

# NATIONAL MISSION FOR CLEAN GANGA (NMCG)

MINISTRY OF JAL SHAKTI DEPARTMENT OF WATER RESOURCES,  
RIVER DEVELOPMENT & GANGA REJUVENATION, GOVT. OF INDIA



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

September - 2022



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



**Funding Agency**  
National Mission for  
Clean Ganga  
MoWR, River  
Development & Ganga  
Rejuvenation,  
New Delhi



**Project Engineer**  
Shah Technical  
Consultant Pvt. Ltd.  
117/231 O block,  
Geeta Nagar  
Kanpur  
Uttar Pradesh - 208025



**Concessionaire**  
Kanpur River Management  
Pvt. Ltd.  
Flat no 101,  
1<sup>st</sup> Floor, 3/83, Vishnupuri,  
Kanpur, Uttar Pradesh -  
208002

## TABLE OF CONTENTS

### CONTENTS

MONTHLY PROGRESS REPORT – HAM KANPUR .....	5
1. INTRODUCTION.....	5
2. HYBRID ANNUITY MODEL (HAM).....	6
3. OBJECTIVES .....	6
4. HAM KANPUR PROJECT AT A GLANCE .....	7
5. PROJECT WISE DETAILS OF COMPONENTS UNDER HAM KANPUR PROJECT .....	8
5.1 PANKHA FACILITIES.....	8
5.2 UNNAO FACILITIES.....	9
5.3 SHUKLAGANJ STP FACILITIES .....	9
5.4 JAJMAU (PHASE I) FACILITIES .....	10
5.5 JAJMAU PHASE II STP FACILITY .....	10
5.6 BINGAWAN FACILITIES .....	11
5.7 SAJARI FACILITIES.....	11
6. PHYSICAL PROGRESS OF WORK .....	12
6.1 MILESTONE WISE ACTIVITIES AND PROGRESS: PANKHA STP FACILITIES .....	14
6.2 MILESTONE WISE ACTIVITIES AND PROGRESS: UNNAO STP.....	42
6.3 MILESTONE WISE ACTIVITIES AND PROGRESS: SHUKLAGANJ STP.....	64
7. PRESENT STATUS AND ISSUES OF EXISTING STPS .....	82
7.1 JAJMAU (PHASE – 1) 130 MLD STP AND IPS REHABILITATION.....	82
7.2 43 MLD JAJMAU PHASE II.....	142
7.3 210 MLD BINGAWAN STP.....	156
7.4 42 MLD SAJARI STP .....	167
8. CONCESSIONAIRE’S PENDING REPRESENTATION / SPECIFIC IMPROVEMENT OF QUALITY .....	174
9. STATUS OF BEP & OTHER DETAILS.....	174

## LIST OF TABLES

Table 2.1	:	HAM Kanpur Project at a Glance
Table 5.1	:	Pankha Facilities
Table 5.2	:	Unnao Facilities
Table 5.3	:	Shuklaganj Facilities
Table 5.4	:	Jajmau Facilities
Table 5.5	:	Bingawan Facilities
Table 5.6	:	Sajari Facilities
Table 6.1	:	Milestone Wise Activities And Progress: Pankha STP Facilities
Table 6.2	:	Milestone Wise Activities And Progress: Unnao STP Facilities
Table 6.3	:	BEPs and other details

## LIST OF FIGURES

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

## 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

### 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 program 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 program 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 industrialization and urbanization 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 program 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)

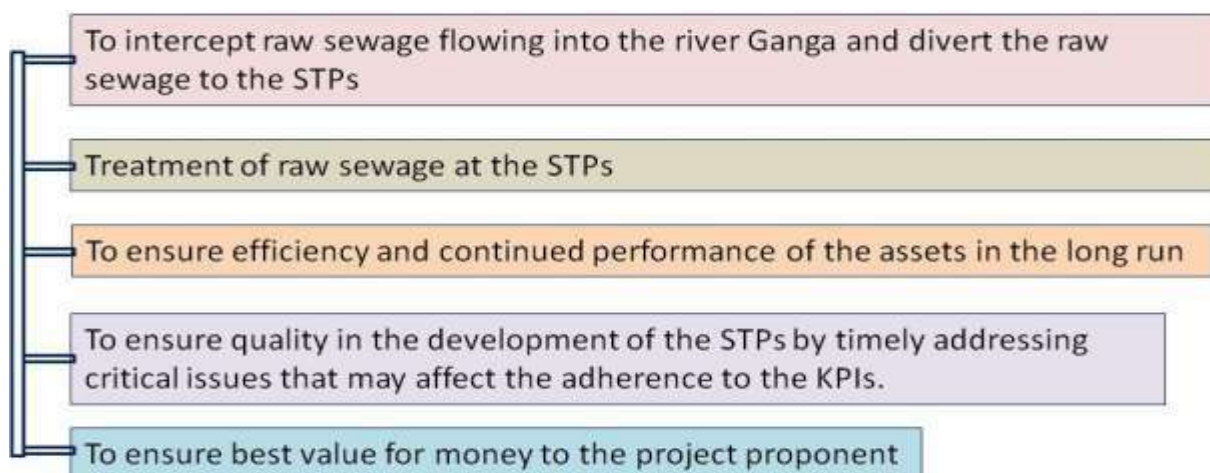
Government of India has approved the Namami Gange program as an integrated approach for effective abatement of pollution in river Ganga and Yamuna. As part of this and to ensure that no untreated domestic sewage flow into the river Ganga and Yamuna, various interventions are planned such as Interception & 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 three new STP facilities at Pankha, Unnao and Shuklaganj with O&M for 15 years, rehabilitation of existing Jajmau 130 MLD STP with O&M for 15 years and O&M of existing 210 MLD USAB based Bingawan STP facilities, 43 MLD Jajmau and for 42 MLD Sajari STP facilities for 15 years 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**

Name of Project	:	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)
Client	:	National Mission for Clean Ganga (NMCG), New Delhi and UP Jal Nigam
Execution Agency	:	Uttar Pradesh Jal Nigam (UPJN)
Consultant	:	Shah Technical Consultants (P) Ltd. as ‘Project Engineer’
Agreement & LOA	:	STC Agreement dated 12.04.2019 & LOA: Pr-12012/41/2018-PPP/NMCG dated 04.02.2019
Concessionaire	:	Kanpur River Management Private Limited (KRMPL) an SPV of Shapoorji Pallonji & Company Private Limited, Mumbai
Concessionaire’s Agreement	:	14/GM/2018-19 dated 21.12.2018
Cost of Project (CAPEX+OPEX)	:	Rs. 816.25 Cr. (CAPEX 255.50 Cr. + OPEX 560.75 Cr.)
Effective Date	:	11.10.2019
Completion date (as per contract)	:	24 Months from effective date (21 months construction + 3 months trial run)
O&M period	:	15 years after last Commercial Operation Date (COD)
Description of Work	:	<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 Facility	Capacity/Dia./Size	Nos./Length
<b>Date of Start- Effective Date (11.10.2019)</b>			
<b>Scope of Work- New Construction and O&amp;M</b>			
1	STP	30 MLD	1
2	MPS	115MLD	1
3	ICI Nala IPS	25 MLD	1
4	Sundar Nagar	20 MLD	1
5	Thermal Nala (A) tapping	22 MLD	1
6	Thermal Nala (B)(tapping)	8 MLD	1
7	ICI Nala (tapping)	7.85 MLD	1
8	Rising main (IC Nala IPS to collection chamber)	800mm-φ	6.450 km
9	Rising main (Sundar Nagar IPS to collection chamber)	800mm-φ	0.547 km
10	Common Gravity main (collection chamberto MPS)	2000mm- φ	1.948Km
11	Sewer network	16.624 km	
		350mm-φ	2.258 km
		400 mm-φ	0.611 km
		450 mm-φ	0.704 km
		500 mm-φ	0.718 km
		600 mm-φ	1.046 km
		700 mm-φ	1.079 km
		800 mm-φ	3.226 km
		900 mm-φ	1.171 km
		1000 mm- φ	0.060 km
		1200 mm-φ	2.290 km
		1600 mm-φ	1.635 km
		2000 mm-φ	1.826 km
12	Manhole		308 nos.



## 5.2 UNNAO FACILITIES

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

**Table 5.2: Unnao Facilities**

SN	STP Facility	Capacity/Dia./Size	Nos./Length
<b>Date of Start- Effective Date (11.10.2019)</b>			
<b>Scope of Work- New Construction and O&amp;M</b>			
1.	STP	15 MLD	1
2.	Sump cum Pump house (MPS)	40 MLD	1
3.	I&D works (Nala tapping)	90 MLD	1
4.	Trunk Sewer	1200mm $\phi$	3.6Km
5.	Manholes		46 nos.
6.	Rising main (MPS to STP)	750mm $\phi$	100m
7.	Rising main (bypass)	750mm $\phi$	100m
8.	Effluent gravity channel (STP to discharge point)	1.5m x1.0m	300m
9.	Effluent disposal drain	700mm	570m

## 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 Facility	Capacity/Dia./Size	Nos./Length
<b>Date of Start- Effective Date (11.10.2019)</b>			
<b>Scope of Work- New Construction and O&amp;M</b>			
1.	STP	5 MLD	1
2.	Sump cum Pump house (MPS)	20 MLD	1
3.	Connecting sewer (in zone 2)	400-500mm $\phi$	200m
	Effluent Disposal line	400mm $\phi$	310m
	(I&D to STP)	600mm $\phi$	430m
	I&D works (Nala tapping)	45 MLD	1
4.	Collection chamber	3.5mx3.6mx1m	1
5.	Rising main (MPS to STP)	500mm $\phi$	50m
6.	Rising main (bypass)	500mm $\phi$	50m
7.	Effluent channel (STP to discharge point)	1.5m x1m	100m

**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 Facility	Capacity/Dia./Size
<b>Date of Start- Effective Date (11.10.2019)</b>		
<b>Scope of Work- Renovation and O&amp;M</b>		
1	STP (ASP) with power Generation	130 MLD
2	Sump cum Pump house (TEPH)	200 MLD
3	CCT	173 MLD
4	Nawabganj IPS	14.35 MLD
	PH1	5.35 MLD
	PH2	9 MLD
7	Parmat IPS	66.67 MLD
	PH1	32.83 MLD
	PH2	21.6 MLD
	PH3	12.4 MLD
11	Baba Ghat / Muar mill IPS	7.42 MLD
	Guptar Ghat IPS	1.44 MLD
	Jajmau CSPA	129.6 MLD

**5.5 JAJMAU PHASE II STP FACILITY**

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

SN	STP Facility	Capacity/Dia./Size
<b>Date of Start- Effective Date (11.10.2019)</b>		
<b>Scope of Work- Renovation and O&amp;M</b>		
1	Khalasi Lane IPS	50.69 MLD
2	Sanjaypuram IPS	4.03 MLD
3	Jajmau MPS	25 MLD

## 5.6 BINGAWAN FACILITIES

Project wise component detail of Bingawan is given in table 5.5:

**Table 5.5: Bingawan Facilities**

SN	STP Facility	Capacity/Dia./Size
<b>Schedule Handing Over Date- 01.04.2019</b>		
<b>Scope of Work- Renovation and O&amp;M</b>		
1	STP (USAB)	210 MLD
2	Installation of online monitoring system (RTOLMS)	
3	Bingawan MPS	200 MLD
4	Rakhimandi IPS	108 MLD
5	Halwakhanda IPS	69.12 MLD
	Munshipurwa IPS	18.79 MLD
7	Sisamau Nala (tapping)	8 MLD

## 5.7 SAJARI FACILITIES

Project wise component detail of Sajari is given in table 5.6

**Table 5.6: Sajari Facilities**

SN	STP Facility	Capacity/Dia./Size
<b>Schedule Handing Over Date- 11.10.2019</b>		
<b>Scope of Work- O&amp;M for 15 years</b>		
1	STP on ASP Technology	42 MLD
2	MPS	42.24 MLD
3	Chakeri IPS	14.33 MLD
4	Sanigawan IPS	14.33 MLD

## 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. 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 started after effective date i.e.

- i. transfer of land for STP in Pankha from KDA;
- ii. permission of laying of sewer line along road in Pankha from KDA;
- iii. Unnao & Shuklaganj and renovation of existing facilities i.e. Jajmau 130 MLD.

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%. Execution of works of new STP facilities and O&M of existing facilities were hampered because of COVID-19 pandemic. Nationwide lockdown was imposed in April 2020 to June 2020 due to which work progress was affected severely. Again in April 2021, due to second wave of COVID-19 progress of work was again affected as majority of workers, staff and officials were affected by the second wave of COVID pandemic.

Once process of unlock started, the Concessionaire was asked to speed up the work. The Concessionaire submitted revised construction plans for new STP construction facilities compensating relevant construction milestone works with extended timeline. Originally, the scheduled date of project completion was 10<sup>th</sup> October 2021 i.e. 24 months from the effective date. But due to COVID pandemic and heavy rainfall during monsoon season of 2021, milestone works were lagging far behind the schedule. On dated 03.09.2021, in the JMD UPJN meeting, new target date for completion of balance works of Pankha and Unnao STPs was given i.e. 15<sup>th</sup> Dec. 2021. But the works of these STPs couldn't be completed on 15<sup>th</sup> Dec. 2021 due to inadequate deployment of manpower and poor work planning / lack of double shift working at these facilities. In the NMCG meeting dated 30.12.2021, the Concessionaire assured to make Pankha plant operational on 15.01.2022 by taking Thermal Nala-A flow into the STP. For Unnao STP, NMCG directed the Concessionaire to complete the works of STP by 31.01.2022.

In the NMCG meeting dated 17.02.2022 the Concessionaire requested for final time extension due to COVID-19 1<sup>st</sup> & 2<sup>nd</sup> waves as per guidelines released by GOI and also requested for extension due to additional works under variation. With above, the Concessionaire requested for EOT for Pankha till 25/04/2022 and for Unnao till 15/05/2022. DG NMCG discussed EOT with UPJN and PE and it was decided to grant the EOT for the aforesaid period with condition of double penalty if works still not completed within extended time. The progress of construction of new STP facilities is given in following headings.

During 11<sup>th</sup> & 12<sup>th</sup> April 2022, ED (T) along with Mr. Rajat Kumar Gupta, SWMS NMCG visited Kanpur to know about the status and progress of the project. It was noted that due

to fund issues with KRMPL, desired progress of STPs has not been achieved. PE informed that at Pankha and Unnao STPs 85-90% of civil works are completed but due to non supply / erection of E&M equipments and incomplete works of sewer laying/manholes and IPS (Sundar Nagar & ICI Nala) progress is not increasing. Also, since last month manpower is extremely low (15-20) and KRMPL will not be able to complete the Pankha and Unnao STPs at scheduled extended dates.

In the NMCG meeting dated 27.04.2022, chaired by DG, progress and status of HAM Kanpur project was again discussed. It was noted that KRMPL has missed the final deadline i.e. 25.04.2022 for the completion of Pankha STP and will also miss the Unnao STP completion date i.e. 15.05.2022. DG, NMCG expressed displeasure towards KRMPL and after discussion completion dates of Pankha and Unnao were decided as 15.07.2022 and 15.06.2022 respectively. DG, NMCG also put condition that failing to complete the mentioned plants on time KRMPL will be subjected to triple fold penalty.

On dated 5<sup>th</sup> & 6<sup>th</sup> June 2022, DG, NMCG along with ED (T) and Mr. R.K. Gupta, SWMS NMCG visited Kanpur for progress review of HAM Kanpur Project. During visit DG NMCG was disappointed with the KRMPL regarding slow progress of the project. DG NMCG gave strict directions to increase the manpower, required machinery and expedite the Pankha, Unnao, Jajmau and Sajari STP works. New timeline to complete Pankha & Unnao STP with full plant operation on SCADA control given is 31/07/2022 and 15/07/2022 respectively.

