senior Electrical Engineer	15	Timesheet attached
4.	Mr. Sunil Basutkar	Senior Mechanical Engineer	11	Timesheet attached
5.	Mr. Prasoon Bhardwaj	Instrumentation Engineer	02	Timesheet attached
6.	Mr. Preetam Walunjkar	Structural Expert	04	Timesheet attached
7.	Mr. Satish Kamaraju	Process Expert	04	Timesheet attached
8.	Mr. Linga Krishna Rao	Safety expert	15	Timesheet attached

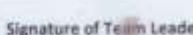
## Annexure 2: Timesheets of Experts

Mr. C. M. Dimri (Senior Civil Engineer)

Project Engineer		Shah Technical Consultants Pvt Limited	
NMCg-STP Projects at Kanpur under Hybrid Annuity based PPP Mode			
Daily Report			
Name :	Mr. C.M Dimri	Month/Year:	
Position:	Senior Civil Engineer/ T.L	Jul-20	
Date	Description	Location	
1	Vetting Design of Blower Room ,STP Unnao	Kanpur	
2	Meeting with KRMPL reg. Vendor list C.P etc	Kanpur	
3	Vetting sludge Thickner Design , STP Unnao.	Kanpur	
4	Discussion regarding Vendor & SS-304.	Kanpur	
5	<b>SUNDAY</b>		Kanpur
6	Presentation of NMCg meet prepared etc.	Kanpur	
7	Vetting design of centrifuge building str.	Kanpur	
8	Discussion with KRMPL about Bingawan RTOLMS and EMF meter.	Kanpur	
9	Revising progress of Pankha & Unnao STP.	Kanpur	
10	Meeting through Zoom by ED(p), NMCgdelhi at UPJN office.	Kanpur	
11	Visit to Unnao STP site postponed due to lockdown	Kanpur	
12	<b>SUNDAY</b>		Kanpur
13	Discussion with KRMPL about effluent channel in Unnao, MH Cover, Bingawan EMF & DFG.	Kanpur	
14	Vetting for approval of addl. Manufacturer.	Kanpur	
15	Appraised of Pankha structure-Sundar nagar+ICI nala	Kanpur	
16	Discussion with KRMPL about EI load list Unnao etc.	Kanpur	
17	Meeting at SE, UPJN Unnao + Vetting DG + DFG sets.	Kanpur	
18	Lockdown ,WFH+ Discussion about DG Set.	Kanpur	
19	<b>Sunday</b>		Kanpur
20	Appraised of Jajmau STP in light of IITR comments	Kanpur	
21	Vetting of Grid mechanisim MOC-304-55-316 etc.	Kanpur	
22	Appraised of Pankha & Unnao Screens +ICI Nala.	Kanpur	
23	Zoom Meeting by CE Lucknow about Unnao Facilities.	Kanpur	
24	Appraised MH Cover+ Sever Bedding ETC.	Kanpur	
25	Shuklaganj Layout plan +Geotech Survey discussed.	Kanpur	
26	<b>Sunday</b>		Kanpur
27	Shuklaganj layout plan appraised.	Kanpur	
28	Joint inspection of Shuklaganj site with HBTU.	Kanpur	
29	Appraised MH cover+Bedding +Jajmau CSPS.	Kanpur	
30	Discussion with KRMPL about Shuklaganj STP.	Kanpur	
31	Discussion with madhav kumar about CA and Bingawan RYOLMS.	Kanpur	

I hereby certify that the time report above is a true and complete statement of my working time for the payroll period.

  
 Signature of Employee

  
 Signature of Team Leader

Mr. J. P. Tripathi (O&M Engineer)

Project Engineer		Shah Technical Consultants Pvt Limited	
NMCG-STP Projects at Kanpur under Hybrid Annuity based PPP Mode			
Daily Report			
Name :	JAI PRAKASH TRIPATHI		Month/Year:
Position:	O & M ENGINEER		Jul-20
Date	Description	Location	
1	Prepared Time sheet and Invoice for the Month of June 2020	Kanpur	
2	Discussed with PM III GPCU UPJN and PM KRMPL regarding revised O & M manual for Bngawan Facilities	Kanpur	
3	Discussed with PM 2 GPCU UPJN regarding layout plan of sewage network of Sajan Facilities and line Diagram of Sajan STP	Kanpur	
4	Wrote letter to GM GPCU UPJN forwarding inspection report of Sajan STP done by Mr. Lokesh Khandelwal support Engineer (civil) and Mr. Sunder Rajan Support Engineer (Mech) on 23/06/2020	Kanpur	
5	Sunday		
6	Reviewed layout plan of sewage network of Sajan Facilities and line Diagram of Sajan STP Made available by PM 2 Office	Kanpur	
7	Helped in preparation of PPT for Zoom Meeting of NMCG on 10/07/2020	Kanpur	
8	Attended meeting with CE KNP zone UPJN, GM GPCU UPJN regarding Preparation of NMCG Zoom meeting on 10/07/2020	Kanpur	
9	Helped in correction of PPT for Zoom Meeting of NMCG on 10/07/2020 as discussed with GM GPCU UPJN on 10/07/2020	Kanpur	
10	Attended NMCG Zoom meeting	Kanpur	
11	Second Saturday		
12	Sunday		
13	Helped in preparation of MPR for the Month of February 2020	Kanpur	
14	Helped in preparation of MPR for the Month of March 2020	Kanpur	
15	Discussed with GM GPCU UPJN regarding Commercial Operation Date of Sajan Facilities	Kanpur	
16	Wrote letter to GM GPCU UPJN regarding revised O & M Manual of Bngawan Facilities	Kanpur	
17	Corrected and finalized MPR for the Month of March 2020	Kanpur	
18	Lockdown		
19	Sunday		
20	Helped in preparation of MPR for the Month of April 2020	Kanpur	
21	Wrote letter to GM GPCU UPJN regarding revised O & M Manual of Bngawan Facilities	Kanpur	
22	Corrected and finalized MPR for the Month of April 2020	Kanpur	
23	Reviewed revised O & M Manual of Bngawan submitted by KRMPL	Kanpur	
24	Wrote letter to GM GPCU UPJN regarding O & M payment of Bngawan Facilities due to Covid-19	Kanpur	
25	Lockdown		
26	Sunday		
27	Reviewed revised O & M Manual submitted by KRMPL	Kanpur	
28	Reviewed revised O & M Manual submitted by KRMPL	Kanpur	
29	Wrote letter to GM GPCU UPJN regarding revised O & M Manual of Bngawan	Kanpur	
30	Corrected and finalized MPR for the Month of May 2020	Kanpur	
31	Corrected and finalized MPR for the Month of June 2020	Kanpur	

I hereby certify that the time report above is a true and complete statement of my working time for the payroll period.