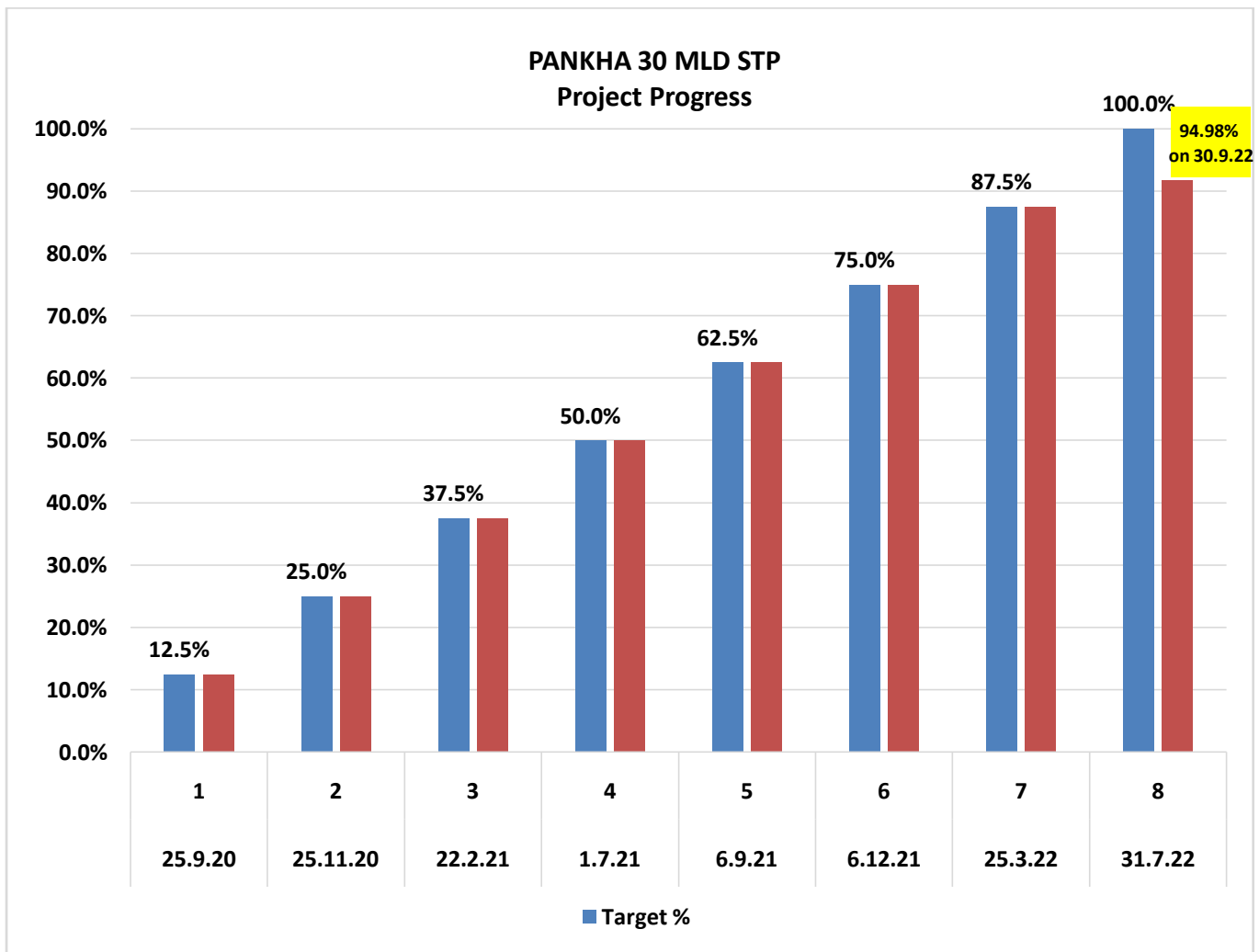
For Sajari plant, DG noticed that O&M of the plant is not in order with visibly septic conditions in aeration tank. There was recurrent operational issues with thickener, sludge pumps etc. leading to sludge buildup. KRMPL committed to improve the O&M and compliance to the KPIs by 30/06/2022. Improvement has been made in the aeration tank operation and the KPIs are also meeting. But the issues of sludge thickeners operation, gas generation, sludge pumps etc still not resolved.

In the NMCG meeting dated 02/08/2022 and Kanpur visit dated 08/08/2022, ED (P) NMCG gave strict directions to increase the manpower, required machinery and expedite the Pankha, Unnao, Jajmau and Shuklaganj STP works. New timeline to complete Pankha, Unnao & Shuklaganj STP with full plant operation on SCADA control given is 31/10/2022, 15/10/2022 and 13/06/2022 respectively.

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

The progress of works related to the 30 MLD STP at Pankha is very slow. Till date total progress is 94.98%. As per direction given in the NMCG meeting dated 02.08.2022, Pankha STP was needed to complete by 31.10.2022. Status and progress of Pankha STP is as following:

- Manpower deployed at the site during Sep. 2022 was 60-90 nos.
- KRMPL failed to increase the manpower over 300 and work in night shift as directed in the NMCG meeting dated 06.06.2022, 27.04.2022, 17.02.2022, 30.12.2021 and 17.11.2021;
- Due to inadequate no. of manpower and lack of management from KRMPL side, the deadline for the completion of Pankha STP was missed.



- Pankha STP site units not functional due to pending installation of E&M items – pump of supernatant, chlorination system, diffuser in 2 SBR basins pending, power backup 24\*7 (DG) not available, instrumentation works pending, etc.
- About 5.5 MLD Sewage taken from Thermal A is taken in intermittently to MPS, PTU, SBR Basin 1 and 2 and discharging through CCT by effluent channel to River Pandu
- Rising Main works completed:  
6.437 km out 6.437 km Laying completed at ICI Nalla.

215.7 m out of 710 m (Length increased due to change in alignment) at Thermal Nalla B at Sundar Nagar

- DG set received at site
- Electric Pole shifting work completed at Sundar Nagar IPS
- Status of I&D:
  - Thermal Nalla A = 95%
  - Thermal Nalla B = 80%
  - ICI Nalla =95%
- Status of IPS (including E&M):
  - Sundar Nagar = 80%
  - ICI Nalla = 85%
- Consent to Operate to be applied by KRMPL and obtained from UPPCB
- Status of progress of different STP units till Sep 2022 are as following:

STP Units	Target %	Achieved %
I&D structure (All 3)	100%	82%
Sewer Laying (14.13 km of 16.624)	100%	89.5%
Manholes (235 completed of 308)	100%	76%
Rising Main (6.65 km of 7 km)	100%	93%
MPS	100%	96%
PTU	100%	95%
SBR	100%	97%
Air Blower	100%	94%
CCT	100%	96%
Chlorination Room	100%	92%
Supernatant Sump	100%	96%
Sludge Thickener	100%	98%
Centrifuge Building	100%	95%
Effluent Disposal System	100%	90%
Admin Building	100%	83%
Staff Quarter	100%	98%
Guard Room	100%	97%
Transformer Yard	100%	94%
DG Set	100%	92%
Boundary Wall	100%	92%

### SUMMARY OF MILESTONE WISE PROGRESS AT PANKHA STP

Milestone	Schedule Completion date	Actual completion date	Milestone Amount (Rs.)	Targeted Progress till 30.09.2022		
				Milestone Amount (Rs.)	% Target	% Achieved
1st milestone	25.09.2020	25.09.2020	12,48,39,750.00	12,48,39,750	12.50%	12.50%
2nd milestone	25.11.2020	25.11.2020	12,48,39,750.00	12,48,39,750	12.50%	12.50%
3rd Milestone	22.02.2021	22.02.2021	12,48,39,750.00	12,48,39,750	12.50%	12.50%
4th Milestone	01.07.2021	01.07.2021	12,48,39,750.00	12,48,39,750	12.50%	12.50%
5th Milestone	06.09.2021	06.09.2021	12,48,39,750.00	12,48,39,750	12.50%	12.50%
6th milestone	06.12.2021	06.12.2021	12,48,39,750.00	12,48,39,750	12.5%	12.50%
7th milestone	25.03.2022	25.03.2022	12,48,39,750.00	11,84,11,233	12.5%	11.86%
8th milestone	15.07.2022 Approval pending	Not completed	12,48,39,750.00	8,11,75,061	12.5%	8.13%
<b>Overall Progress</b>	<b>99,87,18,000.00</b>			<b>94,86,24,794</b>	<b>100%</b>	<b>94.98%</b>

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



Table 6.1: Milestone wise Progress – 30 MLD Pankha STP

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
1	<b>SBR Basin Area</b>						-				-
	<b>CIVIL WORK</b>						-				-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	RCC Foundation/Raft		-		-		-		-		-
	Wall 50% of total lift work		-		-		-		-		-
	Walls (balance 50% of Total Lift work)		-		-		-		-		-
	Baffle Walls work		-		-		-		-		-
	Walkway/Platform	20%	24,15,095	5%	6,59,173	5%	6,14,900		-		-
	Finishing Work	30%	43,78,800	40%	58,38,400	40%	58,38,400	30%	43,78,800	15%	21,89,400
	<b>MECHANICAL WORK</b>		-		-		-		-		-
	<b>A. DECANTERS</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site	100%	313,59,900		-		-		-		-
	(ii) On completion of erection works		-	50%	18,44,700	50%	18,44,700	50%	18,44,700	50%	18,44,700
	(iii) On completion of Testing of equipment		-		-		-	100%	18,44,700	100%	18,44,700
			-		-		-		-		-
	<b>B. DIFFUSERS</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-		-		-
	(ii) On completion of erection works		-	50%	12,29,800	50%	12,29,800	50%	12,29,800	50%	12,29,800
	(iii) On completion of Testing of equipment		-		-		-	100%	12,29,800	100%	12,29,800
			-		-		-		-		-
	<b>C. RAS &amp; SAS PUMPS</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-		-		-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	(ii) On completion of erection works	50%	12,29,800	50%	12,29,800	50%	12,29,800		-		-
	(iii) On completion of Testing of equipment		-		-		-	100%	12,29,800	100%	12,29,800
			-		-		-		-		-
	<b>D. PIPES &amp; FITTINGS</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site	100%	104,53,300		-		-		-		-
	(ii) On completion of erection works	75%	9,22,350	25%	3,07,450	25%	3,07,450		-		-
	(iii) On completion of Testing of equipment	20%	1,22,980		-		-	80%	4,91,920	80%	4,91,920
2	<b>Chlorine Contact Tank Area</b>						-				-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	RCC Foundation/Raft		-		-		-		-		-
	Wall 50% of total lift work		-		-		-		-		-
	Walls (balance 50% of Total Lift work)		-		-		-		-		-
	Baffle Walls work	2%	73,788		-		-		-		-
	Finishing Work		-	80%	22,13,640	80%	22,13,640	20%	5,53,410		-
3	<b>Chlorination House Area</b>						-				-
	<b>CIVIL WORK</b>		-		-		-		-		-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	RCC Foundation/Column footing		-		-		-		-		-
	Column & Beam		-		-		-		-		-
	Ground floor Slab		-		-		-		-		-
	Column & Beam		-		-		-		-		-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	Roof Slab		-		-		-		-		-
	Brickwork & Plaster	70%	12,91,290		-		-		-		-
	Finishing Work		-	100%	18,44,700	90%	16,60,230		-		-
	<b>MECHANICAL WORK</b>		-		-		-		-		-
	<b>A. CHLORINATION SYSTEM</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-	100%	31,35,990	100%	31,35,990		-		-
	(ii) On completion of erection works		-	100%	3,68,940	95%	3,50,493		-		-
	(iii) On completion of Testing of equipment		-		-		-	100%	1,84,470		-
			-		-		-		-		-
	<b>B. HOIST WORKS</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-		-		-
	(ii) On completion of erection works		-	100%	92,235		-		-		-
	(iii) On completion of Testing of equipment		-		-		-	100%	46,118		-
			-		-		-		-		-
	<b>ELECTRICAL &amp; INSTRUMENTATION WORK</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-	100%	15,67,995	100%	15,67,995		-		-
	(ii) On completion of erection works		-		-		-	100%	1,84,470	60%	1,10,682
	(iii) On completion of Testing of equipment		-		-		-	100%	92,235		-
4	<b>Sludge Thickener Area</b>						-				-
	<b>CIVIL WORK</b>		-		-		-		-		-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	RCC Foundation wall/base slab		-		-		-		-		-
	Wall 50% of total lift work		-		-		-		-		-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	Walls (balance 50% of Total Lift work)		-		-		-		-		-
	Finishing Work	40%	7,37,880	10%	1,84,470		-		-		-
	<b>MECHANICAL WORK</b>		-		-		-		-		-
	<b>SLUDGE THICKENER MECHANISM</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site	100%	47,03,985		-		-		-		-
	(ii) On completion of erection works	100%	5,53,410		-		-		-		-
	(iii) On completion of Testing of equipment		-		-		-	100%	2,76,705	100%	2,76,705
5	<b>Inlet / Stilling Chamber Area</b>						-				-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	RCC Foundation/Column footing		-		-		-		-		-
	Column & Beam		-		-		-		-		-
	RCC Slab		-		-		-		-		-
	RCC Wall	50%	6,14,900		-		-		-		-
	Final finishing including Staircases,Railing,Shade,Painting, etc.	50%	6,14,900	50%	6,14,900	35%	4,30,430		-		-
6	<b>Manual &amp; Mechanical Fine Bar Screen Chamber Area</b>						-				-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	RCC Foundation		-		-		-		-		-
	Column & Beam		-		-		-		-		-
	RCC Slab		-		-		-		-		-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	RCC Wall		-		-		-		-		-
	Walkway/Platform	84%	10,33,635		-		-		-		-
	Finishing Work	20%	2,45,960	80%	9,83,840	65%	7,99,370		-		-
7	<b>Grit Chamber (Mechanical Cleaned) &amp; (Manually Cleaned)</b>						-				-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	RCC Foundation		-		-		-		-		-
	Column & Beam		-		-		-		-		-
	RCC Slab	5%	61,490		-		-		-		-
	RCC Wall		-	10%	1,22,980	10%	1,22,980		-		-
	Walkway/Platform	20%	2,45,960	30%	3,68,940	30%	3,68,940		-		-
	Finishing Work		-	90%	11,06,820	85%	10,45,330	10%	1,22,980		-
	<b>MECHANICAL WORK</b>		-		-		-		-		-
	<b>A.MECHANICAL FINE SCREEN</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-		-		-
	(ii) On completion of erection works	100%	2,45,960		-		-		-		-
	(iii) On completion of Testing of equipment		-		-		-	100%	1,22,980	100%	1,22,980
	<b>B.MANUAL FINE SCREEN</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-		-		-
	(ii) On completion of erection works	100%	3,68,940		-		-		-		-
	(iii) On completion of Testing of equipment		-		-		-	100%	1,84,470	100%	1,84,470
	<b>C.GATES</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-	100%	20,90,660	100%	20,90,660		-		-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	(ii) On completion of erection works		-	100%	2,45,960	100%	2,45,960		-		-
	(iii) On completion of Testing of equipment		-		-		-	100%	1,22,980	100%	1,22,980
	<b>D.CONVEYOR BELTS</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-		-		-
	(ii) On completion of erection works		-		-		-	100%	2,45,960	100%	2,45,960
	(iii) On completion of Testing of equipment		-		-		-	100%	1,22,980	100%	1,22,980
	<b>E. GRIT MECHANISM</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-		-		-
	(ii) On completion of erection works		-		-		-	100%	6,14,900	100%	6,14,900
	(iii) On completion of Testing of equipment		-		-		-	100%	3,07,450	100%	3,07,450
			-		-		-		-		-
8	<b>Flow Measurement Channel Area</b>						-				-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	RCC Foundation		-		-		-		-		-
	Column & Beam	10%	1,84,470		-		-		-		-
	RCC Slab		-		-		-		-		-
	RCC Wall	10%	2,45,960		-		-		-		-
	Walkway/Platform	10%	1,22,980		-		-		-		-
	Finishing Work	20%	4,91,920	80%	19,67,680	50%	12,29,800		-		-
9	<b>Admin Bldg Area</b>						-				-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	Column footings/Foundation		-		-		-		-		-
	Column & Beam		-		-		-		-		-
	Ground Floor Slab	50%	9,22,350		-		-		-		-
	1st Floor Slab	100%	18,44,700		-		-		-		-
	Roof Slab	100%	18,44,700		-		-		-		-
	Brickwork & Plaster	48%	13,28,184	52%	14,38,866	52%	14,38,866		-		-
	Finishing Work		-	70%	12,91,290	70%	12,91,290	30%	5,53,410		-
	<b>ELECTRICAL WORK</b>		-		-		-		-		-
	<b>LT/HT PANEL</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site	50%	36,92,995		-		-		-		-
	(ii) On completion of erection works		-	100%	13,03,410	100%	13,03,410		-		-
	(iii) On completion of Testing of equipment		-		-		-	100%	4,34,470	100%	4,34,470
	<b>PLC/SCADA SYSTEM</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-	100%	73,85,990	100%	73,85,990
	(ii) On completion of erection works		-		-		-	100%	13,03,410	90%	11,73,069
	(iii) On completion of Testing of equipment		-		-		-	100%	4,34,470		-
			-		-		-		-		-
10	<b>Air Blower Room Area</b>						-				-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	Column footings/Foundation		-		-		-		-		-
	Column & Beam		-		-		-		-		-
	RCC Ground Floor Slab		-	100%	15,37,250	100%	15,37,250		-		-
	RCC Roof Slab	100%	15,37,250		-		-		-		-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	Brickwork & Plaster	23%	3,53,568	77%	11,83,683	77%	11,83,683		-		-
	Finishing Work		-	100%	15,37,250	80%	12,29,800		-		-
	<b>MECHANICAL WORK</b>		-		-		-		-		-
	<b>AIR BLOWER(PUMP)</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-	30%	11,75,996	30%	11,75,996	70%	27,43,991	70%	27,43,991
	(ii) On completion of erection works		-	30%	1,38,353	30%	1,38,353	70%	3,22,823	70%	3,22,823
	(iii) On completion of Testing of equipment		-		-		-	100%	2,30,588	100%	2,30,588
	<b>ELECTRICAL WORK</b>		-		-		-		-		-
	<b>AIR BLOWER(MOTOR)</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-	30%	15,67,995	30%	15,67,995	70%	36,58,655	70%	36,58,655
	(ii) On completion of erection works		-	30%	1,84,470	30%	1,84,470	70%	4,30,430	70%	4,30,430
	(iii) On completion of Testing of equipment		-		-		-	100%	3,07,450	100%	3,07,450
11	<b>Staff Quarter Area</b>						-				-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	RCC Foundation/column footing		-		-		-		-		-
	Column & Beam		-		-		-		-		-
	RCC Ground Floor Slab	100%	12,91,290		-		-		-		-
	RCC Roof Slab	100%	8,60,860		-		-		-		-
	Brickwork & Plaster	50%	4,30,430	50%	4,30,430	50%	4,30,430		-		-
	Electrical work		-	100%	12,91,290	100%	12,91,290		-		-
	Finishing Work		-	100%	8,60,860	92%	7,91,991		-		-
12	<b>Guard Room Area</b>						-				-
	Site Clearance		-		-		-		-		-



Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	Excavation	100%	1,47,576		-		-		-		-
	PCC	100%	2,21,364		-		-		-		-
	RCC Foundation/column footing	100%	5,53,410		-		-		-		-
	Column & Beam	100%	5,53,410		-		-		-		-
	RCC Ground Floor Slab	100%	5,53,410		-		-		-		-
	RCC Roof Slab		-	100%	3,68,940	100%	3,68,940		-		-
	Brickwork & Plaster		-	100%	3,68,940	100%	3,68,940		-		-
	Electrical work		-	100%	5,53,410	100%	5,53,410		-		-
	Finishing Work		-	100%	3,68,940	90%	3,32,046		-		-
13	<b>Sludge Dewatering System Area (Centrifuge Pump House, Sludge sump &amp; Poly dosing tank)</b>						-				-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	RCC Foundation		-		-		-		-		-
	1st Column & Beam		-		-		-		-		-
	Ground Floor Slab	100%	30,74,500		-		-		-		-
	2nd Column & Beam	10%	3,07,450	50%	15,37,250	50%	15,37,250		-		-
	RCC Roof Slab		-	100%	30,74,500	100%	30,74,500		-		-
	Brickwork & Plaster		-	100%	30,74,500	100%	30,74,500		-		-
	Finishing Work		-	50%	15,37,250	50%	15,37,250	50%	15,37,250	30%	9,22,350
	<b>MECHANICAL WORK</b>		-		-		-		-		-
	<b>CENTRIFUGE UNIT</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-		-		-
	(ii) On completion of erection works		-		-		-	100%	4,61,175	100%	4,61,175

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	(iii) On completion of Testing of equipment		-		-		-	100%	2,30,588		-
	<b>CENTRIFUGE FEED PUMP</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-		-		-
	(ii) On completion of erection works		-		-		-	100%	3,07,450	100%	3,07,450
	(iii) On completion of Testing of equipment		-		-		-	100%	1,53,725		-
	<b>POLY DOSING PUMPS</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site	100%	13,06,663		-		-		-		-
	(ii) On completion of erection works		-		-		-	100%	1,53,725	100%	1,53,725
	(iii) On completion of Testing of equipment		-		-		-	100%	76,863		-
14	<b>Supernatant Recirculation Sump Area</b>						-				-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	RCC Foundation wall/base slab		-		-		-		-		-
	Wall 50% of total lift work		-		-		-		-		-
	Walls (balance 50% of Total Lift work)		-		-		-		-		-
	Final finishing including Staircases,Railing,Shade,Painting etc.		-	40%	7,37,880	30%	5,53,410	10%	1,84,470		-
	<b>MECHANICAL WORK</b>		-		-		-		-		-
	<b>PUMPING SYSTEM</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-		-		-
	(ii) On completion of erection works	50%	3,22,823	50%	3,22,823	50%	3,22,823		-		-
	(iii) On completion of Testing of equipment		-		-		-	100%	3,22,823		-
			-		-		-		-		-
15	<b>Transformer Yard Area</b>						-				-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	Site Clearance		-		-		-		-		-
	Excavation & PCC		-		-		-		-		-
	Foundation Work		-		-		-		-		-
	Finishing Work	50%	3,68,940	50%	3,68,940	30%	2,21,364		-		-
	<b>ELECTRICAL WORK</b>		-		-		-		-		-
	<b>TRANSFORMER</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-		-		-
	(ii) On completion of erection works	80%	2,95,152	20%	73,788	20%	73,788		-		-
	(iii) On completion of Testing of equipment		-	100%	1,84,470	100%	1,84,470		-		-
	<b>CABLE &amp; CABLE TRAY</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site	100%	30,31,457		-		-		-		-
	(ii) On completion of erection works	100%	3,56,642		-		-		-		-
	(iii) On completion of Testing of equipment		-	100%	1,78,321	100%	1,78,321		-		-
16	<b>DG Area</b>						-				-
	Site Clearance		-		-		-		-		-
	Excavation & PCC		-	100%	5,53,410	100%	5,53,410		-		-
	Foundation Work		-	100%	8,30,115	100%	8,30,115		-		-
	Finishing Work		-	50%	2,76,705	50%	2,76,705	50%	2,76,705	50%	2,76,705
	<b>ELECTRICAL WORK</b>		-		-		-		-		-
	<b>DG SET</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-	100%	32,92,790	100%	32,92,790		-		-
	(ii) On completion of erection works		-		-		-	100%	3,87,387	100%	3,87,387
	(iii) On completion of Testing of equipment		-		-		-	100%	1,93,694	50%	96,847
	<b>CABLE &amp; CABLE TRAY</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site	100%	16,46,395		-		-		-		-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	(ii) On completion of erection works		-		-		-	100%	1,93,694	100%	1,93,694
	(iii) On completion of Testing of equipment		-		-		-	100%	96,847	100%	96,847
17	<b>Sludge Storage Platform</b>						-				-
	Site Clearance		-		-		-		-		-
	Excavation & PCC		-	100%	3,00,000	100%	3,00,000		-		-
	Foundation Work		-	100%	4,00,000	100%	4,00,000		-		-
	Finishing work		-		-		-	100%	1,00,000		-
18	<b>EXTERNAL DEVELOPMENT</b>						-				-
A.	Roads, Storm Water Drain & Miscellaneous work	9%	11,38,649	61%	76,81,351	61%	76,86,000	30%	37,80,000		-
B.	<b>Compound Wall with Gate</b>		-		-		-		-		-
	Excavation & PCC		-		-		-		-		-
	RCC Column footing		-		-		-		-		-
	RCC Column & Beam		-		-		-		-		-
	Brickwork & Plaster		-	10%	6,14,900	5%	3,07,450		-		-
	Finishing Work	30%	18,44,700	30%	18,44,700	10%	6,14,900		-		-
19	<b>MPS-2 ( 115MLD)</b>						-				-
	<b>CIVIL</b>		-		-		-		-		-
A	<b>Construction of Raw Sewage Sump</b>		-		-		-		-		-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	RCC Foundation/Raft		-		-		-		-		-
	Wall 50% of total lift work		-		-		-		-		-
	Column & Beam	43%	16,49,162		-		-		-		-
	Walls (balance 50% of Total Lift work)	20%	7,67,052		-		-		-		-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	Ground Floor Slab		-	100%	38,35,260	100%	38,35,260		-		-
	Finishing Work		-	100%	25,56,840	100%	25,56,840		-		-
B	<b>Construction of Inlet Chamber &amp; Screen Channel</b>		-		-		-		-		-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	RCC Foundation/Raft		-		-		-		-		-
	Wall 50% of total lift work		-		-		-		-		-
	Walls (balance 50% of Total Lift work)	3%	51,137		-		-		-		-
	Walkway/Platform	100%	17,04,560		-		-		-		-
C	<b>Construction of Raw Sewage Pump House</b>		-		-		-		-		-
	Column & Beam	40%	6,39,210	60%	9,58,815	60%	9,58,815		-		-
	Roof Slab		-	100%	15,98,025	100%	15,98,025		-		-
	Brickwork & Plaster	10%	1,59,803	70%	11,18,618	70%	11,18,618	20%	3,19,605	20%	3,19,605
	Finishing Work		-		-		-	100%	15,98,025	80%	12,78,420
D	<b>MECHANICAL WORK</b>		-		-		-		-		-
	<b>Coarse Screen mechanical &amp; manual</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site	75%	33,95,803		-		-		-		-
	(ii) On completion of erection works		-	100%	5,32,675	100%	5,32,675		-		-
	(iii) On completion of Testing of equipment		-	100%	2,66,338	100%	2,66,338		-		-
	<b>Piping &amp; Support work</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site	25%	11,31,934		-		-		-		-
	(ii) On completion of erection works	75%	3,99,506	25%	1,33,169	25%	1,33,169		-		-
	(iii) On completion of Testing of equipment		-		-		-	100%	2,66,338		-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	<b>Gate Work</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-	100%	63,38,833	100%	63,38,833		-		-
	(ii) On completion of erection works		-	100%	7,45,745	100%	7,45,745		-		-
	(iii) On completion of Testing of equipment		-		-		-	100%	3,72,873	100%	3,72,873
	<b>Pumps</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-		-		-
	(ii) On completion of erection works		-	100%	11,71,885	100%	11,71,885		-		-
	(iii) On completion of Testing of equipment		-		-		-	100%	5,85,943	100%	5,85,943
20	<b>ICI Nala IPS</b>						-				-
	<b>CIVIL</b>		-		-		-		-		-
A	<b>Construction of Raw Sewage Sump</b>		-		-		-		-		-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-
	RCC Foundation/Raft		-		-		-		-		-
	Wall 50% of total lift work		-		-		-		-		-
	Column & Beam		-		-		-	60%	15,33,600	60%	15,33,600
	Walls (balance 50% of Total Lift work)		-		-		-		-		-
	Ground Floor Slab		-		-		-	100%	25,56,000	100%	25,56,000
	Finishing Work		-		-		-	100%	12,78,000	60%	7,66,800
B	<b>Construction of Inlet Chamber &amp; Screen Channel</b>		-		-		-		-		-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	RCC Foundation/Raft		-		-		-		-		-
	Wall 50% of total lift work		-		-		-		-		-
	Walls (balance 50% of Total Lift work)		-		-		-		-		-
	Walkway/Platform		-	100%	4,26,000	100%	4,26,000		-		-
	Finishing work		-		-		-	100%	4,26,000	40%	1,70,400
C	<b>Construction of Raw Sewage Pump House</b>		-		-		-		-		-
	Column & Beam		-		-		-	100%	7,99,013	100%	7,99,013
	Roof Slab		-		-		-	100%	7,99,013	100%	7,99,013
	Brickwork & Plaster		-		-		-	100%	7,99,013	100%	7,99,013
	Finishing Work		-		-		-	100%	7,99,013		-
D	<b>Construction of Office Room</b>		-		-		-		-		-
	Site Clearance		-		-		-		-		-
	Excavation & PCC		-		-		-		-		-
	RCC Foundation/column footing		-	100%	6,39,000	100%	6,39,000		-		-
	Column & Beam		-	60%	1,27,800	60%	1,27,800	40%	85,200	40%	85,200
	RCC Ground floor Slab		-		-		-	100%	2,13,000	100%	2,13,000
	RCC Roof Slab		-		-		-	100%	2,13,000	100%	2,13,000
	Brick work & Plaster		-		-		-	100%	2,13,000	100%	2,13,000
	Electrification, plumbing, fixtures		-		-		-	100%	2,13,000		-
	Finishing work		-		-		-	100%	2,13,000		-
E	<b>Construction of Guard Room</b>		-		-		-		-		-
	Site Clearance		-		-		-		-		-
	Excavation & PCC		-		-		-		-		-
	RCC Foundation/column footing		-		-		-	100%	6,39,000	100%	6,39,000
	Column & Beam		-		-		-	100%	2,13,000	100%	2,13,000

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	RCC Ground floor Slab		-		-		-	100%	2,13,000	100%	2,13,000
	RCC Roof Slab		-		-		-	100%	2,13,000	100%	2,13,000
	Brick work & Plaster		-		-		-	100%	2,13,000	100%	2,13,000
	Electrification, plumbing, fixtures		-		-		-	100%	2,13,000		-
	Finishing work		-		-		-	100%	2,13,000		-
F	<b>Transformer Yard,DG Yard</b>		-		-		-	100%	-		-
	Site Clearance		-		-		-		-		-
	Excavation & PCC		-		-		-	100%	6,39,210	100%	6,39,210
	Foundation Work		-		-		-	100%	15,98,025	100%	15,98,025
	Finishing Work		-		-		-	100%	9,58,815		-
G	<b>MECHANICAL WORK</b>		-		-		-		-		-
	<b>Piping &amp; Support work</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-	70%	6,33,883	70%	6,33,883		-		-
	(ii) On completion of erection works		-		-		-	100%	1,06,535	100%	1,06,535
	(iii) On completion of Testing of equipment		-		-		-	100%	53,268		-
	<b>Screen Channel</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site	100%	28,97,752		-		-		-		-
	(ii) On completion of erection works		-		-		-	100%	3,40,912	100%	3,40,912
	(iii) On completion of Testing of equipment		-		-		-	100%	1,70,456		-
	<b>Pumps</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site	100%	28,97,752		-		-		-		-
	(ii) On completion of erection works		-		-		-	100%	3,40,912	100%	3,40,912
	(iii) On completion of Testing of equipment		-		-		-	100%	1,70,456	20%	34,091
H	<b>ELECTRICAL WORK</b>		-		-		-		-		-
	<b>Cable Tray &amp; Earthing Work</b>		-		-		-		-		-



Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	(i) On supply of machinery/equipment at site	50%	5,43,329		-		-	50%	5,43,329	50%	5,43,329
	(ii) On completion of erection works		-		-		-	100%	1,27,842	90%	1,15,058
	(iii) On completion of Testing of equipment		-		-		-	100%	63,921		-
	<b>Transformer</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-	100%	28,97,752	100%	28,97,752
	(ii) On completion of erection works		-		-		-	100%	3,40,912		-
	(iii) On completion of Testing of equipment		-		-		-	100%	1,70,456		-
	<b>DG</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-	100%	19,92,205	100%	19,92,205
	(ii) On completion of erection works		-		-		-	100%	2,34,377	100%	2,34,377
	(iii) On completion of Testing of equipment		-		-		-	100%	1,17,189	100%	1,17,189
I	<b>Construction of Boundary wall &amp; Internal Road</b>		-		-		-		-		-
	Site Clearance		-		-		-		-		-
	Excavation & PCC		-	10%	31,961	10%	31,961	20%	63,921	17%	54,333
	RCC Column footing		-	2%	8,523	2%	8,523	30%	1,27,842	27%	1,15,058
	RCC Column & Beam		-	2%	6,392	2%	6,392	30%	95,882	20%	63,921
	Brickwork & Plaster		-		-		-	55%	1,75,783	35%	1,11,862
	Finishing		-		-		-	100%	3,19,605		-
	Construction of Internal road		-		-		-	100%	4,26,140		-
21	<b>IPS-6 (Sundar Nagar- 20 MLD)-Pankha Area</b>						-				-
	<b>CIVIL</b>		-		-		-		-		-
A	<b>Construction of Raw Sewage Sump</b>		-		-		-		-		-
	Site Clearance		-		-		-		-		-
	Excavation		-		-		-		-		-
	PCC		-		-		-		-		-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	RCC Foundation/Raft		-		-		-		-		-
	Wall 50% of total lift work		-		-		-		-		-
	Column & Beam		-		-		-	60%	15,33,600	60%	15,33,600
	Walls (balance 50% of Total Lift work)	55%	14,05,800		-		-		-		-
	Ground Floor Slab		-		-		-	100%	25,56,000	100%	25,56,000
	Finishing Work		-		-		-	100%	12,78,000		-
B	<b>Construction of Inlet Chamber &amp; Screen Channel</b>		-		-		-		-		-
	Site Clearance		-		-		-		-		-
	Excavation & PCC		-		-		-		-		-
	RCC Foundation/Raft		-		-		-		-		-
	Wall 50% of total lift work		-		-		-		-		-
	Walls (balance 50% of Total Lift work)	70%	2,98,200		-		-		-		-
	Walkway/Platform		-		-		-	100%	2,13,000	100%	2,13,000
	Finishing work		-		-		-	100%	2,13,000		-
C	<b>Construction of Raw Sewage Pump House</b>		-		-		-		-		-
	Column & Beam		-		-		-	100%	7,99,013	100%	7,99,013
	Roof Slab		-		-		-	100%	7,99,013	100%	7,99,013
	Brickwork & Plaster		-		-		-	100%	7,99,013	50%	3,99,506
	Finishing Work		-		-		-	100%	7,99,013		-
D	<b>Construction of Office Room</b>		-		-		-		-		-
	Site Clearance		-		-		-		-		-
	Excavation & PCC		-		-		-		-		-
	RCC Foundation/column footing		-		-		-	100%	6,39,000	100%	6,39,000
	Column & Beam		-		-		-	100%	2,13,000	100%	2,13,000