Signature of Employee
 Signature of Supervisor

Mr. A. K. Seth (Senior Electrical Engineer)

Project Engineer		Shah Technical Consultants Pvt Limited	
NMCG-STP Projects at Kanpur under Hybrid Annuity based PPP Mode			
Daily Report			
Name :	ANIL KUMAR SETH	Month/Year:	Jul-20
Position:	Sr Electrical Eng.	Date	
Date	Description	Location	
1	Discussion with PM (ETM) UPJN regarding Gen Set.	Kanpur	
2	Work Plan of Pankha S.T.P.	"	
3	Add vendor list. Shifting of HT OHL over CCT Tajman.	"	
4	work connected with scope of work.	"	
5	Sunday		
6	work connected with unnao STP 15 MLD.	"	
7	work connected with Pankha STP 30 MLD.	"	
8	work connected with Shukla Ganj STP 50 MLD	"	
9	work connected with 120 MLD Tajman-	"	
10	work connected with load list.	"	
11	Second Saturday		
12	Sunday		
13	work connected with mass balancing	"	
14	work connected with SLD of Pankha unnao STP	"	
15	work connected with SBR flow line diagram,	"	
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I hereby certify that the time report above is a true and complete statement of my working time for the payroll period.

Signature of Employee

Signature of VCA Leader

Mr. S. Kamaraju (Senior Process Expert)

Project					
<b>Shah Technical Consultants Pvt Limited</b>					
<b>NMCG- STP Projects at Kanpur under Hybrid Annuity based PPP Mode</b>					
<b>Daily Report for the Year 2020</b>					
<b>Name :</b>	Satish Kamaraju, Process Engineer				
<b>Position:</b>	Office Manager				
Date	Description	Duration (Days)	STP/Nalas	Work Performed Location	
20/01/2020	Review of Sludge Handling System of 130 MLD Jajmau Facility - Responding to the request received via email dated 20/1/20 from TL	0.25	Jajmau STP	Home	
22/01/2020	Review of Sludge Handling System of 130 MLD Jajmau Facility - Responding to the request received via email dated 20/1/20 from TL	0.25	Jajmau STP	Home	
08/03/2020	Review Comments of ICI Nala & Sundernagar Nala - Responding to the request received via email dated 26/2/20 from TL	0.5	Nalas	Home	
19/03/2020	Review Comments of ICI Nala & Sundernagar Nala - Responding to the request received via email dated 18/3/20 from TL	0.5	Nalas	Home	
04/04/2020	Review of TEPs of Jajmau STP - Responding to the request received via email dated 04/04/20 from TL/Support Engineer (Mr. Priyesh Shukla)	1	Jajmau STP	Home	
07/05/2020	Review of Process Calculations based on COD for Sajari STP - Responding to the request received via email dated 03/05/20 from TL	0.5	Sajari STP	Home	
11/05/2020	Response drafted on KRMP L R3 Revision Jajmau STP 130 MLD Renovation	0.5	Jajmau STP	Home	
21/05/2020	Response drafted on KRMP L Letter on Sajari Facilities - Responding to the request received via email dated 21/5/20 from TL	0.25	Sajari STP	Home	
18/07/2020	Review Comments of I&D Work at Thermal Nala, IPS Sunder Nala & ICI Nala	1	Nalas	Home	
20/07/2020	Review of IIT Comments on Jajmau STP 130 MLD and responding the comments by email	1	Jajmau STP	Home	
26/07/2020	Review Comments given on new layout of Shuklaganj STP & Phone calls - Responding to the request received via email dated 25/7/20 from TL	1	Shuklaganj STP	Home	
31/07/2020	Review of Pankha STP CCT Dwg - Responding to the request received via email dated 30/7/20 from TL	0.5	Pankha STP	Home	
10/08/2020	Discussion over the phone with TL on Shuklaganj STP New Layout & Drafting an email response in this regard - Responding to the request received via email dated 10/08/20 from TL	0.5	Shuklaganj STP	Home	
24/09/2020	Review of KRMP L/STC Letters on Shuklaganj BEP CIR Status - Responding to the request received via email dated 23/9/20 from TL	1	Shuklaganj STP	Home	
28/09/2020	Review comments of process calculations for I&D Works at Unnao - Responding to the request received via email dated 26/09/20 from TL	1	Unnao	Home	
29/09/2020	Review comments of process calculations for I&D Works at Unnao - Responding to the request received via email dated 26/09/20 from TL	1	Unnao	Home	
04/10/2020	Detailed summary of the letters on Shuklaganj BEP regarding CRs - Responding to the request received via email dated 03/10/20 from TL	1	Shuklaganj STP	Home	
12/10/2020	Client VC Meeting - NMCG, JN, STC & KRMP L	0.25	All Projects	Home	
16/10/2020	Detailed summary of the letters on Jajmau BEP - Responding to the request received via email dated 14/10/20 from TL	1	Jajmau STP	Home	
19/10/2020	Response given on CA Agreement clauses of CR Compliance for BEPs (Shuklaganj STP Review)	0.5	Shuklaganj STP	Home	
05/11/2020	Review of Letters, drafting a detailed email on letters received on I&D Works for Unnao STP - Responding to the request received via email dated 04/11/20 from TL	1	Unnao I&D	Home	

Mr. P Walunjkar (Structure Engineer)

**RAJASTHAN RURAL WATER SUPPLY & FLUOROSIS MITIGATION PROJECT (NAGOUR)**  
**PMSC: STC-NKI-AECOM JV**  
**MONTHLY ACTIVITY RECORD**

Name: / Preetam Walunjkar (Structural Specialist) Month / Year: July 2020

Date	Package	Location	Details of Work
01-07-2020	Nagaur	Office	Check Soil Test Reports & Seismic & Wind calculations for Idwa ESR 300 KL-22m capacity for STC
02-07-2020	Nagaur	Office	Check Staad Pro file modelling for Idwa ESR STC Nagaur
03-07-2020	Nagaur	Office	Check bottom ,Top dome slab, Conical wall calculations for Idwa ESR 300 KL capacity STC Nagaur
04-07-2020			Saturday Holiday
05-07-2020			Sunday Holiday
06-07-2020	Nagaur	Office	Check ERT Survey documents for CWR Deshnok & Study Harsaur ESR Soil Test Report
07-07-2020	Nagaur	Office	Check SBC Report to Deshnok CWR Land
08-07-2020	Nagaur	Office	Meeting with CE & SE PHED Nagaur for balance Structural Drg Issue for CDS
09-07-2020	Kanpur Unnao's STP	Office	Review RCC Drg Kanpur STP: Centrifuge Building, SBR, and Administration Build.
10-07-2020	Kanpur Unnao & Pankha STP	Office	Review Kanpur RCC Drg: Blower Room ,Sundar Nagar Pankha Nalla
11-07-2020			Saturday Holiday
12-07-2020			Sunday Holiday
13-07-2020	Nagaur	Office	Check ERT Survey report details for CWR Deshnok CWR
14-07-2020	Nagaur	Office	Check Soil Test Cengres report CWR Deshnok
15-07-2020	Nagaur	Office	Site visit Review Report preparation of DTL Deshnok
16-07-2020	Nagaur	Office	Checking ERT Survey report & preparation of final letter
17-07-2020	Nagaur	Office	Checking Soil Test report & preparation of final letter
18-07-2020			Saturday Holiday
19-07-2020			Sunday Holiday
20-07-2020	Nagaur	Office	Checking IIT comments on Deshnok CWR
21-07-2020	Nagaur	Office	Preparation of CV for Uttarakhand & UP Bidding & Checking IIT comments on Deshnok CWR
22-07-2020	Nagaur	Site Visit	Khattu Khurd Site Visit as per RTI Report
23-07-2020	Nagaur	Office	Preparation of Site Visit Report CDS03
24-07-2020	Nagaur	Office	Preparation of Site Visit Report Khattu Khurd CDS03
25-07-2020			Saturday Holiday
26-07-2020			Sunday Holiday
27-07-2020	Nagaur	Office	Check Deshnok IIT Soil report & Preparation of Letter to reject it
28-07-2020			
29-07-2020	Kanpur Jajmau	Office	Check Carbonate Test & NDT test for Jajmau & co-ordination with KRMP, Structural Engg for these tests
30-07-2020	Kanpur Jajmau	Office	Check Concrete Cover, Core test Results & NDT test ,Carbonate & NDT test for Jajmau
31-07-2020	Nagaur	Office	Preparation of CV for Saharanpur UP Bidding & Checking IIT comments on Deshnok CWR

SIGNATURE

TL/ DTL  
 PMSC for RRWS&FMP (Nagaur)

Page 1 of 1

Mr. L.K. Rao (Safety Expert)

<b>Project Engineer</b>		<b>Shah Technical Consultants Pvt Limited</b>	
NMCG-STP Projects at Kanpur under Hybrid Annuity based PPP Mode			
Daily Report			
<b>Name :</b>	Linga Krishna Rao	<b>Month/Year:</b>	Jul-20
<b>Position:</b>	Safety Expert		
<b>Date</b>	<b>Description</b>	<b>Location</b>	
1	Office work attended. Unnao 15 MLD Project work site inspection along with civil support engineers.	Kanpur	
2	Office work attended. Unnao 15 MLD Project work site inspection report draft and Sajari plant compliance report of KRMPPL Reply draft prepared	Kanpur	
3	Office work attended. Unnao 15 MLD Project work site inspection final report and Sajari plant compliance report of KRMPPL Reply final prepared taken sign from TL and sent to the concerned NMCG.	Kanpur	
4	Office work attended. Review of ESI (Environmental and Social Impact Assessment) of new projects and O&M Projects.	Kanpur	
5	SUNDAY	Kanpur	
6	Office work attended. Bingswan O&M Plant ISP Muncipura site inspection done.	Kanpur	
7	Office work attended. Bingswan O&M Plant ISP Muncipura site inspection report draft prepared.	Kanpur	
8	Office work attended. Review of Shuklaguri 5 MLD Project ESHS (Environmental, Social, Health and Safety)	Kanpur	
9	Office work attended. Review of old site safety inspection reports compliance by KRMPPL in different O&M Plants and construction sites	Kanpur	
10	Office work attended. Review of Project EHS (Environmental, Health and Safety) of Jajmau 130 MLD O&M Plant. Finalization of Bingswan O&M Plant ISP Muncipura site inspection report and submitting TL	Kanpur	
11	SECOND SATURDAY	Kanpur	
12	SUNDAY		
13	Office work attended. Review of old site safety inspection reports compliance by KRMPPL in different O&M Plants and construction sites & final report updated to TL.	Kanpur	
21	Office work attended. Unnao 15 MLD Project work site inspection done.	Kanpur	
22	Office work attended. Unnao 15 MLD Project work site inspection draft report submitted to TL Sir. ESHS Review of Construction and O&M plants.	Kanpur	
31	KRMPPL arranged 3rd party Environmental monitoring from "M/s Green Enviro" on 31st July, 2020 & 1st August, 2020. On 31st July, 2020 I have witnessed the following sites 1) Pankha 30 MLD Construction sites 2) Sajari 42 MLD (O&M) site 3) Bingswan 210 MLD (O&M) site 4) Chakari IPS 5) Muncipura IPS 6) Rashimandi IPS. They have monitored CO, CO2, AIR, SPM 2.5, SPM 10, SOUND LEVEL, SOX, NOX ETC.	Kanpur	

  
Signature of Employee

  
Signature of Task Leader



### Annexure 3: Monthly Performance Report of Bingawan

210 MLD SEWAGE TREATMENT PLANT, BINGAWAN, KANPUR																	
MONTHLY FLOW & LAB REPORT																	
MONTH: JULY-2020																	
Date	INLET FLOW in MLD	Plant Run in HRS	RAW SEWAGE					FINAL OUTLET					POWER SHUTDOWN		REMARK		
			Temp	TDS	PH (7-8)	COD (523mg/l)	BOD (322mg/l)	TSS (418mg/l)	Temp	TDS	PH (7-8)	COD (<100mg/l)	BOD (<30mg/l)	TSS (<50mg/l)		HRS	MINS
			°c	ppm	ppm	ppm	ppm	ppm	°c	ppm	ppm	ppm	ppm	ppm			
1-7-20	89.27	24.0	31	700	7.3	455	162	386	31	750	7.3	104	35	52	6	20	33kv HT feeder fault from Kesco side
2-7-20	126.71	24.0	32	850	7.4	440	150	384	32	810	7.6	112	34	50	4	18	33kv HT feeder fault from Kesco side
3-7-20	94.64	24.0	30	910	7.3	432	148	400	30	880	7.6	104	33	52	8	38	33kv HT feeder fault from Kesco side
4-7-20	156.16	24.0	32	980	7.4	455	138	386	32	880	7.7	112	34	50			
5-7-20	148.89	24.0	32	740	7.3	472	156	400	32	880	7.7	104	33	48			
6-7-20	105.73	24.0	29	780	7.4	400	120	404	29	780	7.6	96	34	50			
7-7-20	119.94	24.0	30	780	7.3	408	130	386	30	780	7.5	88	31	54			
8-7-20	143.52	24.0	31	880	7.4	415	142	400	31	780	7.6	104	33	52			
9-7-20	152.36	24.0	30	675	7.3	400	148	380	30	770	7.5	104	34	50			
10-7-20	96.67	24.0	29	520	7.1	434	150	380	29	640	7.4	96	33	48			Due to heavy rain, storm water with silt is not taken in plant.
11-7-20	120.31	24.0	30	680	7.4	432	144	388	30	700	7.5	104	34	52			Due to heavy rain, storm water with silt is not taken in plant.
12-7-20	137.96	24.0	31	750	7.3	456	136	400	31	820	7.6	112	33	54			
13-7-20	135.20	24.0	31	780	7.4	448	150	380	31	850	7.5	104	34	52			
14-7-20	136.61	24.0	31	710	7.3	464	182	384	31	840	7.4	112	32	58			
15-7-20	133.12	24.0	31	850	7.3	400	180	400	31	900	7.5	96	33	52			
16-7-20	132.08	24.0	32	780	7.1	472	170	380	32	880	7.3	112	32	58			
17-7-20	126.88	24.0	31	800	7.3	536	184	388	31	888	7.5	120	33	48			
18-7-20	135.53	24.0	32	810	7.4	520	176	400	32	900	7.6	112	34	58			
19-7-20	117.17	24.0	31	850	7.3	496	168	384	31	910	7.7	104	33	52	7	18	33kv HT feeder fault from Kesco side
20-7-20	87.36	24.0	31	770	7.4	488	170	388	31	880	7.6	96	32	58	12	15	33kv HT feeder fault from Kesco side
21-7-20	144.56	24.0	31	800	7.3	528	180	400	31	900	7.5	112	33	48			
22-7-20	128.79	24.0	31	830	7.4	504	172	388	32	930	7.7	104	32	54			
23-7-20	138.36	24.0	32	780	7.2	532	186	386	32	900	7.6	112	35	58			
24-7-20	156.00	24.0	32	810	7.4	544	200	400	32	880	7.5	104	33	58			
25-7-20	142.31	24.0	32	970	7.3	536	188	406	32	970	7.7	120	36	56			
26-7-20	130.80	24.0	32	910	7.2	528	180	400	32	990	7.1	224	68	280			
27-7-20	142.81	24.0	32	880	7.4	544	188	388	32	1000	7.3	232	70	210			
28-7-20	130.80	24.0	31	780	7.3	520	188	404	31	880	7.2	216	67	280			
29-7-20	132.08	24.0	31	780	7.3	536	188	400	31	960	7.2	224	64	288			
30-7-20	126.17	24.0	31	850	7.3	560	170	408	31	870	7.1	232	76	210			
31-7-20	130.80	24.0	31	840	7.4	504	170	380	31	890	7.2	240	72	200			
<b>TOTAL</b>	<b>3957.26</b>														<b>38</b>	<b>42</b>	
<b>AVG</b>	<b>127.65</b>	<b>24.00</b>	<b>31.1</b>	<b>801.4</b>	<b>7.3</b>	<b>478.5</b>	<b>164.0</b>	<b>392.0</b>	<b>31.1</b>	<b>855.7</b>	<b>7.5</b>	<b>129.5</b>	<b>40.3</b>	<b>81.0</b>			