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	RCC Ground floor Slab		-		-		-	100%	2,13,000	100%	2,13,000
	RCC Roof Slab		-		-		-	100%	2,13,000	100%	2,13,000
	Brick work & Plaster		-		-		-	100%	2,13,000	50%	1,06,500
	Electrification, plumbing, fixtures		-		-		-	100%	2,13,000		-
	Finishing work		-		-		-	100%	2,13,000		-
E	<b>Construction of Guard Room</b>		-		-		-		-		-
	Site Clearance		-		-		-		-		-
	Excavation & PCC		-		-		-		-		-
	RCC Foundation/column footing		-		-		-		-		-
	Column & Beam		-		-		-	50%	1,06,500		-
	RCC Ground floor Slab		-		-		-	100%	2,13,000		-
	RCC Roof Slab		-		-		-	100%	2,13,000		-
	Brick work & Plaster		-		-		-	100%	2,13,000		-
	Electrification, plumbing, fixtures		-		-		-	100%	2,13,000		-
	Finishing work		-		-		-	100%	2,13,000		-
F	<b>Transformer Yard,DG Yard</b>		-		-		-		-		-
	Site Clearance		-		-		-	100%	-		-
	Excavation & PCC		-		-		-	100%	6,39,210	100%	6,39,210
	Foundation Work		-		-		-	100%	15,98,025	100%	15,98,025
	Finishing Work		-		-		-	100%	9,58,815		-
G	<b>MECHANICAL WORK</b>		-		-		-		-		-
	<b>Piping &amp; Support work</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-	75%	8,14,993	75%	8,14,993		-		-
	(ii) On completion of erection works		-		-		-	100%	1,27,842		-
	(iii) On completion of Testing of equipment		-		-		-	100%	63,921		-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	<b>Screen Channel</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site	100%	28,97,752		-		-		-		-
	(ii) On completion of erection works		-		-		-	100%	3,40,912		-
	(iii) On completion of Testing of equipment		-		-		-	100%	1,70,456		-
	<b>Pumps</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site	100%	28,97,752		-		-		-		-
	(ii) On completion of erection works		-		-		-	100%	3,40,912		-
	(iii) On completion of Testing of equipment		-		-		-	100%	1,70,456		-
H	<b>ELECTRICAL WORK</b>		-		-		-		-		-
	<b>Cable Tray &amp; Earthing Work</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site	50%	9,96,102		-		-	50%	9,96,102	50%	9,96,102
	(ii) On completion of erection works		-		-		-	100%	2,34,377		-
	(iii) On completion of Testing of equipment		-		-		-	100%	1,17,189		-
	<b>Transformer</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-	100%	28,97,752	100%	28,97,752
	(ii) On completion of erection works		-		-		-	100%	3,40,912		-
	(iii) On completion of Testing of equipment		-		-		-	100%	1,70,456		-
	<b>DG</b>		-		-		-		-		-
	(i) On supply of machinery/equipment at site		-		-		-	100%	19,92,205	100%	19,92,205
	(ii) On completion of erection works		-		-		-	100%	2,34,377		-
	(iii) On completion of Testing of equipment		-		-		-	100%	1,17,189		-
I	<b>Construction of Boundary wall &amp; Internal Road</b>		-		-		-		-		-
	Site Clearance		-		-		-		-		-
	Excavation & PCC		-		-		-	100%	3,19,605	50%	1,59,803
	RCC Column footing		-		-		-	100%	4,26,140	30%	1,27,842

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	RCC Column & Beam		-		-		-	100%	3,19,605	30%	95,882
	Brickwork & Plaster		-		-		-	100%	3,19,605		-
	Construction of Internal road		-		-		-	100%	4,26,140		-
	Finishing		-		-		-	100%	3,19,605		-
22	<b>I&amp;D Works</b>						-				-
A	<b>ICI Nala</b>		-		-		-		-		-
	Construction Work		-		-		-		-		-
	Tapping of Nallahs		-		-		-	100%	11,12,000	100%	11,12,000
	Electro-Mechanical work		-	60%	10,00,800	60%	10,00,800	40%	6,67,200	20%	3,33,600
	Testing		-		-		-	100%	5,56,000		-
B	<b>Thermal Nala -A</b>		-		-		-		-		-
	Construction Work	17%	3,78,080		-		-		-		-
	Tapping of Nallahs	60%	6,67,200	40%	4,44,800	40%	4,44,800		-		-
	Electro-Mechanical work		-	100%	16,68,000	100%	16,68,000		-		-
	Testing		-	100%	5,56,000	100%	5,56,000		-		-
C	<b>Thermal Nala -B</b>		-		-		-		-		-
	Construction Work		-	31%	6,89,440	31%	6,89,440	50%	11,12,000	50%	11,12,000
	Tapping of Nallahs		-		-		-	100%	11,12,000		-
	Electro-Mechanical work		-	40%	6,67,200	40%	6,67,200	60%	10,00,800	40%	6,67,200
	Testing		-		-		-	100%	5,56,000		-
23	<b>Rising Main Works</b>						-				-
A	<b>ICI Nala Area</b>		-		-		-		-		-
	Site Cleance from Client		-		-		-		-		-
	Supply of Pipes		-	11%	5,73,995	11%	5,61,000	14%	7,23,690	14%	7,14,000
	Excavation,Laying & backfilling of Pipes		-		-		-	40%	2,40,000	40%	2,40,000

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	Testing		-		-		-	100%	3,00,000		-
B	<b>Sundar Nagar IPS Area</b>		-		-		-		-		-
	Site Clearance from Client		-		-		-		-		-
	Supply of Pipes		-		-		-		-		-
	Excavation,Laying & backfilling of Pipes		-		-		-	40%	2,40,000	5%	30,000
	Testing		-		-		-	100%	3,00,000		-
24	<b>Sewer System Area (RCC Pipes-NP3 Types)</b>										-
	Site Clearance						-				-
	Supply of pipes	1%	8,02,271	8%	128,32,363	7%	112,31,799		-		-
	Excavation and Laying of pipes including bed preparation & backfilling	27%	27,53,058	7%	7,01,987	7%	7,01,987	16%	16,04,543	5%	5,01,420
	Manholes	12%	11,58,015	12%	12,10,248	12%	12,03,407	36%	36,49,004	20%	20,05,678
	Testing		-		-		-	100%	100,28,392		-
	Road Restoration work		-	35%	35,47,990	35%	35,09,937	65%	64,80,402	50%	50,14,196
25	<b>Design ,Supply,Testing &amp; Commissioning of Sewer line (crossing National Highway-2 &amp; Railway Track)</b>										-
	Statutory approvals from Railway & Road dept						-				-
	Supply of Carrier & Casing Pipes		-	13%	14,62,284	13%	14,62,284		-		-
	Construction of Pit		-	35%	3,28,076	35%	3,28,076		-		-
	Excavation & Laying of Pipes thru Jack push method		-	50%	28,12,084	50%	28,12,084		-		-
	Testing		-	23%	2,15,593	23%	2,15,593	50%	4,68,681		-
26	<b>Design ,Supply,Testing &amp; Commissioning of Treated Effluent line from STP to River Pandu</b>						-				-
	Site Clearance		-		-		-		-		-

Sl. No.	Description of Items	Milestone-6 (From 07th September'21 to 06th December'21)		Milestone-7 (From 07th December'21 to 25th Mar'22)		Achieved for 7th Milestone		Milestone-8 (From 26th Mar'22 to 25th Apr'22)		Achieved for 8th Milestone	
		%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)	%	Amount(Rs.)
	Construction of Effluent line from STP to River Pandu	25%	18,00,000	40%	28,80,000	40%	28,80,000		-		-
	Testing		-	100%	8,00,000		-		-		-
	<b>TRIAL RUN &amp; COMMISSIONING</b>				-						
	Trial Run & Commissioning				-						
	<b>Total Amount</b>		<b>1248,39,750</b>		<b>1248,39,750</b>		<b>1184,11,233</b>		<b>1248,39,750</b>		<b>811,75,061</b>

## PHOTOGRAPHS OF PANKHA STP SITE



**MPS works**



**VCB Panel & Admin Building**





**Chlorination Room**

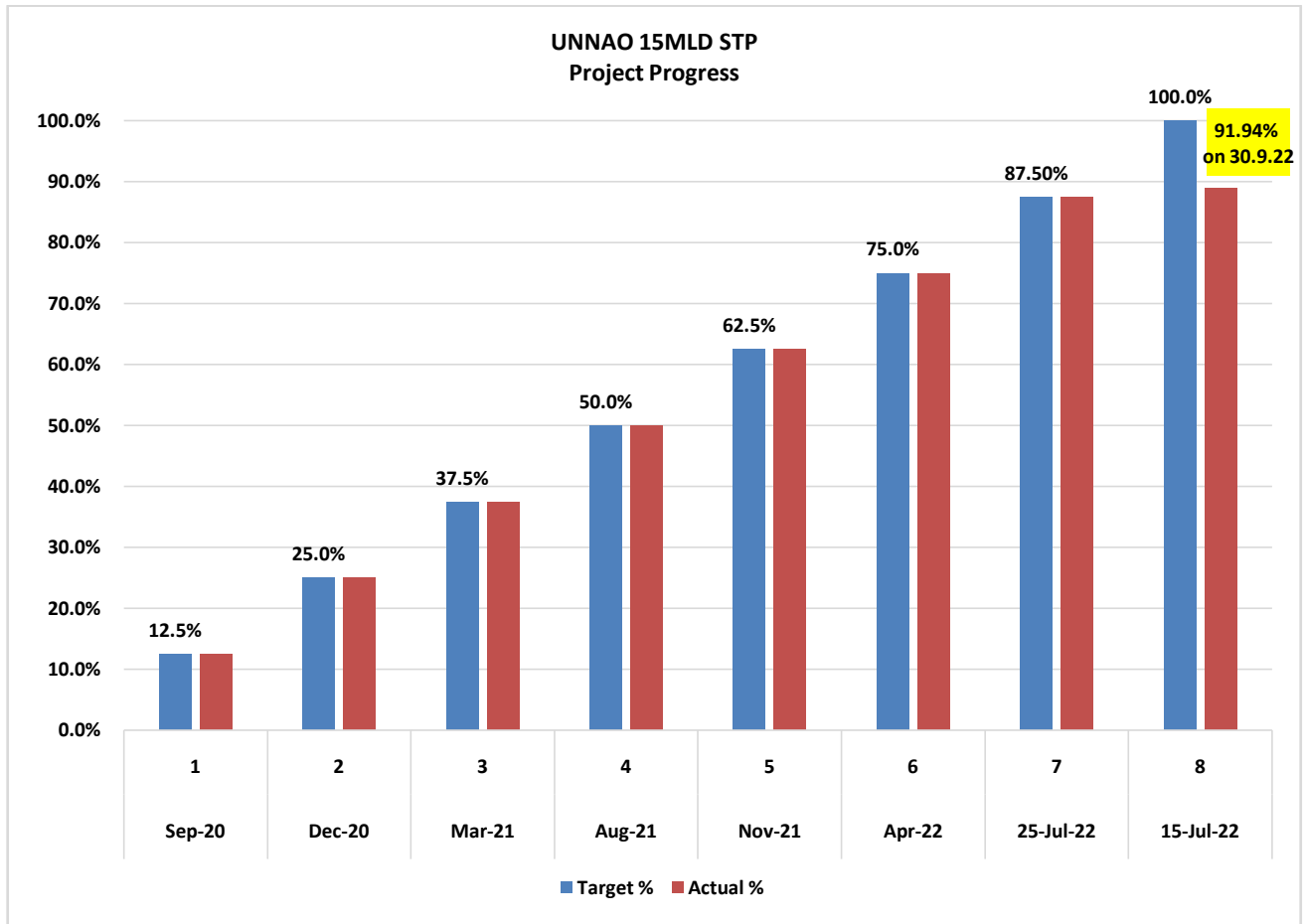


**Centrifuge Building**

**6.2 MILESTONE WISE ACTIVITIES AND PROGRESS: UNNAO STP**

The progress of works related to the 15 MLD STP at Unnao is very slow. As per direction given in the NMCG meeting dated 02.08.2022, KRMPL needed to complete the plant by 15.10.2022. Status and progress of Unnao STP is as following:

- Total progress till Sep 2022 was 91.94%; Till date 7 milestones out of 8 completed.
- Manpower deployed at the 15 MLD STP Unnao site was in the range of 60-70 nos.
- At Unnao plant most of the Civil structures are 95% ready.



- STP soil Backfilling (36,000 Cum): Initial permission for 12000 Cum given by DM office, Unnao. KRMPL done 6000 cum work.
- Sewer and Manhole works are completed. Finishing, cleaning and cover of manholes are in progress;
- Supply of Admin Building - PMCC work (50%) and PLC/SCADA pending;
- Status of progress of different STP units till Aug 2022 are as following:

STP Units	Target %	Achieved %
I&D structure	100%	100%
Sewer Laying (3.25 km of 3.45 km)	100%	100%
Manholes (23 completed of 42)	100%	100%
MPS	100%	100%

PTU	100%	100%
SBR	100%	100%
Air Blower	100%	100%
CCT	100%	95%
Chlorination Room	100%	95%
Supernatant Sump	100%	95%
Sludge Thickener	100%	95%
Centrifuge Building	100%	100%
Effluent Disposal System	100%	100%
Admin Building	100%	90%
Staff Quarter	100%	95%
Guard Room	100%	95%
Transformer Yard	100%	95%
DG Set	100%	95%
Boundary Wall	100%	90%

#### SUMMARY OF OVERALL PROGRESS AT UNNAO STP

Milestone	Schedule Completion date	Actual completion date	Milestone Amount (Rs.)	Progress till 30.09.2022		
				Milestone Amount (Rs.)	% Target	% Achieved
1st milestone	25.09.2020	25.09.2020	4,78,36,250.00	4,78,36,250.00	12.50%	12.50%
2nd milestone	06.12.2020	06.12.2020	4,78,36,250.00	4,78,36,250.00	12.50%	12.50%
3rd Milestone	25.03.2021	25.03.2021	4,78,36,250.00	4,78,36,250.00	12.50%	12.50%
4th Milestone	07.08.2021	07.08.2021	4,78,36,250.00	4,78,36,250.00	12.50%	12.50%
5th Milestone	15.11.2021	15.11.2021	4,78,36,250.00	4,78,36,250.00	12.50%	12.50%
6th milestone	25.03.2022	04.04.2022	4,78,36,250.00	46769499.00	12.50%	12.22%
7th milestone	25.04.2022	Not completed	4,78,36,250.00	35503859.00	12.50%	9.28%
8th milestone	15.06.2022	Not completed	4,78,36,250.00	30408966.00	12.50%	7.95%
<b>Overall Progress</b>			<b>38,26,90,000.00</b>	<b>351863574.00</b>	<b>100%</b>	<b>91.94%</b>

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

TABLE 6.2: MILESTONE WISE PROGRESS – 15 MLD UNNAO STP

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
i)	<b>SBR Basin Area</b>										
1	Site Clearance		-				-		-		-
2	Excavation wall footing		-				-		-		-
3	PCC wall footing		-				-		-		-
4	RCC Foundation/Raft of wall		-				-		-		-
5	Wall 50% of total upto base slab		-				-		-		-
6	Walls (balance 50% of upto base slab)		-				-		-		-
7	PCC Base Slab		-				-		-		-
8	RCC Foundation base slab		-				-		-		-
9	Wall 50% of total lift work		-		-		-		-		-
40	Walls (balance 50% of Total Lift work)	25%	6,86,534.40		-		-		-		-
11	Walkway/Platform	70%	19,22,296.32	30%	8,23,841.28	30%	8,23,841.28		-		-
12	Piping & fitting works	50%	10,98,455.04	50%	10,98,455.04	50%	10,98,455.04		-		-
13	Testing /Finishing works		-	100%	36,80,000.00	85%	31,28,000.00		-		-
ii	<b>Sludge Thickener Area</b>		0		0		0		0		0
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
4	RCC Foundation Wall/base slab		-		-		-		-		-
5	Wall 50% of total lift work		-		-		-		-		-
6	Walls (balance 50% of Total Lift work)		-		-		-		-		-
7	Testing /Finishing works	60%	1,84,800.00	15%	46,200.00	5%	15,400.00		-		-
iii	<b>Supernatant Sump Area</b>	0%	0		0		0		0		0
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-
4	RCC Foundation wall/base slab		-		-		-		-		-
5	Wall 50% of total lift work		-		-		-		-		-
6	Walls (balance 50% of Total Lift work)		-		-		-		-		-
7	Testing /Finishing works	50%	42,900.00	25%	21,450.00	15%	12,870.00		-		-
iv	<b>Chlorination Tank Area</b>		0		0		0		0		0
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-
4	RCC Foundation/Raft		-		-		-		-		-
5	Wall 50% of total lift work		-		-		-		-		-
6	Walls (balance 50% of Total Lift work)		-		-		-		-		-

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
7	Baffle Walls work		-		-		-		-		-
8	Testing /Finishing works		-	100%	4,57,000.00	95%	4,34,150.00		-		-
v	<b>Air Blower Room Area</b>		0		0		0		0		0
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-
4	RCC Foundation/column footing		-		-		-		-		-
5	Column & Beam		-		-		-		-		-
6	RCC Roof Slab	100%	8,29,801.60		-		-		-		-
7	Cable Trench Work		-		-		-		-		-
8	RCC Ground floor Grade Slab		-		-		-		-		-
9	Brick work	70%	4,37,617.60	30%	1,87,550.40	30%	1,87,550.40		-		-
10	Plaster		-	100%	1,71,633.60	100%	1,71,633.60		-		-
11	Testing/Finishing work		-	100%	5,83,000.00	90%	5,24,700.00		-		-
vi	<b>Staff Quarter Area (G+1)</b>		0		0		0		0		0
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-
4	RCC Foundation/column footing		-		-		-		-		-

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
5	Column & Beam		-		-		-		-		-
6	RCC Ground floor Slab		-		-		-		-		-
7	RCC 1st floor Slab		-		-		-		-		-
8	RCC Roof Slab		-		-		-		-		-
9	Brick work		-		-		-		-		-
10	Plaster	50%	33,500.00		-		-		-		-
11	Plumbing, fixtures , sanitary works, AC work		-	50%	33,500.00		-		-		-
12	Electrification work		-	50%	16,750.00		-		-		-
13	Finishing works	70%	23,450.00	30%	10,050.00	10%	3,350.00		-		-
vii	<b>Guard Room Area</b>		0		0		0		0		0
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-
4	RCC Foundation/column footing		-		-		-		-		-
5	Column & Beam		-		-		-		-		-
6	RCC Ground floor Slab		-		-		-		-		-
7	RCC Roof Slab		-		-		-		-		-
8	Brick work		-		-		-		-		-
9	Plaster		-		-		-		-		-

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
10	Plumbing, fixtures		-	50%	57,211.20		-		-		-
11	Sanitary works, AC work		-	50%	32,211.20		-		-		-
12	Electrification work		-	50%	16,105.50		-		-		-
13	Finishing works	50%	16,105.50	50%	16,105.50	30%	9,663.30		-		-
viii	<b>Chlorination Room Area</b>										
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-
4	RCC Foundation/Column footing		-		-		-		-		-
5	Column & Beam		-		-		-		-		-
6	Ground floor Slab		-		-		-		-		-
7	Roof Slab		-		-		-		-		-
8	Brickwork		-		-		-		-		-
9	Plaster	50%	1,28,844.80		-		-		-		-
10	Testing/Finishing works	50%	2,05,500.00	50%	2,05,500.00	25%	1,02,750.00		-		-
ix	<b>Admin Bldg Area (G+1)</b>										
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-



Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
4	Column footings/Foundation		-		-		-		-		-
5	Column & Beam up to First Floor		-		-		-		-		-
6	1st Floor Slab		-		-		-		-		-
7	Column & Beam First Floor to Roof Slab		-		-		-		-		-
8	Roof Slab	100%	1,35,357.77		-		-		-		-
9	Brickwork	100%	1,35,357.77		-		-		-		-
10	Plaster	80%	85,275.40	20%	21,318.85	20%	21,318.85		-		-
11	Electrification, plumbing, fixtures , sanitary works, AC work	30%	66,674.79	70%	1,55,574.52	20%	44,449.86		-		-
12	finishing works	50%	69,500.00	50%	69,500.00	30%	41,700.00		-		-
x	Sludge Dewatering System Area (Centrifuge Pump House, Sludge sump & Poly dosing tank)										
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-
4	RCC Foundation		-		-		-		-		-
5	Column & Beam Upto First Floor		-		-		-		-		-
6	First Floor Slab		-		-		-		-		-
7	Column & Beam First Floor to Roof Slab	75%	2,53,932.00		-		-		-		-

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
8	Roof Slab	100%	3,19,576.00		-		-		-		-
9	Brickwork	70%	2,58,703.20	30%	1,10,872.80	30%	1,10,872.80		-		-
10	Plaster	40%	1,27,830.40	60%	1,91,745.60	60%	1,91,745.60		-		-
11	Piping & fiittings Work		-	100%	1,84,364.00	100%	1,84,364.00		-		-
12	Testing/Finishing works		-	100%	3,51,000.00	75%	2,63,250.00		-		-
xi	<b>Inlet Chamber Area</b>										
1	Site Clearance		-		-		-		-		-
2	Excavation & PCC		-		-		-		-		-
3	RCC Foundation/Column footing		-		-		-		-		-
4	Column & Beam	75%	2,35,369.80		-		-		-		-
5	RCC Slab	30%	94,147.92	70%	2,19,678.48	70%	2,19,678.48		-		-
6	RCC Wall		-	100%	2,89,652.40	100%	2,89,652.40		-		-
7	Testing/Finishing works		-	100%	1,88,000.0000	85%	1,59,800.0000		-		-
xii	<b>Manual &amp; Mechanical Fine Bar Screen Chamber Area</b>										
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-
4	RCC Foundation		-		-		-		-		-
5	Column & Beam	75%	1,36,837.80		-		-		-		-

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
6	RCC Slab	50%	1,28,725.20	50%	1,28,725.20	50%	1,28,725.20		-		-
7	RCC Wall		-	100%	1,71,633.60	100%	1,71,633.60		-		-
8	Walkway/Platform		-	100%	1,67,633.60	100%	1,67,633.60		-		-
9	Testing/Finishing works		-	100%	1,54,000.00	85%	1,30,900.00		-		-
xiii	<b>Grit Chamber Area</b>										
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-
4	RCC Foundation		-		-		-		-		-
5	Column & Beam	75%	1,82,450.40		-		-		-		-
6	RCC Slab	100%	2,43,267.20		-		-		-		-
7	RCC Wall	40%	91,537.92	60%	1,37,306.88	60%	1,37,306.88		-		-
8	Walkway/Platform		-	100%	2,28,844.80	100%	2,28,844.80		-		-
9	Testing/Finishing works		-	100%	1,85,400.00	85%	1,57,590.00		-		-
xiv	<b>Parshall Flume Channel Area</b>										
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-
4	RCC Foundation		-		-		-		-		-

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
5	Column & Beam	75%	2,57,450.40		-		-		-		-
6	RCC Slab	40%	1,37,306.88	60%	2,05,960.32	60%	2,05,960.32		-		-
7	RCC Wall	30%	1,02,980.16	70%	2,40,287.04	70%	2,40,287.04		-		-
8	Walkway/Platform		-	100%	3,43,267.20	100%	3,43,267.20		-		-
9	Piping & fitting Work		-	100%	1,71,633.60	50%	85,816.80		-		-
10	Testing		-	100%	2,57,400.00		-		-		-
xv	<b>Sludge Storage Platform Area</b>										
1	Site Clearance		-		-		-		-		-
2	Excavation	100%	1,00,000.00		-		-		-		-
3	PCC	100%	2,50,000.00		-		-		-		-
4	Foundation Work	70%	2,10,000.00	30%	90,000.00	30%	90,000.00		-		-
5	Finishing work		-	100%	1,50,000.00	30%	45,000.00		-		-
xvi	<b>Transformer Yard Area</b>										
1	Site Clearance		-		-		-		-		-
2	Excavation	100%	3,88,045.00		-		-		-		-
3	PCC	100%	3,88,045.00		-		-		-		-
4	Foundation Work	100%	3,88,045.00		-		-		-		-
xvii	<b>DG Shed Area</b>										
1	Site Clearance	0%	-		-		-		-		-

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
2	Excavation	100%	4,36,555.00		-		-		-		-
3	PCC	100%	4,36,555.00		-		-		-		-
4	Foundation Work	70%	3,05,588.50	30%	1,30,966.50	30%	1,30,966.50		-		-
xviii	<b>EXTERNAL DEVELOPMENT</b>										
	<b>Boundary Wall with Gate</b>		-		-		-		-		-
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-
4	RCC Column footing		-		-		-		-		-
5	RCC Column & Beam		-		-		-		-		-
6	Brickwork		-		-		-		-		-
7	Plaster		-	20%	1,00,309.60		-		-		-
8	Retaining wall	40%	6,44,414.00	21%	3,38,317.35		-		-		-
9	Finishing Work	50%	2,51,062.50	50%	2,51,062.50		-		-		-
	<b>Earthfilling, Internal Roads ,Landscaping</b>		-		-		-		-		-
1	Earthfilling, Internal Roads ,Landscaping	20%	3,50,186.80	40%	7,00,373.60		-		-		-
B	<b>I &amp; D Work</b>										

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
(i)	<b>Approach Channel</b>										
1	Excavation	50%	34,093.30		-		-		-		-
2	PCC	100%	1,70,466.50		-		-		-		-
3	RCC Foundation/Raft	100%	2,04,559.80		-		-		-		-
4	wall	60%	1,02,279.90	40%	68,186.60	40%	68,186.60		-		-
5	Testing/Finishing work		-	100%	61,300.00		-		-		-
(ii)	<b>Inlet Chamber</b>										
1	Excavation		-		-		-		-		-
2	PCC		-		-		-		-		-
3	RCC Foundation/Raft	100%	2,57,904.60		-		-		-		-
4	wall	100%	2,14,920.50		-		-		-		-
5	Testing/Finishing work		-	100%	77,300.00		-		-		-
(iii)	<b>Screen Channel</b>										
1	Excavation		-		-		-		-		-
2	PCC	100%	1,71,974.25		-		-		-		-
3	RCC Foundation/Raft	100%	2,06,369.10		-		-		-		-
4	wall	60%	1,03,184.55	40%	68,789.70	40%	68,789.70		-		-
5	Testing/Finishing work		-	100%	61,900.00		-		-		-
(iv)	<b>Grit Chamber</b>										

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
1	Excavation		-		-		-		-		-
2	PCC	100%	1,76,674.25		-		-		-		-
3	RCC Foundation/Raft	100%	2,12,009.10		-		-		-		-
4	wall	100%	1,76,674.25		-		-		-		-
5	Testing/Finishing work	0%	-	100%	63,600.00		-		-		-
<b>(v)</b>	<b>Collection Chamber</b>										
1	Excavation	100%	13,709.20		-		-		-		-
2	PCC	100%	34,273.00		-		-		-		-
3	RCC Foundation/Raft	100%	41,127.60		-		-		-		-
4	wall	80%	27,418.40	20%	6,775.77	20%	6,775.77		-		-
5	Testing/Finishing work		-	100%	12,300.00		-		-		-
<b>C</b>	<b>MPS-40 MLD</b>										
	<b>Civil Work</b>										
<b>i</b>	<b>Construction of Raw Sewage Sump</b>										
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-
4	RCC Foundation/Raft		-		-		-		-		-
5	Wall 50% of total lift work		-		-		-		-		-

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
6	Walls (balance 50% of Total Lift work)	10%	88,722.00		-		-		-		-
7	Column & Beam	100%	7,87,220.00		-		-		-		-
8	Ground Floor Slab	100%	5,91,480.00		-		-		-		-
9	Testing/Finishing work	30%	1,77,444.00	70%	4,14,036.00	45%	2,66,166.00		-		-
ii	<b>Construction of Raw Sewage Pump House</b>										
1	Column & Beam	50%	4,62,093.75	50%	4,62,093.75	50%	4,62,093.75		-		-
2	Roof Slab	30%	2,77,256.25	70%	6,46,931.25	70%	6,46,931.25		-		-
3	Brickwork		-	100%	9,24,187.50	100%	9,24,187.50		-		-
4	Plaster		-	100%	9,24,187.50	100%	9,24,187.50		-		-
iii	<b>Construction of Inlet Chamber &amp; Screen Channel</b>										
1	Site Clearance		-		-		-		-		-
2	Excavation		-		-		-		-		-
3	PCC		-		-		-		-		-
4	RCC Foundation/Raft		-		-		-		-		-
5	Wall 50% of total lift work		-		-		-		-		-
6	Walls (balance 50% of Total Lift work)	50%	92,418.75		-		-		-		-
7	Column & Beam	100%	1,51,504.17		-		-		-		-
8	Ground Floor Slab	100%	1,84,837.50		-		-		-		-
9	Walkway/Platform		-	100%	1,84,837.50	100%	1,84,837.50		-		-



Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
10	Testing/Finishing work		-	100%	1,59,500.00	75%	1,19,625.00		-		-
<b>D</b>	<b>SEWER SYSTEM AREA (3.2 Km)</b>										
1	Site Clearance		-		-		-		-		-
			-		-		-		-		-
2	Supply of pipes		-		-		-		-		-
3	Excavation and Laying of pipes including bed preparation & backfilling	24%	13,51,705.97	13%	7,18,992.54	13%	7,18,992.54		-		-
4	Manholes	25%	9,22,039.49	65%	23,97,302.67	55%	20,28,486.87		-		-
5	Flow/Hydraulic Testing		-	100%	73,74,893.60		-		-		-
6	Road restoration work	10%	1,79,726.66	40%	7,37,489.36		-		-		-
<b>E</b>	<b>RISING MAIN PIPING WORK (100 m)</b>										
1	Site Clearance		-		-		-		-		-
2	Supply of pipes	25%	1,37,994.48	25%	1,36,005.52	25%	1,36,005.52		-		-
3	Cutting,Excavtion,Laying of Pipes, backfilling	20%	13,700.00	50%	34,250.00	50%	34,250.00	30%	20,550.00	30%	20,550.00
4	Testing		-		-		-	100%	68,500.00		-
<b>F</b>	<b>EFFLUENT DISPOSAL SYSTEM</b>										
			-		-		-		-		-
1	Site Clearance		-		-		-		-		-