**Annexure 4: Summary of Monthly Performance Report of Sajari**

42 MLD SEWAGE TREATMENT PLANT, SAJARI, KANPUR																			
MONTHLY FLOW & LAB REPORT																			
Month: July 2020																			
Date	INLET FLOW in MLD	Plant Run in HRS	RAW SEWAGE						FINAL OUTLET						Aeration		POWER SHUTDOWN		REMARK
			Temp	TDS	PH (7-8)	COD (450 mg/l)	BOD (250 mg/l)	TSS (600 mg/l)	Temp	TDS	PH (7-8)	COD (<100mg/l)	BOD (<30mg/l)	TSS (<50mg/l)	DO	HR5	MINS		
			°c	ppm		ppm	ppm	ppm	°c	ppm		ppm	ppm	ppm	ppm				
1-Jul	22.55	23.0	29	1390	7.5	464	182	278	29	1016	7.9	112	26	31	1.6		50	2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage	
2-Jul	19.80	20.0	29	1362	7.5	456	175	291	29	983	7.9	104	22	27.0	1.6			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage	
3-Jul	23.76	24.0	30	1179	7.5	372	154	259	30	812	7.9	96	21	24	1.8			2 STREAM IS UNDER OPERATION	
4-Jul	23.76	24.0	30	1094	7.5	304	140	263	30	803	7.9	88	19	29.0	1.7			2 STREAM IS UNDER OPERATION	
5-Jul	22.77	23.0	30	1262	7.5	416	*	294	30	911	7.9	95	*	31	1.6			2 STREAM IS UNDER OPERATION	
6-Jul	23.76	23.0	30	1389	7.5	384	*	276	30	872	7.9	88	*	29	1.8	1	25	2 STREAM IS UNDER OPERATION	
7-Jul	23.76	24.0	30	1230	7.5	328	*	241	30	802	7.9	80	*	24	2.1			2 STREAM IS UNDER OPERATION	
8-Jul	23.76	24.0	30	1309	7.5	340	*	273	30	818	7.9	96	*	26	1.7			2 STREAM IS UNDER OPERATION	
9-Jul	18.06	18.0																* water sample discarded due to power failure from kesco side ( fault in transmission line)	
10-Jul	7.25	7.0																Plant not run due to fault in transmission line from Kesco Side (7.30AM TO 12.00AM)	
11-Jul	0.00	0.0														16	30	Plant not run due to fault in transmission line from Kesco Side (12.00AM TO 12AM)	
12-Jul	7.27	7.0	30	1438	7.5	480	188	271	30	1014	7.9	144	28	38	0.2	18	0	2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage	
13-Jul	23.76	24.0	30	1469	7.5	454	170	298	30	911	7.9	128	25	33	1.1			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage	
14-Jul	23.76	24.0	30	1316	7.5	472	166	301	30	898	7.9	104	23	33	1.2			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage	
15-Jul	22.23	24.0	30	1229	7.5	384	155	257	30	809	7.9	96	21	27	1.4			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage	
16-Jul	14.36	14.0	30	1393	7.5	408	162	274	30	813	7.9	88	23	29	1.8			2 STREAM IS UNDER OPERATION	
17-Jul	23.76	24.0	30	1455	7.5	432	164	297	30	923	7.9	92	22	31	1.4			2 STREAM IS UNDER OPERATION	
18-Jul	23.76	24.0	30	1416	7.5	448	172	288	30	938	7.9	96	26	27	1.7			2 STREAM IS UNDER OPERATION	
19-Jul	21.61	22.0	30	1349	7.5	468	160	263	30	891	7.9	104	24	25	1.9			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage	
20-Jul	15.34	15.0	30	1221	7.5	356	145	246	30	817	7.9	88	22	23	1.9			2 STREAM IS UNDER OPERATION	
21-Jul	23.76	24.0	30	1294	7.5	384	152	291	30	891	7.9	96	24	27	4.8			2 STREAM IS UNDER OPERATION	
22-Jul	23.10	23.0	30	1182	7.5	356	148	276	30	796	7.9	80	20	29	2.1			2 STREAM IS UNDER OPERATION	
23-Jul	23.76	24.0	30	1503	7.5	508	185	297	30	905	7.9	110	24	34	1.6			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage	
24-Jul	23.76	24.0	30	1491	7.5	468	165	281	30	944	7.9	104	22	29	1.7			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage	
25-Jul	22.77	23.0	30	1310	7.5	440	160	297	30	891	7.9	96	21	26	1.4			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage	
26-Jul	23.76	24.0	30	1449	7.5	534	182	311	30	905	7.9	104	25	28	1.5			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage	
27-Jul	22.08	22.0	30	1353	7.5	356	142	291	30	811	7.9	88	23	24	1.8			2 STREAM IS UNDER OPERATION	
28-Jul	19.80	20.0	30	1386	7.5	384	150	257	30	819	7.9	96	21	27	1.6			2 STREAM IS UNDER OPERATION	
29-Jul	15.84	16.0	30	1469	7.5	348	155	313	30	805	7.9	80	23	25	1.9			2 STREAM IS UNDER OPERATION	
30-Jul	23.76	24.0	30	1205	7.6	372	158	294	30	899	7.9	92	22	28	1.6			2 STREAM IS UNDER OPERATION	
31-Jul	22.77	23.0	30	1411	7.6	516	180	316	30	964	7.9	104	25	29	1.9			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage	
<b>TOTAL</b>	<b>633.24</b>																		
<b>AVG</b>	<b>20.43</b>	<b>20.48</b>	<b>30</b>	<b>1338</b>	<b>7.5</b>	<b>415</b>	<b>163</b>	<b>282</b>	<b>30</b>	<b>878</b>	<b>7.90</b>	<b>98</b>	<b>23</b>	<b>28</b>	<b>1.7</b>	<b>60</b>	<b>45</b>		

Note: There is ingress of Industrial Waste water (coloured) at STP from Sanjivan area, which was experienced on dates of 1,2,12,13,14,18,19,23,24,26,31 July 2020 and was reported to UPJN officials also.

## ANNEXURE 5: Site Inspection Report for the Month of July 2020 (Bingawan)

### 210 MLD STP Bingawan Inspection report of IPS, MunshiPurwa (67 MLD)

Visit & Inspected on date 06.07.2020

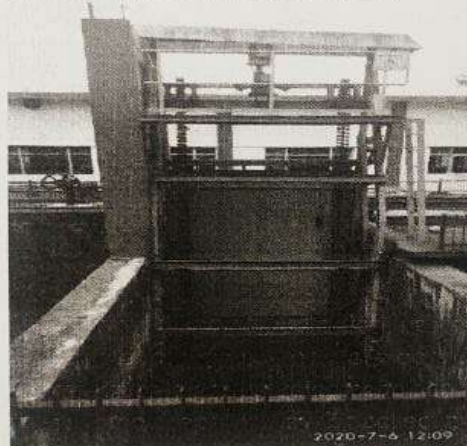
Following STC & KRML Staff were present.

1. Mr. Lokesh Khandelwal, Support Engineer, STC Kanpur
2. Mr. Sundar Rajan, Support Engineer, E / M, STC Kanpur
3. Mr. Linga Krishna Rao, Safety Expert, STC Kanpur
4. Mr. Biraj Kishor, Pump operator, KRML Kanpur

#### Observations:-

##### 1. Collection Chamber

- 1no. of manual screen is in working condition
- 1no. of mechanical screen installed found not in working condition.
- MS structural's are in rusted condition. Painting has to be carried out.
- There is no proper trolley for collecting derbies in the belt conveyer and the same is not in working condition.



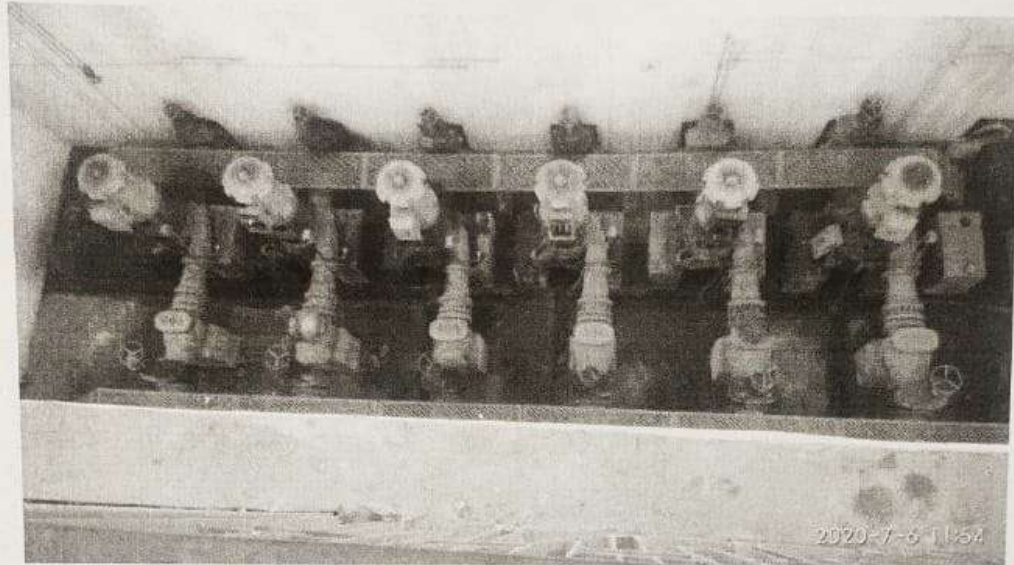
Photograph of Mechanical Screen



Photograph of Belt Conveyer

##### 2. Pumping Station

- Out of 6 no's sewage transfer pump 3 no's in working condition also there is leakage from the gland in 1 no. of the working pump.
- Out of 6 no's, 3 no's of Junction box are in damaged condition.
- Pump no. 4, 5 & 6 are not in working condition due to starter cable fault and Panel issues from past 45 days.



Photograph of Raw Sewage transfer pump

**3. Online Monitoring**

- 1 no. of Electro-Magnetic Flow meter is installed at site.
- RTU & UPS System has been installed at site. KRMPPL told online monitoring system will be commissioning on date 15.07.2020.



EMF Meter



UPS



RTU

**4. Miscellaneous**

- On 05.07.2020 total discharge is 35.28 MLD.
- On 06.07.2020 there is no power supply from 10:30 AM to 02:00 PM. DG not found in running condition.
- No proper housekeeping around the site.
- Plastering on Collection chamber walls have to be carried out and painting of civil structure need to be done.

**5. DG Set**

- 1 no. of DG set not found in working condition.



Photograph of DG

**6. Safety observations**

- Rubber mats to be arranged properly before the electrical panels.
- In-between electrical panel's gaps to be closed with chequered plates or grills for avoiding fall persons in the gaps.
- In pump house floor cleaning and good housekeeping need to be maintained.
- Pumps electrical box top covers to be arranged for avoiding electrical shock.
- Belt conveyor pull chord to be arranged and motor coupling guards to be arranged.
- Sump inlet area pipe line around hand railing to be arranged with flexible nut and bolt arrangement for opening during maintenance.
- Fire buckets sand to be replaced once in a month.
- Present fire extinguishers kept near electrical panel room to be changed with new extinguishers and to be maintained properly in further time.
- Electrical cables should pass through over head line. In few location electrical cables not laid properly.

*Lokesh Khandelwal*

Lokesh Khandelwal  
Support Engg Civil

*Sundar Rajan*

Sundar Rajan  
Support Engg Mech.

*Linga Rao*

Linga Rao  
Safety Expert

## Inspection report of 210 MLD STP Bingawan

Visit & Inspected on date 07-07-2020

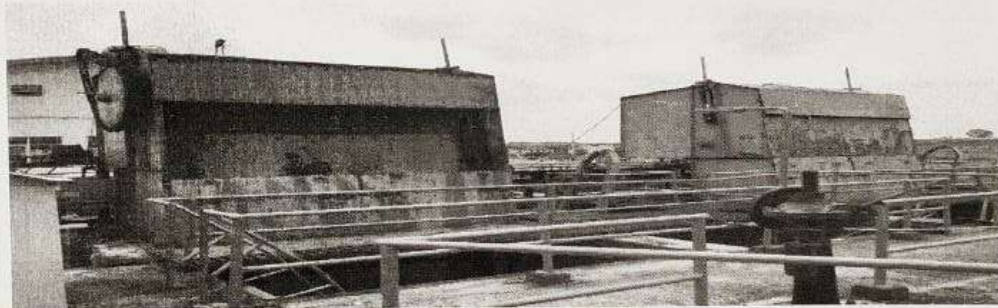
Following STC & KRMPL Staff were present

- 1 Mr. Lokesh Khandelwal, Support Engineer
- 2 Mr. Sunder Rajan, Support Engineer
- 3 Mr. Vikas Sharma, Support Engineer
- 4 Mr. Amit Brahmre, O&M In-charge, KRMPL
- 5 Mr. Satesh Yadav, Lab Chemist, KRMPL

### Observations:-

#### **1. Collection Chamber**

- 2 no's of manual screen are in working condition.
- 2 no's of mechanical screen including belt conveyer assembly installed which are not in working condition.
- 2 no's of mechanical screen structure has to be painted. Currently in corroded state.