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
2	Construction of Effluent Channel from Distribution Chamber to Agriculture Land	90%	13,60,799.97	10%	1,51,200.00	10%	1,51,200.00		-		-
3	Construction of Rectangular Channel from STP to Distribution Chamber	90%	10,20,599.98	10%	1,13,400.00	10%	1,13,400.00		-		-
4	Construction of Distribution Chamber	90%	10,20,599.98	10%	1,13,400.00	5%	56,700.00		-		-
G	<b>E&amp;M WORK</b>						-		-		-
i)	<b>GRIT CHAMBER AREA</b>		-		-		-		-		-
	A.On supply - Grit Scraper Mechanism		-		-		-		-		-
	B.On Installation - Grit Scraper Mechanism		-	100%	5,40,000.00	100%	5,40,000.00		-		-
ii)	<b>SLUDGE THICKENER AREA</b>		-		-		-		-		-
	A.Supply - Sludge Thickener		-		-		-		-		-
	B.Installation - Sludge Thickener	100%	3,20,000.00		-		-		-		-
iii)	<b>TRANSFORMER YARD AREA</b>		-		-		-		-		-
	A.Supply - Transformer	100%	44,00,000.00		-		-		-		-
	B.Installation - Transformer		-	100%	11,00,000.00	100%	11,00,000.00		-		-
iv)	<b>DG SHED AREA</b>		-		-		-		-		-
	A.Supply - DG		-		-		-	100%	100,00,000.00	100%	100,00,000.00
	B.Installation - DG		-		-		-	100%	25,00,000.00	100%	25,00,000.00

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
v)	<b>MEP</b>		-		-		-		-		-
	A.Supply - Screen		-		-		-		-		-
	B.Installation - Screen		-		-		-	100%	15,20,000.00	100%	15,20,000.00
	C.Supply - Hoist		-		-		-		-		-
	D.Installation - Hoist		-	100%	1,40,000.00	100%	1,40,000.00		-		-
	E.Supply - Pumps & Motors(MEP)		-		-		-		-		-
	F.Installation - Pumps & Motors(MEP)		-	50%	11,60,000.00	50%	11,60,000.00	50%	11,60,000.00	50%	11,60,000.00
	G.Supply - Gate & Valves(MPS)	50%	20,80,000.00		-		-		-		-
	H.Installation - Gate & Valves(MPS)		-	100%	10,40,000.00	100%	10,40,000.00		-		-
	I.Supply Instruments(like flow meter, Guages, level, Transmitter)		-	100%	25,60,000.00	90%	23,04,000.00		-		-
	J.Installation - Instruments(like flow meter, Guages, level, Transmitter)		-		-		-	100%	6,40,000.00	60%	3,84,000.00
vi)	<b>INLET CHAMBER AREA</b>		-		-		-		-		-
	A.Supply - Gate & Valves(STP)	50%	16,80,000.00		-		-		-		-
	B.Installation - Gate & Valves(STP)		-	20%	1,67,998.00	20%	1,67,998.00	80%	6,72,000.00	80%	6,72,000.00
vii)	<b>FINE SCREEN AREA</b>		-		-		-		-		-
	A.On supply -Fine Screen		-		-		-		-		-
	B.On Installation -Fine Screen		-	100%	6,40,000.00	100%	6,40,000.00		-		-

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
viii)	<b>SBR BASIN AREA</b>		-		-		-		-		-
	A..On supply - Decanter Equipment		-		-		-		-		-
	B..Installation - Decanter Equipment	50%	19,30,000.00	50%	19,30,000.00	50%	19,30,000.00		-		-
	C.On supply - Diffuser		-		-		-		-		-
	D.On Installation - Diffuser		-	100%	38,60,000.00	100%	38,60,000.00		-		-
	E.On supply - RAS Pump, SAS Pump		-		-		-		-		-
	F.On Installation - RAS Pump, SAS Pump	100%	10,80,000.00		-		-		-		-
	G.On supply - Chain Pulley Block		-		-		-		-		-
	H.On Installation - Chain Pulley Block		-	100%	1,40,000.00	100%	1,40,000.00		-		-
ix)	<b>AIR BLOWER ROOM</b>		-		-		-		-		-
	A.Supply - Blower	60%	28,80,000.00	40%	19,06,080.00	40%	19,20,000.00		-		-
	B. Installation - Blower		-	39%	4,71,457.00	39%	4,71,457.00	61%	7,28,581.00	61%	7,32,000.00
	C.Supply - Hoist Work		-	100%	4,00,000.00	100%	4,00,000.00		-		-
	D.Installation - Hoist Work		-	100%	1,00,000.00	100%	1,00,000.00		-		-
x)	<b>CHLORINATION ROOM AREA</b>		-		-		-		-		-
	A.Supply - Chlorination system (Dosing pumps, chlorinators, Tonnes, Chemicals & Piping work	40%	9,28,000.00	10%	2,32,000.00	10%	2,32,000.00		-		-
	B. Installation - Chlorination system(Dosing pumps, chlorinators, Tonnes, Chemicals & Piping work		-	40%	2,32,000.00	40%	2,32,000.00	60%	3,48,000.00	30%	1,74,000.00

Sr. No.	Description of Items	Achieved for 6th Milestone		Milestone-7 (From 26th Mar'22 to 25th Apr'22 )		Achieved for 7th Milestone		Milestone-8 (From 26th Apr'22 to 15th May'22 )		Achieved for 8th Milestone	
		%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	C.Supply - Chlorine Nutrilisation Tank		-	100%	4,00,000.00	100%	4,00,000.00		-		-
	D.Installation - Chlorine Nutrilisation tank		-	100%	1,00,000.00	100%	1,00,000.00		-		-
	E.Supply - Hoist Work		-		-		-		-		-
	F.Installation - Hoist Work		-	100%	1,40,000.00	100%	1,40,000.00		-		-
xi)	<b>CENTRIFUGE HOUSE &amp; FEED PUMP AREA</b>		-		-		-		-		-
	A.On supply -Centrifuge & Feed Pump		-		-		-		-		-
	B.On Installation -Centrifuge & Feed Pump	90%	18,53,997.28	10%	2,06,002.72	10%	2,06,000.00		-		-
xii)	<b>ADMN BUILDING AREA</b>		-		-		-		-		-
	A.Supply - PMCC work	50%	47,20,000.00		-		-		-		-
	B.Installation - PMCC work	47%	11,09,137.00	45%	10,66,460.74	45%	10,66,460.74	8%	1,78,618.64	8%	1,78,416.00
	C.Supply - PLC/SCADA Automation of MPS,STP,D.G set)		-		-		-	100%	80,00,000.00	100%	80,00,000.00
	D.Installation - PLC/SCADA Automation of MPS,STP,D.G set)		-		-		-	100%	20,00,000.00	40%	8,00,000.00
xiii)	<b>TESTING OF E&amp;M EQUIPMENT FOR STP &amp; MPS</b>		-		-		-	100%	194,00,000.00	22%	42,68,000.00
xiv)	<b>EQUIPMENT TOOLS &amp; MISC.</b>		-		-		-	100%	6,00,000.00		-
<b>III</b>	<b>TRIAL RUN &amp; COMMISSIONING</b>										
1	Trial Run & Commissioning										
			<b>467,69,499</b>		<b>478,36,250</b>		<b>355,03,859</b>		<b>478,36,250</b>		<b>304,08,966</b>

## PHOTOGRAPHS OF UNNAO STP SITE



**MPS final works**



**Decanter Installation & Testing**



**Diffuser leakage testing done**

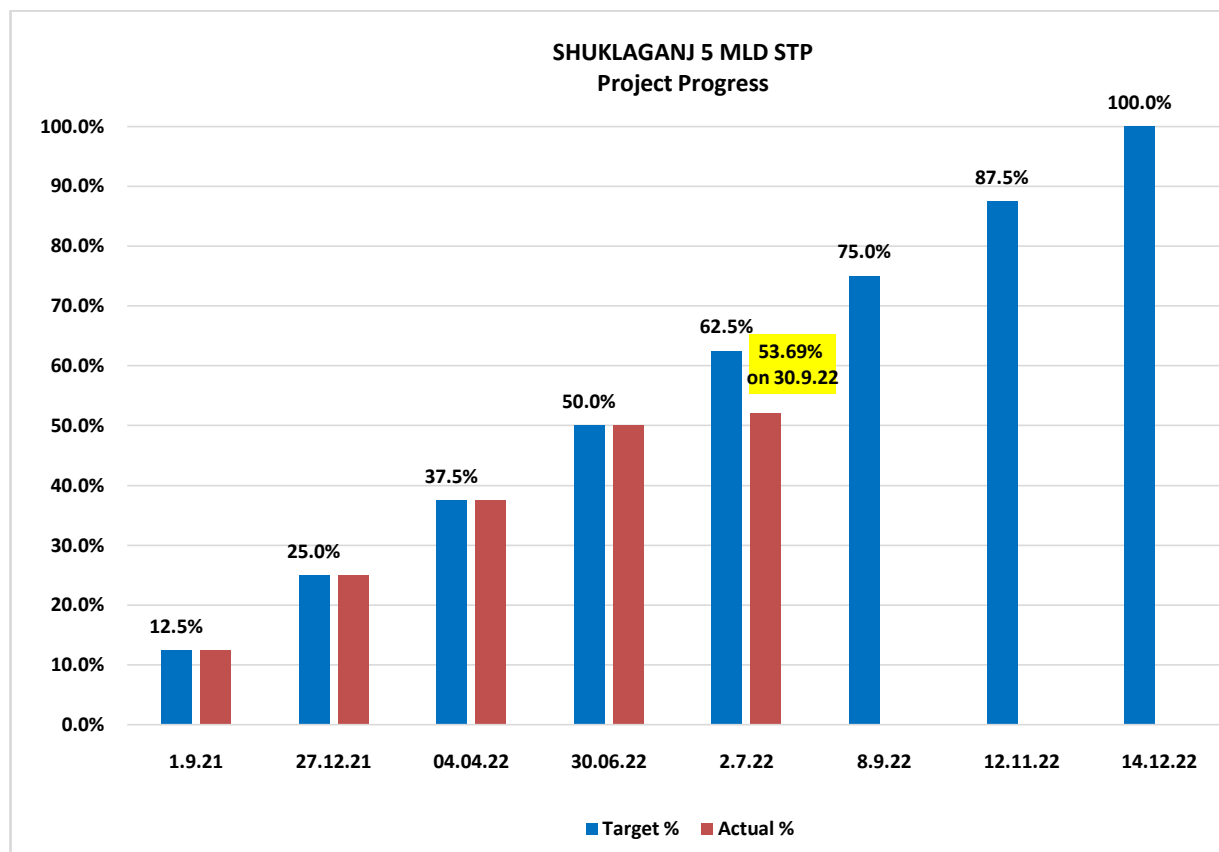


**HT VCB Panel testing done**

**6.3 MILESTONE WISE ACTIVITIES AND PROGRESS: SHUKLAGANJ STP**

Progress of construction works for 05 MLD STP at Shuklaganj is very slow. Total progress till Sep 2022 is 53.69%. In the meeting dated 02.08.2022, EOT for Shuklaganj STP is recommended till 13.06.2022. Status and progress of Shuklaganj STP is as following:

- During Sep 2022, the manpower deployed at the 05 MLD STP site was 15-20 nos. KRMPL need to increase the manpower up to 100 to achieve the target on time;
- EOT till 14.06.2023 has been considered on behalf of hindrances due of COVID 2nd wave and extra works due poor SBC/land change, flooding and ITR vetting etc.
- Low Manpower (29 against >100).



- KRMPL needs to expedite the progress by increasing the manpower and working on multiple fronts.
- During visit, progress of different STP components was checked as per the approved construction plan and it was found that progress of 05 MLD STP is very slow. Detail is given below:

STP Units	Target %	Achieved %
I&D	38%	0%
Sewer Laying (900 mm, 424m)	38%	10%
Manhole (09 nos.)	38%	0%
Pumping Main (500mm dia, 80 m)	38%	0%



MPS	38%	70%
PTU	38%	20%
SBR	38%	25%
Blower	38%	20%
CCT, Chlorination Building	38%	10%
Thickener, Supernatant Sump	38%	70%
Centrifuge	38%	0%
Admin Building	38%	20%
Staff Quarter	38%	25%
Guard Room	38%	70%
Boundary Wall	38%	30%

### SUMMARY OF OVERALL PROGRESS AT SHUKLAGANJ STP

Milestone	Schedule Completion date	Actual completion date	Milestone Amount (Rs.)	Progress till 30.09.2022		
				Milestone Amount (Rs.)	% Target	% Achieved
1st milestone	01.09.2021	01.09.2021	2,66,18775.0	26618774.91	12.50%	12.50
2nd milestone	27.12.2021	27.12.2021	2,66,18775.0	26618774.62	12.50%	12.50
3rd Milestone	25.03.2022	04.04.2022	2,66,18775.0	22058389.36	12.50%	10.36
4th Milestone	02.05.2022	-	2,66,18775.0	15961271.29	12.50%	7.50
5th Milestone	02.07.2022	-	2,66,18775.0	12293526.02	12.50%	5.77
6th milestone	08.09.2022	-	2,66,18775.0	4052647.78	12.50%	1.90
7th milestone	12.11.2022	-	2,66,18775.0	6720000.00	12.50%	3.16
8th milestone	14.12.2022	-	2,66,18775.0	0.00	12.50%	0.00
<b>Overall Progress</b>			<b>21,29,50,200.0</b>	<b>114323384.00</b>	<b>100%</b>	<b>53.69%</b>

Milestone wise progress of Shuklaganj STP is given in following table:

TABLE 6.3: MILESTONE WISE PROGRESS – 05 MLD Shuklaganj STP

Sr. No.	Description of Items	Milestone-3 (From 28th Dec'21 to 25th March'22 )			Milestone-4 (From 26th March'22 to 2nd May'22 )			Milestone-5 (From 3rd May'22 to 2nd July'22 )			Achieved for 5th Milestone	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
i)	<b>SBR Basin Area</b>											
1	Site Clearance	-		-		-		-		-		
2	Excavation wall footing	-		-		-		-		-		
3	PCC wall footing	11,26,697.21	47%	11,25,974.21		-		-		-		
4	RCC Foundation/Raft of wall	28,74,827.76	100%	28,74,827.76		-		-		-		
5	Wall 50% of total upto base slab	23,95,689.80	100%	23,95,689.80		-		-		-		
6	Walls (balance 50% of upto base slab)	11,97,844.90	50%	11,97,844.90	50%	11,97,844.90	50%	11,97,844.90		-		
7	PCC Base Slab	-		-	100%	35,93,534.70	100%	35,93,534.70		-		
8	RCC Foundation base slab	-		-		-		-	100%	26,35,258.78	66%	17,39,270.79
9	Wall 50% of total lift work	-		-		-		-	20%	4,79,137.96		-
10	Walls (balance 50% of Total Lift work)	-		-		-		-		-		-
13	Hydro Testing /Finishing works	-		-		-		-		-		-
ii	<b>Chlorination Tank Area</b>	0				0		0		0		0
1	Site Clearance	-		-		-		-		-		-
2	Excavation	3,11,439.70	100%	3,11,439.70		-		-		-		-
3	PCC	3,59,353.50	100%	3,59,353.50		-		-		-		-
4	RCC Foundation/Raft	5,98,922.50	100%	5,98,922.50		-		-		-		-
5	Wall 50% of total lift work	-		-	100%	3,59,353.50	100%	3,59,353.50		-		-
6	Walls (balance 50% of Total Lift work)	-		-	26%	1,24,575.88	26%	1,24,575.88	74%	3,54,562.12	74%	3,54,562.12
7	Baffle Walls work	-		-		-		-	100%	1,19,784.50	100%	1,19,784.50
8	Hydro Testing /Finishing works	-		-		-		-		-		-
iii	<b>Chlorination Room Area</b>	0		0		0		0		0		0

Sr. No.	Description of Items	Milestone-3 (From 28th Dec'21 to 25th March'22 )		Achieved for 3rd Milestone		Milestone-4 (From 26th March'22 to 2nd May'22 )		Achieved for 4th Milestone		Milestone-5 (From 3rd May'22 to 2nd July'22 )		Achieved for 5th Milestone	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1	Site Clearance	-		-		-		-		-		-	
2	Excavation	1,91,655.20	100%	1,91,655.20		-		-		-		-	
3	PCC	2,39,569.00	100%	2,39,569.00		-		-		-		-	
4	RCC Foundation/Column footing	5,98,922.50	100%	5,98,922.50		-		-		-		-	
5	Column & Beam	1,79,676.75	50%	1,79,676.75	50%	1,79,676.75	50%	1,79,676.75		-		-	
6	Ground floor Slab	-		-	100%	2,39,569.00	100%	2,39,569.00		-		-	
7	Roof Slab	-		-		-		-	100%	3,59,353.50		-	
8	Brickwork	-		-		-		-	100%	1,19,784.50		-	
9	Plaster	-		-		-		-	100%	1,19,784.50		-	
10	Testing/Finishing works	-		-		-		-		-		-	
iv	<b>Guard Room Area</b>	<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>	
1	Site Clearance	-		-		-		-		-		-	
2	Excavation	-		-		-		-		-		-	
3	PCC	-		-		-		-		-		-	
4	RCC Foundation/column footing	-		-		-		-		-		-	
5	Column & Beam	-		-		-		-		-		-	
6	RCC Ground floor Slab	2,51,547.45	100%	2,51,547.45		-		-		-		-	
7	RCC Roof Slab	83,849.15	100%	83,849.15		-		-		-		-	
8	Brick work	-		-	100%	1,67,698.30	100%	1,67,698.30		-		-	
9	Plumbing, fixtures	-		-		-		-		-		-	
10	Sanitary works	-		-		-		-		-		-	
11	Electrification work	-		-		-		-		-		-	
12	Plaster	-		-		-		-		-		-	
13	Finishing works	-		-		-		-		-		-	

Sr. No.	Description of Items	Milestone-3 (From 28th Dec'21 to 25th March'22 )		Achieved for 3rd Milestone		Milestone-4 (From 26th March'22 to 2nd May'22 )		Achieved for 4th Milestone		Milestone-5 (From 3rd May'22 to 2nd July'22 )		Achieved for 5th Milestone	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
iv	<b>Admin Bldg Area (G+1)</b>	0		0		0		0		0		0	
1	Site Clearance	-		-		-		-		-		-	
2	Excavation	-		-		-		-		-		-	
3	PCC	3,68,936.19	100%	3,68,936.19		-		-		-		-	
4	Column footings/Foundation	5,27,051.70	100%	5,27,051.70		-		-		-		-	
5	Column & Beam up to Floor Base slab	-		-	100%	7,90,577.55	100%	7,90,577.55		-		-	
6	Floor base Slab	-		-		-		-	100%	7,90,577.55		-	
7	Column & Beam upto Roof Slab	-		-		-		-		-		-	
8	1st Floor Roof Slab	-		-		-		-		-		-	
9	Brickwork	-		-		-		-		-		-	
10	Electrification, plumbing, fixtures , sanitary works	-		-		-		-		-		-	
11	Plaster	-		-		-		-		-		-	
12	finishing works	-		-		-		-		-		-	
v	<b>Air Blower Room Area</b>	0		0		0		0		0		0	
1	Site Clearance	-		-		-		-		-		-	
2	Excavation	-		-		-		-		-		-	
3	PCC	7,18,707.00	100%	7,18,707.00		-		-		-		-	
4	RCC Foundation/column footing	7,18,707.00	100%	7,18,707.00		-		-		-		-	
5	Column & Beam	-		-		-		-	100%	7,18,707.00	100%	7,18,707.00	
6	RCC Roof Slab	-		-		-		-	100%	9,58,276.00		-	
7	Cable Trench Work	-		-		-		-		-		-	
8	Brick work	-		-		-		-		-		-	
9	Plaster	-		-		-		-		-		-	
10	Testing/Finishing work	-		-		-		-		-		-	

Sr. No.	Description of Items	Milestone-3 (From 28th Dec'21 to 25th March'22 )		Achieved for 3rd Milestone		Milestone-4 (From 26th March'22 to 2nd May'22 )		Achieved for 4th Milestone		Milestone-5 (From 3rd May'22 to 2nd July'22 )		Achieved for 5th Milestone	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
vi	<b>Staff Quarter Area (G+1)</b>	0		0		0		0		0		0	
1	Site Clearance	-		-		-		-		-		-	
2	Excavation	-		-		-		-		-		-	
3	PCC	-		-		-		-		-		-	
4	RCC Foundation/column footing	-		-		-		-		-		-	
5	Column & Beam upto ground floor slab	2,51,547.45	100%	2,51,547.45		-		-		-		-	
6	RCC Ground floor Slab (Base floor slab)	-		-	100%	1,67,698.30	100%	1,67,698.30		-		-	
7	Column upto roof slab & RCC 1st floor Slab	-		-	100%	3,35,396.60	100%	3,35,396.60		-		-	
8	Brick work	-		-		-		-	100%	83,849.15	50%	41,924.58	
9	Plumbing, fixtures , sanitary works	-		-		-		-		-		-	
10	Electrification work	-		-		-		-		-		-	
11	Plaster	-		-		-		-		-		-	
12	Finishing works	-		-		-		-		-		-	
vii	<b>Inlet Chamber Area</b>	0		0		0		0		0		0	
1	Site Clearance	28,748.28	100%	28,748.28		-		-		-		-	
2	Excavation & PCC	1,86,863.82	100%	1,86,863.82		-		-		-		-	
3	RCC Foundation/Column footing	2,15,612.10	100%	2,15,612.10		-		-		-		-	
4	Column & Beam	-		-		-		-	100%	3,59,353.50	40%	1,43,741.40	
5	RCC Slab	-		-		-		-	100%	2,87,482.80		-	
6	RCC Wall	-		-		-		-	100%	2,87,482.80		-	
7	Hydro Testing /Finishing works	-		-		-		-		-		-	
viii	<b>Manual &amp; Mechanical Fine Bar Screen Chamber Area</b>	0		0		0		0		0		0	

Sr. No.	Description of Items	Milestone-3 (From 28th Dec'21 to 25th March'22 )		Achieved for 3rd Milestone		Milestone-4 (From 26th March'22 to 2nd May'22 )		Achieved for 4th Milestone		Milestone-5 (From 3rd May'22 to 2nd July'22 )		Achieved for 5th Milestone	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
1	Site Clearance	28,748.28	100%	28,748.28		-		-		-		-	
2	Excavation	1,86,863.82	100%	1,86,863.82		-		-		-		-	
3	PCC	2,15,612.10	100%	2,15,612.10		-		-		-		-	
4	RCC Foundation	-		-	100%	2,87,482.80	100%	2,87,482.80		-		-	
5	Column & Beam	-		-		-		-	100%	2,15,612.10	40%	86,244.84	
6	RCC Slab	-		-		-		-		-		-	
7	RCC Wall	-		-		-		-		-		-	
8	Walkway/Platform	-		-		-		-		-		-	
9	Hydro Testing /Finishing works	-		-		-		-		-		-	
ix	<b>Grit Chamber Area</b>	0		0		0		0		0		0	
1	Site Clearance	62,287.94	100%	62,287.94		-		-		-		-	
2	Excavation	4,04,871.61	100%	4,04,871.61		-		-		-		-	
3	PCC	4,67,159.55	100%	4,67,159.55		-		-		-		-	
4	RCC Foundation	6,22,879.40	100%	6,22,879.40		-		-		-		-	
5	Column & Beam	-		-	50%	2,33,579.78	40%	1,86,863.82	50%	2,33,579.78		-	
6	RCC Slab	-		-		-		-		-		-	
7	RCC Wall	-		-		-		-		-		-	
8	Walkway/Platform	-		-		-		-		-		-	
9	Hydro Testing /Finishing works	-		-		-		-		-		-	
x	<b>Parshall Flume Channel Area</b>	0		0		0		0		0		0	
1	Site Clearance	62,287.94	100%	62,287.94		-		-		-		-	
2	Excavation	4,04,871.61	100%	4,04,871.61		-		-		-		-	
3	PCC	4,67,159.55	100%	4,67,159.55		-		-		-		-	
4	RCC Foundation	-		-	50%	2,33,579.78	50%	2,33,579.78	50%	2,33,579.78	50%	2,33,579.78	
5	Column & Beam	-		-		-		-	100%	4,67,159.55	40%	1,86,863.82	

Sr. No.	Description of Items	Milestone-3 (From 28th Dec'21 to 25th March'22 )		Achieved for 3rd Milestone		Milestone-4 (From 26th March'22 to 2nd May'22 )		Achieved for 4th Milestone		Milestone-5 (From 3rd May'22 to 2nd July'22 )		Achieved for 5th Milestone	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
6	RCC Slab	-		-		-		-		-		-	
7	RCC Wall	-		-		-		-		-		-	
8	Walkway/Platform	-		-		-		-		-		-	
9	Piping & fitting Work	-		-		-		-		-		-	
10	Hydro Testing /Finishing works	-		-		-		-		-		-	
xi	<b>Sludge Dewatering System Area (Centrifuge Pump House, Sludge sump &amp; Poly dosing tank)</b>	0		0		0		0		0		0	
1	Site Clearance	86,244.84	100%	86,244.84		-		-		-		-	
2	Excavation	-		-		-		-	100%	2,15,612.10	100%	2,15,612.10	
3	PCC	-		-		-		-	100%	3,44,979.36		-	
4	RCC Foundation	-		-		-		-	75%	3,23,418.15		-	
5	Column & Beam Upto First Floor	-		-		-		-		-		-	
6	First Floor Slab	-		-		-		-		-		-	
7	Column & Beam First Floor to Roof Slab	-		-		-		-		-		-	
8	Roof Slab	-		-		-		-		-		-	
9	Brickwork	-		-		-		-		-		-	
10	Plaster	-		-		-		-		-		-	
11	Piping & fiittings Work	-		-		-		-		-		-	
12	Hydro Testing /Finishing works	-		-		-		-		-		-	
xii	<b>Sludge Thickener Area</b>	0		0		0		0		0		0	
1	Site Clearance	-		-		-		-		-		-	
2	Excavation	-		-		-		-		-		-	
3	PCC	-		-		-		-		-		-	
4	RCC Foundation Wall/base slab	-		-		-		-		-		-	

Sr. No.	Description of Items	Milestone-3 (From 28th Dec'21 to 25th March'22 )		Achieved for 3rd Milestone		Milestone-4 (From 26th March'22 to 2nd May'22 )		Achieved for 4th Milestone		Milestone-5 (From 3rd May'22 to 2nd July'22 )		Achieved for 5th Milestone	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
5	Wall 50% of total lift work	6,70,793.20	100%	6,70,793.20		-		-		-		-	
6	Walls (balance 50% of Total Lift work)	3,35,396.60	50%	3,35,396.60	50%	3,35,396.60	48%	3,21,980.74		-		-	
7	Hydro Testing /Finishing works	-		-		-		-	100%	1,67,698.30		-	
xiii	<b>Supernatant Sump Area</b>	0		0		0		0		0		0	
1	Site Clearance	-		-		-		-		-		-	
2	Excavation	-		-		-		-		-		-	
3	PCC	-		-		-		-		-		-	
4	RCC Foundation wall/base slab	-		-		-		-		-		-	
5	Wall 50% of total lift work	-		-		-		-		-		-	
6	Walls (balance 50% of Total Lift work)	4,79,138.00	100%	4,79,138.00		-		-		-		-	
7	Hydro Testing /Finishing works	-		-	50%	59,892.25		-		-		-	
xiv	<b>Sludge Storage Platform Area</b>	0		0		0		0		0		0	
1	Site Clearance	-		-		-		-		-		-	
2	Excavation	-		-		-		-		-		-	
3	PCC	-		-		-		-		-		-	
4	Foundation Work	-		-		-		-		-		-	
5	Finishing work	-		-		-		-		-		-	
xv	<b>Transformer Yard Area</b>	0		0		0		0		0		0	
1	Site Clearance	-		-		-		-		-		-	
2	Excavation	-		-		-		-		-		-	
3	PCC	-		-		-		-		-		-	
4	Foundation Work	-		-		-		-		-		-	
xvi	<b>DG Shed Area</b>	0		0		0		0		0		0	
1	Site Clearance	-		-		-		-		-		-	
2	Excavation	-		-		-		-		-		-	



Sr. No.	Description of Items	Milestone-3 (From 28th Dec'21 to 25th March'22 )		Achieved for 3rd Milestone		Milestone-4 (From 26th March'22 to 2nd May'22 )		Achieved for 4th Milestone		Milestone-5 (From 3rd May'22 to 2nd July'22 )		Achieved for 5th Milestone	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
3	PCC	-		-		-		-		-		-	
4	Foundation Work	-		-		-		-		-		-	
xvii	<b>EXTERNAL DEVELOPMENT</b>	0		0		0		0		0		0	
	<b>Boundary Wall with Gate</b>	-		-		-		-		-		-	
1	Site Clearance	-		-		-		-		-		-	
2	Excavation	9,44,851.16	6%	1,61,974.49	10%	2,69,957.48		-		-		-	
3	PCC	10,07,841.24	2%	71,988.66	7%	2,51,960.31		-	10%	3,59,943.30		-	
4	RCC Column footing	7,19,886.60	2%	71,988.66	4%	1,51,041.32		-	14%	4,96,856.62		-	
5	RCC Column & Beam	5,12,919.20	7%	1,88,970.23	4%	1,07,982.99		-	15%	4,04,936.21		-	
6	Brickwork	-		-	4%	1,07,982.99		-	5%	1,34,978.74		-	
7	Plaster	-		-		-		-	5%	89,985.83		-	
8	Finishing Work	-		-		-		-		-		-	
	<b>Earthfilling, Internal Roads ,Landscaping</b>	-		-		-		-		-		-	
1	Earthfilling, Internal Roads ,Landscaping	-		-		-		-		-		-	
B	<b>MPS-20 MLD</b>	0		0		0		0		0		0	
	<b>Civil Work</b>	-		-		-		-		-		-	
i	<b>Construction of Raw Sewage Sump</b>	0		0		0		0		0		0	
1	Site Clearance	-		-		-		-		-		-	
2	Excavation	-		-		-		-		-		-	
3	PCC	-		-		-		-		-		-	
4	RCC Foundation/Raft	-		-		-		-		-		-	
5	Wall 50% of total lift work	6,43,706.93	50%	6,43,706.93	50%	6,43,706.93	50%	6,43,706.93		-		-	
6	Walls (balance 50% of Total Lift work)	-		-	100%	12,87,413.85	95%	12,23,043.16		-		-	
7	Column & Beam	-		-	100%	8,58,275.90		-		-		-	

Sr. No.	Description of Items	Milestone-3 (From 28th Dec'21 to 25th March'22 )		Achieved for 3rd Milestone		Milestone-4 (From 26th March'22 to 2nd May'22 )		Achieved for 4th Milestone		Milestone-5 (From 3rd May'22 to 2nd July'22 )		Achieved for 5th Milestone	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
8	Ground Floor Slab	-		-		-		-	100%	6,86,620.72		-	
9	Hydro Testing /Finishing works	-		-		-		-		-		-	
ii	<b>Construction of Raw Sewage Pump House</b>	0		0		0		0		0		0	
1	Column & Beam	-		-		-		-		-		-	
2	Roof Slab	-		-		-		-		-		-	
3	Brickwork	-		-		-		-		-		-	
4	Plaster	-		-		-		-		-		-	
iii	<b>Construction of Inlet Chamber &amp; Screen Channel</b>	0		0		0		0		0		0	
1	Site Clearance	-		-		-		-		-		-	
2	Excavation	-		-	100%	2,87,482.80	100%	2,87,482.80		-		-	
3	PCC	-		-	100%	4,31,224.20	100%	4,31,224.20		-		-	
4	RCC Foundation/Raft	-		-	50%	2,15,612.10	50%	2,15,612.10	50%	2,15,612.10	50%	2,15,612.10	
5	Wall 50% of total lift work	-		-		-		-	100%	4,31,224.20	100%	4,31,224.20	
6	Walls (balance 50% of Total Lift work)	-		-		-		-		-		-	
7	Column & Beam	-		-		-		-		-		-	
8	Ground Floor Slab	-		-		-		-		-		-	
9	Walkway/Platform	-		-		-		-		-		-	
10	Hydro Testing /Finishing works	-		-		-		-		-		-	
C	<b>SEWER SYSTEM AREA</b>	0		0		0		0		0		0	
1	Site Clearance	-		-		-		-		-		-	
2	Supply of pipes	-		-		-		-		-		-	
3	Excavation and Laying of pipes including bed preperation & backfilling	-		-	75%	5,09,994.00	75%	5,09,994.00	25%	1,69,998.00	15%	1,01,998.80	
4	Manholes	-		-	75%	5,09,994.00		-	25%	1,69,998.00		-	