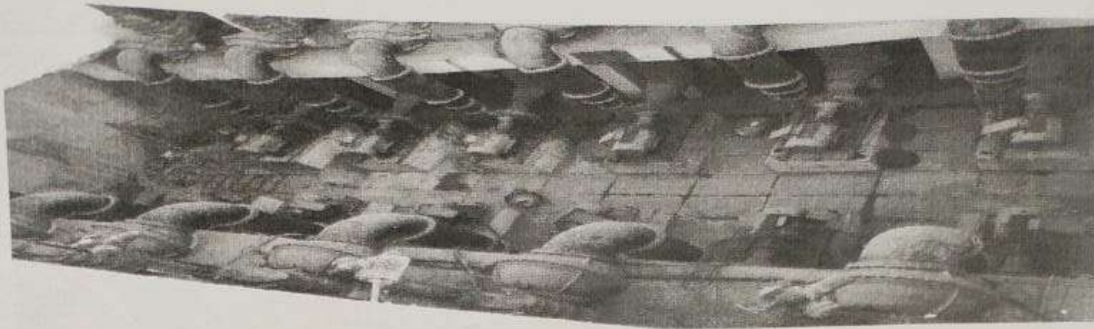


- Proper cabling work has to be carried out in cable trays



#### **2. Main Pumping Station**

- Out of 12 no's sewage transfer pump, 10 no's are in working condition. Pump no. 8 & 9 are break down due to ATS problem and Pumps no. 7 & 10 leakage from the gland.



**3. Flow Meter**

- 2 no's of Electro-Magnetic Flow meter installed at site and 1 no. is in working condition
- Online monitoring system, RTU, DNP & UPS installed at site. KRMPPL told on-line monitoring system will be starting on date 15.07.2020.



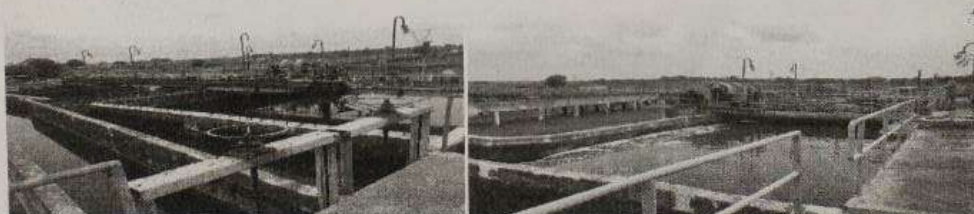
**4. Inlet chamber**

- 2 no's of manual screen are in working condition.
- 3 no's of mechanical screen including belt conveyer assembly are installed but 1 no. is not in working condition

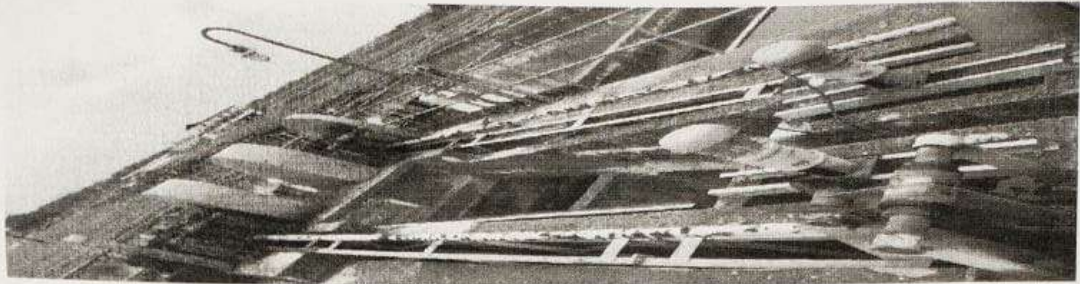


**5. Grit removal assembly**

- Out of 4 no's , 3 no's are in working condition
- Coupling guard & Chain covers has yet to be placed
- Painting has to be carried out for all the gates.

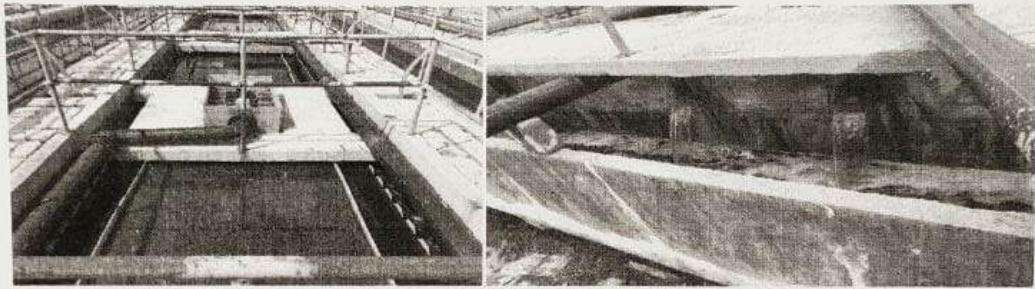


- Classifier drive assembly has to be painted



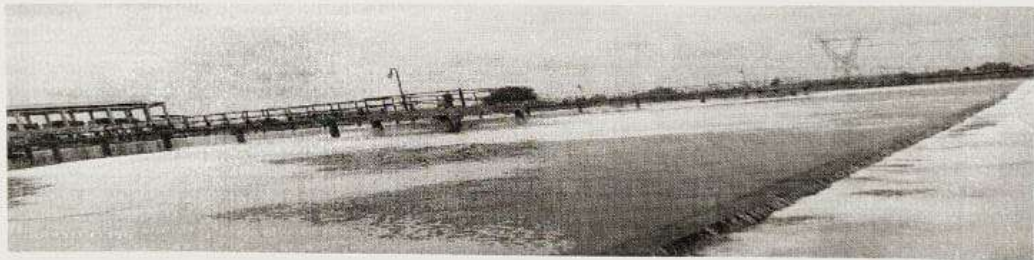
**6. UASB reactor**

- Out of 16 no's, Reactor no. 4 are under trail-run & Reactor no. 8 are in working condition. Reactor no. 1 & 3 are under maintenance for rectifying sludge removal and HDPE pipeline damages. Reactor no. 4 is running trail ( Photo Reactor no. 4 )



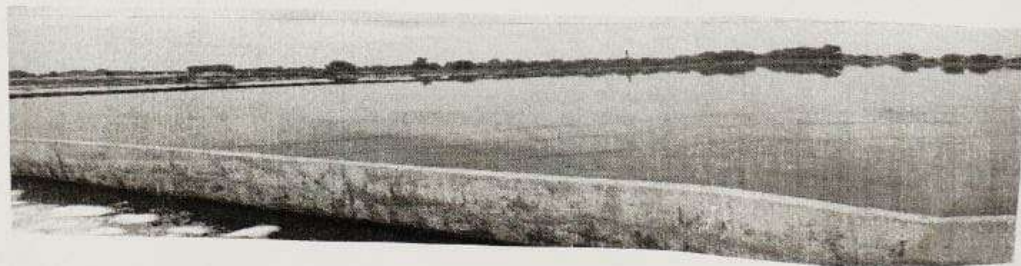
**7. Aeration pond**

- Out of 18 no's of aerators 4 no's are under maintenance (electric motor maintenance).



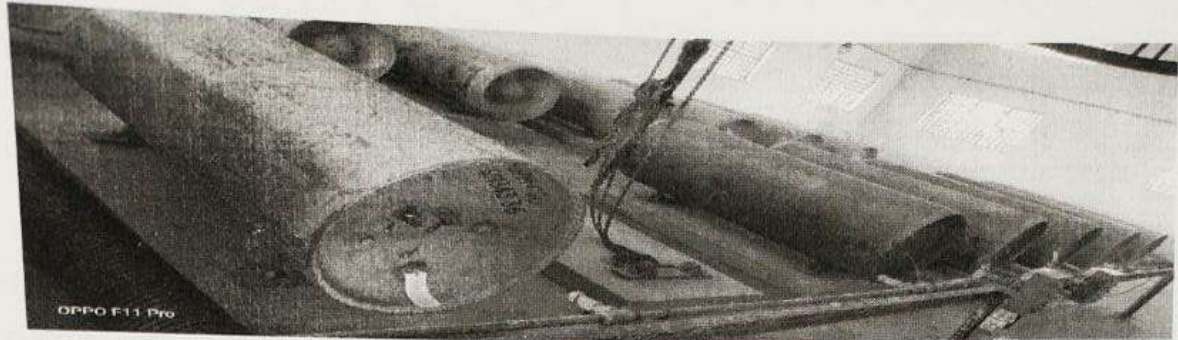
- Painting of panels and hand railing has to be carried out.
- Most of the cable trays are in corroded condition.

**8. Final polishing pond**





## 9. Chlorination

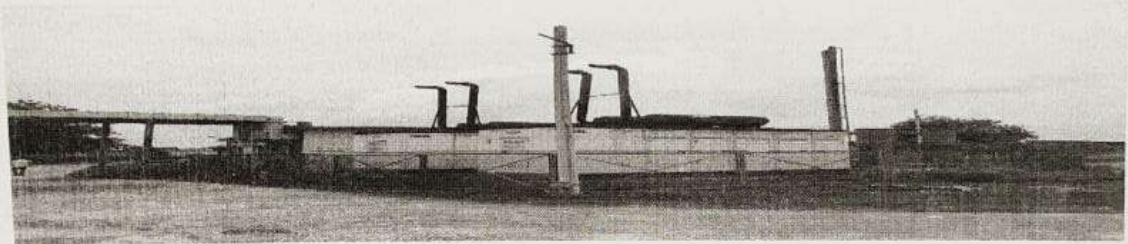


## 10. Gas holder

- Out of 2 no's both are not in working condition.

## 11. DFG

- Out of 2 no's 1 no. is in working condition and another under maintenance from plant handover date



## 12. Belt filter press

- Out of 3 no's all are not in working condition. Repairing work is being done. KRMPPL has told that 1 no. will be ready by 10.07.2020.



## 13. Miscellaneous

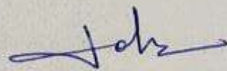
- There is no proper approach road beyond aeration system
- There is no proper house keeping
- IP camera is to be installed around the plant

#### 14. Safety

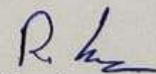
- Chlorine safety system to be improved, required proper caution boards and safe operation procedure at outside and inside area, chlorine detector and alarm system to be arranged for safety of operators and workers working in this area.
- SCBA (self contained breathing apparatus) which is supposed to be in good condition and required usage training for workers is not there. At present SCBA is not working and required to procure good set and organise training to all the employees working in and around this area.
- Well top plate or grill to arranged in protection point of view.
- While entering in to 'DARGA' in/out checking and monitoring to be done at entry gate in safety point of view. In case of any problem in this area then the Concessioner should take liability as per Factories Act.
- In plant all ladders hand railing supports to be arranged for avoiding the fall of persons while climbing and getting down from ladder.
- In plant entire platforms area toe boards with 100X6 mm plate to be arranged for avoiding fall of persons legs in down.
- Coupling guards and chain belt guards to be provided for all the pumps and motors in the site area.
- DG area cautions boards, do's and don'ts to be written on the gate.
- In entire plant safety cautions boards, slogans, pictorial message, and flexes to be arranged for creating safety awareness to the workers, staff and visitors of the plant.



Vikas Sharma  
Supt. Engr.



Lokesh Khandelwal  
Supt. Engr.



Sundarrajan  
Supt. Engr.

## ANNEXURE 6: Site Inspection Report for the Month of July 2020 (Sajari)

### 42 MLD STP Sajari Inspection report of IPS, Sanigawan (14 MLD)

Visit & Inspected on date 13-07-2020

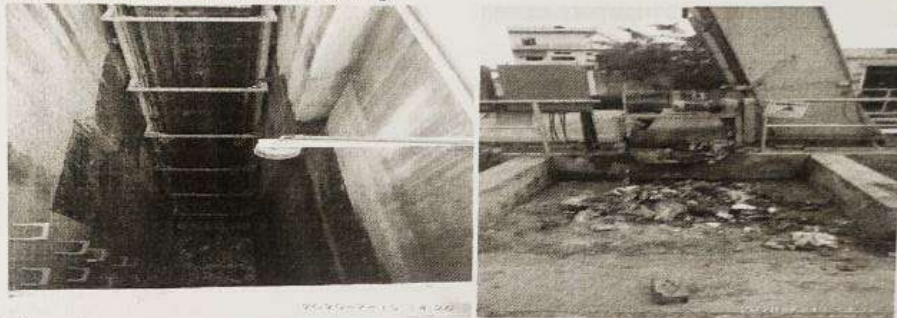
Following STC & KRMPL Staff were present.

1. Mr. Lokesh Khandelwal, Support Engineer.
2. Mr. Linga Krishna Rao, Safety Expert.
3. Mr. Akhilesh Pandy Pump operator KRMPL

#### Observations:-

##### 1. Collection Chamber

- 1 no. of manual screen is in working condition.
- 2 no's. of mechanical screen installed and both are in working condition. Auto panel system is not working.



- There is no proper trolley for collecting derbies in the belt conveyer and belt conveyer is working condition.

##### 2. Pumping Station

- Out of 5 no's sewage transfer pump's all are in working condition.

##### 3. Flow meter

- 1 no. of Electro-Magnetic Flow meter is installed at site. There is no calibration certificate of flow meter.
- On-line monitoring system is not installed at site.



4. Miscellaneous

- No proper housekeeping around the site.
- Only one person (pump operator) has been present in chakeri IPS.

5. DG Set

- 1 no. of DG set is found in working condition..



6. Safety observations

- Sanitizers not available at site. Basic PPE Helmets, shoes and Gloves not maintaining at site.
- Electrical panel room area DG connection taken without plug top.
- Between panels gap to be closed with chequered plate.
- DG painting to be done and good maintenance to be done. Battery area door to be closed. At present DG is not working.
- In this plant fire extinguishers expired one to be replaced with good condition one.
- IPS pumps cables top cable tray to be arranged.
- EOT crane, chain blocks and hoists 3rd inspection to be get it done immediately.
- Belt conveyer area garbage to be removed periodically.
- Meter reading box area in-between panel and cable pit area gap to be closed with grill or chequered plate in safety point of view.
- Number of safety caution boards to be displayed for making safety awareness to workers.
- Tube well room not operating.
- Electrical panel rooms area good housekeeping to be maintained

*LK*  
*R K*  
Lokesh Khandelwal  
Support Engg. Civil

*LKR*  
*R K*  
Linga Krishna Rao  
Safety Expert

## 42 MLD STP Sajari

### Inspection report of IPS, Chakeri (14 MLD)

Visit & Inspected on date 13-07-2020

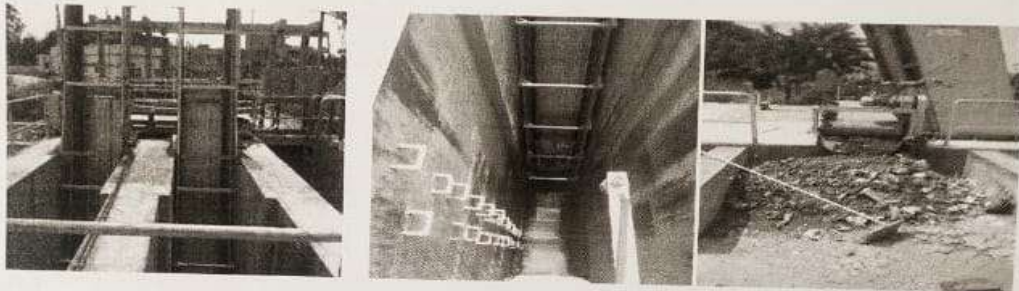
Following STC & KRMP staff were present.

1. Mr. Lokesh Khandelwal, Support Engineer.
2. Mr. Linga Krishna Rao, Safety Expert.
3. Mr. Akash, Pump operator.

#### Observations:-

##### 1. Collection Chamber

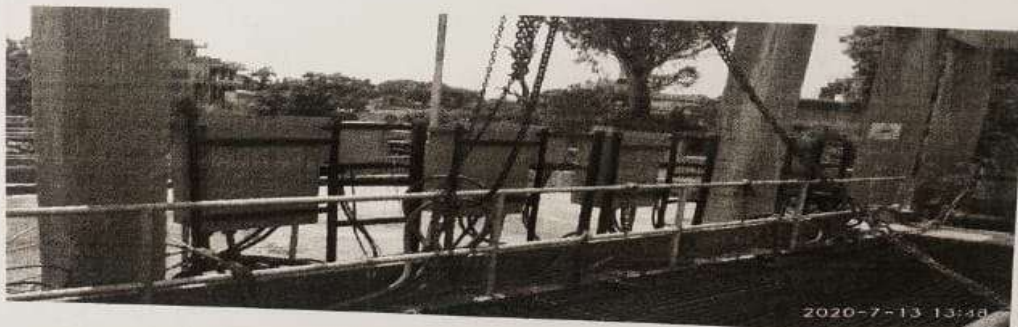
- 1 no. of manual screen is in working condition.
- 2 no's. of mechanical screen installed. 1 no. is not in working condition.



- MS structural's are in rusted condition. Painting has to be carried out.
- There is no proper trolley for collecting derbies in the belt conveyer and the same is not in proper working condition.

##### 2. Pumping Station

- Out of 5 no's sewage transfer pump 4 no's in working condition.
- 1 no. pump not installed due to maintenance.



3. Flow meter

- 1 no. of Electro-Magnetic Flow meter is installed at site. There is no calibration certificate of flow meter.
- On-line monitoring system is not installed at site.

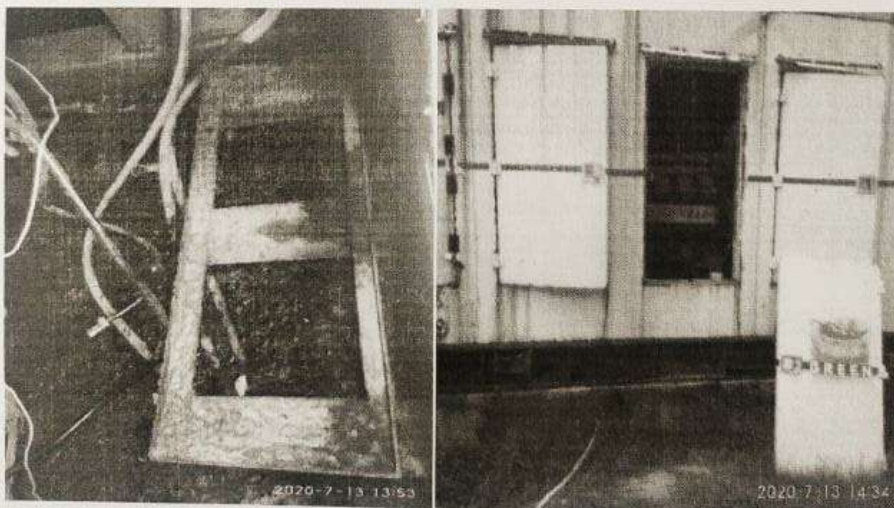


4. Miscellaneous

- No proper housekeeping around the site.
- Only one person (pump operator) has been present in chakeri IPS.

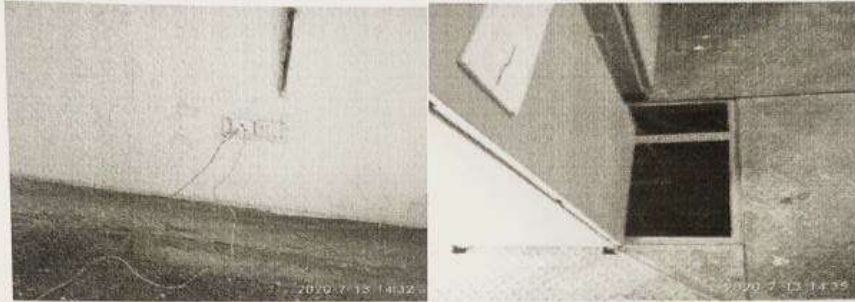
5. DG Set

- 1 no. of DG set is not found in working condition. Battery not found in DG set.

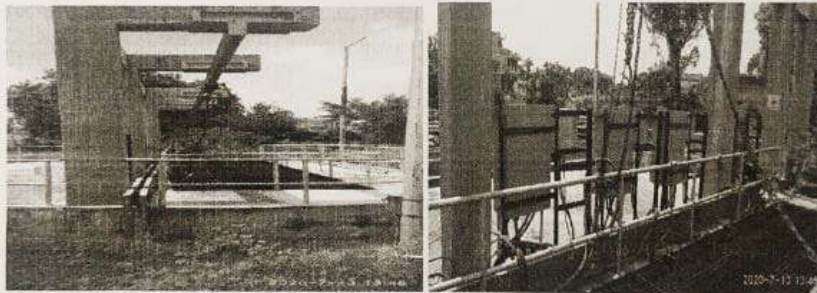


6. **Safety observations**

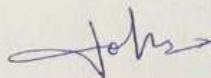
- Sanitizers not available at site. Basic PPE Helmets, shoes and Gloves not maintaining at site.
- Electrical panel room area DG connection taken without plug top.



- Between panels gap to be closed with chequered plate.
- DG painting to be done and good maintenance to be done. Battery area door to be closed. At present DG is not working.
- In this plant fire extinguishers expired one to be replaced with good condition one.
- IPS pumps cables top cable tray to be arranged.
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- Belt conveyer area garbage to be removed periodically.
- Meter reading box area in-between panel and cable pit area gap to be closed with grill or chequered plate in safety point of view.
- Number of safety caution boards to be displayed for making safety awareness to workers.
- Tube well room not operating.
- Electrical panel rooms area good housekeeping to be maintained



Lokesh Khandelwal  
 Support Engg. Civil



Linga Krishna Rao  
 Safety Expert