Sr. No.	Description of Items	Milestone-3 (From 28th Dec'21 to 25th March'22 )		Achieved for 3rd Milestone		Milestone-4 (From 26th March'22 to 2nd May'22 )		Achieved for 4th Milestone		Milestone-5 (From 3rd May'22 to 2nd July'22 )		Achieved for 5th Milestone	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
5	Flow Testing	-		-		-		-		-		-	
<b>D</b>	<b>I &amp; D Work</b>	0		0		0		0		0		0	
<b>(i)</b>	<b>Approach Channel</b>	0		0		0		0		0		0	
1	Excavation	-		-	100%	68,100.00		-		-		-	
2	PCC	-		-	100%	1,70,000.00		-		-		-	
3	RCC Foundation/Raft	-		-	100%	2,05,000.00		-		-		-	
4	wall	-		-		-		-	22%	37,237.00		-	
5	Hydro Testing /Finishing works	-		-		-		-		-		-	
<b>(ii)</b>	<b>Inlet Chamber</b>	0		0		0		0		0		0	
1	Excavation	-		-	100%	85,900.00		-		-		-	
2	PCC	-		-	100%	2,15,000.00		-		-		-	
3	RCC Foundation/Raft	-		-	100%	2,55,000.00		-		-		-	
4	wall	-		-		-		-	100%	2,15,000.00		-	
5	Hydro Testing /Finishing works	-		-		-		-		-		-	
<b>(iii)</b>	<b>Screen Channel</b>	0		0		0		0		0		0	
1	Excavation	-		-		-		-	100%	68,700.00		-	
2	PCC	-		-		-		-	100%	1,71,900.00		-	
3	RCC Foundation/Raft	-		-		-		-	100%	2,06,370.00		-	
4	wall	-		-		-		-	100%	1,71,975.00		-	
5	Hydro Testing /Finishing works	-		-		-		-		-		-	
<b>(iv)</b>	<b>Grit Chamber</b>	0		0		0		0		0		0	
1	Excavation	-		-		-		-	100%	70,670.00		-	
2	PCC	-		-		-		-	100%	1,76,675.00		-	
3	RCC Foundation/Raft	-		-		-		-	100%	2,12,000.00		-	
4	wall	-		-		-		-	100%	1,75,675.00		-	

Sr. No.	Description of Items	Milestone-3 (From 28th Dec'21 to 25th March'22 )		Achieved for 3rd Milestone		Milestone-4 (From 26th March'22 to 2nd May'22 )		Achieved for 4th Milestone		Milestone-5 (From 3rd May'22 to 2nd July'22 )		Achieved for 5th Milestone	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
5	Hydro Testing /Finishing works	-		-		-		-		-		-	
(v)	<b>Collection Chamber</b>	0		0		0		0		0		0	
1	<b>Excavation</b>	-		-		-		-	100%	13,710.00		-	
2	PCC	-		-		-		-	100%	34,273.00		-	
3	RCC Foundation/Raft	-		-		-		-	100%	41,130.00		-	
4	wall	-		-		-		-	100%	34,273.00		-	
5	Hydro Testing /Finishing works	-		-		-		-		-		-	
E	<b>EFFLUENT DISPOSAL SYSTEM</b>	0		0		0		0		0		0	
		-		-		-		-		-		-	
1	Site Clearance	-		-		-		-	100%	2,50,000.00		-	
2	Construction of Effluent Channel	-		-		-		-		-		-	
F	<b>E&amp;M WORK</b>	-		-		-		-		-		-	
i)	<b>GRIT CHAMBER AREA</b>	-		-		-		-		-		-	
	A.On supply - Grit Scraper Mechanism	18,28,000.00	100%	18,28,000.00		-		-		-		-	
	B.On Installation - Grit Scraper Mechanism	-		-		-		-		-		-	
ii)	<b>SLUDGE THICKENER AREA</b>	-		-		-		-		-		-	
	A.Supply - Sludge Thickener	7,04,000.00	100%	7,04,000.00		-		-		-		-	
	B.Installation - Sludge Thickener	-		-		-		-		-		-	
iii)	<b>TRANSFORMER YARD AREA</b>	-		-		-		-		-		-	
	A.Supply - Transformer	-		-		-		-		-		-	
	B.Installation - Transformer	-		-		-		-		-		-	
iv)	<b>DG SHED AREA</b>	-		-		-		-		-		-	
	A.Supply - DG	-		-		-		-		-		-	
	B.Installation - DG	-		-		-		-		-		-	

Sr. No.	Description of Items	Milestone-3 (From 28th Dec'21 to 25th March'22 )		Achieved for 3rd Milestone		Milestone-4 (From 26th March'22 to 2nd May'22 )		Achieved for 4th Milestone		Milestone-5 (From 3rd May'22 to 2nd July'22 )		Achieved for 5th Milestone	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
v)	<b>MEP</b>	-		-		-		-		-		-	
	A.Supply - Screen	-		-	100%	33,44,000.00		-		-		-	
	B.Installation - Screen	-		-		-		-		-		-	
	C.Supply - Hoist	4,68,000.00	100%	4,68,000.00		-		-		-		-	
	D.Installation - Hoist	-		-		-		-		-		-	
	E.Supply - Pumps & Motors(MEP)	-		-	50%	34,72,000.00	50%	34,72,000.00	50%	34,72,000.00	50%	34,72,000.00	50%
	F.Installation - Pumps & Motors(MEP)	-		-		-		-		-		-	
	G.Supply - Gates	-		-		-		-	100%	11,44,000.00		-	
	H.Supply - Valves(MPS)	-		-	100%	11,44,000.00		-		-		-	
	I.Installation - Gate & Valves(MPS)	-		-		-		-		-		-	
	J.Installation - Gate & Valves(MPS)	-		-		-		-		-		-	
	K.Supply Instruments(like flow meter, Guages, level, Transmitter)	-		-		-		-		-		-	
	L.Installation - Instruments(like flow meter, Guages, level, Transmitter)	-		-		-		-		-		-	
vi)	<b>INLET CHAMBER AREA</b>	-		-		-		-		-		-	
	A.Supply - Gates	-		-		-		-	50%	4,62,000.00		-	
	B.Supply - Valves(STP)	-		-	100%	9,24,000.00		-		-		-	
	C.Installation - Gates	-		-		-		-		-		-	
	D.Installation - Valves(STP)	-		-		-		-		-		-	
vii)	<b>FINE SCREEN AREA</b>			0		0		0		0		0	
	A.On supply -Fine Screen	-		-	100%	14,08,000.00		-		-		-	
	B.On Installation -Fine Screen	-		-		-		-		-		-	
viii)	<b>SBR BASIN AREA</b>	-		-		-		-		-		-	
	A..On supply - Decanter Equipment	-		-		-		-		-		-	

Sr. No.	Description of Items	Milestone-3 (From 28th Dec'21 to 25th March'22 )		Achieved for 3rd Milestone		Milestone-4 (From 26th March'22 to 2nd May'22 )		Achieved for 4th Milestone		Milestone-5 (From 3rd May'22 to 2nd July'22 )		Achieved for 5th Milestone	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
	B..Installation - Decanter Equipment	-		-		-		-		-		-	
	C.On supply - Diffuser	-		-		-		-		-		-	
	D.On Installation - Diffuser	-		-		-		-		-		-	
	E.On supply - RAS Pump, SAS Pump	-		-		-		-	100%	27,76,000.00	100%	27,76,000.00	
	F.On Installation - RAS Pump, SAS Pump	-		-		-		-		-		-	
	G.On supply - Chain Pulley Block	-		-		-		-	100%	3,08,000.00	100%	3,08,000.00	
	H.On Installation - Chain Pulley Block	-		-		-		-		-		-	
ix)	<b>AIR BLOWER ROOM</b>	-		-		-		-		-		-	
	A.Supply - Blower	-		-		-		-		-		-	
	B. Installation - Blower	-		-		-		-		-		-	
	C.Supply - Hoist Work	-		-	100%	4,60,000.00	100%	4,60,000.00		-		-	
	D.Installation - Hoist Work	-		-		-		-		-		-	
x)	<b>CHLORINATION ROOM AREA</b>	-		-		-		-		-		-	
	A.Supply - Chlorination system(Dosing pumps, chlorinators, Tonnes, Chemicals & Piping work	-		-		-		-	100%	12,76,000.00	90%	11,48,400.00	
	B. Installation - Chlorination system(Dosing pumps, chlorinators, Tonnes, Chemicals & Piping work	-		-		-		-		-		-	
	C.Supply - Chlorine Nutrilisation Tank	-		-		-		-		-		-	
	D.Installation - Chlorine Nutrilisation tank	-		-		-		-		-		-	
	E.Supply - Hoist Work	-		-		-		-		-		-	
	F.Installation - Hoist Work	-		-		-		-		-		-	
xi)	<b>CENTRIFUGE HOUSE &amp; FEED PUMP AREA</b>	-		-		-		-		-		-	

Sr. No.	Description of Items	Milestone-3 (From 28th Dec'21 to 25th March'22 )		Achieved for 3rd Milestone		Milestone-4 (From 26th March'22 to 2nd May'22 )		Achieved for 4th Milestone		Milestone-5 (From 3rd May'22 to 2nd July'22 )		Achieved for 5th Milestone	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
	A.On supply -Centrifuge	-		-		-		-	100%	22,66,000.00		-	
	B.On supply -Centrifuge Feed Pump	18,69,086.47		-	18%	3,96,913.53		-		-		-	
	C.On Installation -Centrifuge	-		-		-		-		-		-	
	D.On Installation -Centrifuge Feed Pump	-		-		-		-		-		-	
xii)	<b>ADMN BUILDING AREA</b>	-		-		-		-		-		-	
	A.Supply - LT/HT Panel	-		-		-		-		-		-	
	B.Installation - LT/HT Panel	-		-		-		-		-		-	
	C.Supply - PLC/SCADA Automation	-		-		-		-		-		-	
	D.Installation - PLC/SCADA Automation	-		-		-		-		-		-	
xiii)	<b>Cable Tray &amp; Earthing work</b>	-		-		-		-		-		-	
	A.Supply - cable Tray/Earthing material	-		-		-		-		-		-	
	B.Installation - Cable Tray/Earthing material	-		-		-		-		-		-	
xiv)	<b>External Electrification (lighting &amp; Pole)</b>	-		-		-		-		-		-	
	A.Supply	-		-		-		-		-		-	
	B.Installation	-		-		-		-		-		-	
xv)	<b>TESTING OF E&amp;M EQUIPMENT FOR STP &amp; MPS</b>	-		-		-		-		-		-	
xvi)	<b>EQUIPMENT TOOLS &amp; MISC.</b>	-		-		-		-		-		-	
III	<b>TRIAL RUN &amp; COMMISSIONING</b>					0		0					
1	Trial Run & Commissioning							0					
		266,18,775		220,58,389		266,18,775		159,61,271		266,18,775		122,93,526	

## Photographs of Shuklaganj STP



**MPS works**



**PTU column casting**





**Supernatant Sump**



**SBR floor & steel works**

## 7. PRESENT STATUS AND ISSUES OF EXISTING STPS

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

Schedule handing over date for 130 MLD Jajmau phase-I facilities is same as Effective date (11.10.2019) as per CA but the plant could be handed over to KRMPL on 01/03/2021 only for renovation and O & M for 15 years, due to labour problem.

As per CA COD for 130 MLD Jajmau Phase-I and 43 MLD Jajmau phase-II was same as per CA, which has been separated by NMCG vide letter no.F.No.pr-12012/7/2018/PPP/NMCG dated 02.08.2021.

- CSPS Jajmau handed over to KRMPL on 01.03.2021
- Nawabganj IPS handed over to KRMPL on 28.06.2021
- Baba Ghat IPS handed over to KRMPL on 28.06.2021
- Parmat Ghat handed over to KRMPL on 23.07.2021
- Guptar Ghat IPS handed over to KRMPL on 23.07.2021

#### • CSPS Jajmau

1. During meeting held on 05.09.2022 it was described regarding Power backup for CSPS –Mr. Rajat Gupta suggested that the actual power requirement at the CSPS shall be confirmed by PE and UPJN, and the same shall be provided by KRMPL.
2. ED (T) instructed KRMPL during site visit on 12.04.2022 at Jajmau Campus to install flow meter at site on priority and submit details of rising main capacity from CSPS Jajmau to common inlet of 130 & 43 MLD Jajmau. KRMPL will provide load calculation to PE for recommendation and KRMPL will provide adequate power backup at site as per CA article clause 8.7(b).It was also informed by DG, NMCG review meeting on 27.04.2022 to submit technical data sheet of DG sets for 100% power backup arrangements.
3. During NMCG meetings on 02.08.2022 regarding Power backup for CSPS –Mr. Rajat Gupta suggested that the actual power requirement at the CSPS shall be confirmed by PE and UPJN, and the same shall be provided by KRMPL. DG sets requirement for running CSPS at designed flow recommended from PE vide letter no. 1755 dated 05.08.2022
4. CCTV cameras need to be installed at site.
5. Raw sewage pump no. 2 and 6 needs to be repair on urgent basis.
6. Both Mechanical coarse bar screens are under repair since long time.
7. 1 no. out of 4 nos. transformers is still pending for replacement as part of renovation works.
8. KRMPL has not replaced all pumps under renovation plan.
9. KRMPL is not doing maintain proper O&M during renovation period.
10. Proper maintenance of CSPS is not doing by KRMPL.
11. Documentations and Log book of pumps, DG set are not maintaining by KRMPL.

12. Transformer foundation for 630KVA work is completed without getting permission or drawing design approval from UPJN/STC.
13. Garbage removal work from screen chamber has not done by KRMPL properly.
14. Flow meter has not installed by KRMPL at site.
15. Auto-starter of DG set has not installed by KRMPL.

- **Nawabganj IPS**

- 1) This IPS is in overflow/Bypass condition since Handover.
- 2) KRMPL did not take any necessary action to preventing overflow condition.
- 3) At, Pump house no. 01, raw sewage pump no. 2 and 3 are under maintenance since long time. KRMPL needs to repair on urgent basis.
- 4) Pumps 3 Nos. have received on 31.12.2021 at site for pump house 02. During site visit at 18.01.2022 it was found that raw sewage pumps are unavailable. KRMPL operator informed to UPJN/STC team that raw sewage pumps got submergence during the installation period. They were refurbished/ repaired and delivered to site on 15.02.2022. Raw sewage pumps and motors of Pump house No. 2 were found at site. KRMPL has started sludge cleaning work of wet well 02 from 28.05.2022; KRMPL has installed all 4 nos. of raw sewage pumps on 23.07.2022 but only raw sewage pump no. 1 and 3 found in operation out of 4 nos.
- 5) Flow meter has not installed by KRMPL at site.
- 6) Auto-starter of DG set has not installed by KRMPL.
- 7) ED (T) instructed KRMPL during site visit on 12.04.2022 at Jajmau facilities to replace all the valves and fittings under renovation within 17.04.2022 and pumps installation work should be complete within 25.04.2022. KRMPL has not installed raw sewage pumps yet.
- 8) New pumps should be installed at site on urgent basis.
- 9) Material Inward and outward registers has not maintained properly by KRMPL.
- 10) Log book of pumps and DG set are not being maintained by KRMPL.
- 11) KRMPL has not arranged adequate number of staff (Operators, Sweepers and relievers) for proper O&M of IPS and attendance register manipulated staff details.

- **Baba Ghat IPS**

- 1) Pump no. 1 is under maintenance.
- 2) Material Inward and outward registers has not maintained properly by KRMPL.
- 3) Flow meter has not installed by KRMPL at site.
- 4) Auto-starter of DG set has not installed by KRMPL.
- 5) Log book of pumps and DG set are not being maintained by KRMPL.
- 6) KRMPL has not arranged adequate number of staff (Operators, Sweepers and relievers) for proper O&M of IPS and attendance register manipulated staff details.

- **Guptar Ghat IPS**

- 1) Raw sewage pump no. 3 is under repair since 15.07.2022. KRMPL needs to repair on urgent basis.
- 2) Material Inward and outward registers has not maintained properly by KRMPL.
- 3) Log book of pumps and DG set are not being maintained by KRMPL.
- 4) Flow meter needs to be repair and calibrated.
- 5) KRMPL has not arranged adequate number of staff (Operators, Sweepers and relievers) for proper O&M of IPS and attendance register manipulated staff details.

- **Parmat IPS**

- 1) PE informed that Shisamau I&D is interconnected with Shisamau IPS and Parmat IPS at its downstream. Parmat IPS has 3 Nos. of Pump houses (PH). Of the 3 PH only PH No. 1 and PH No. 2 are operational, and PH No. 3 is non-operational since handover. PE also informed that overflow condition at Shisamau IPS can be better handled if KRMPL completes renovation of PH No. 3 and starts operating them at Parmat IPS. ED (T) directed KRMPL and UPJN to jointly survey the sewer connections and gather necessary information for renovations of PH3 No. to make it operational.
- 2) During site visit of ED (T), NMCG on 12.04.2022 at Jajmau campus it was directed to UPJN to conduct survey of interconnected pipe line at Parmat pump house 03 with KRMPL and STC representatives. UPJN has arranged a joint survey on 06.05.2022 with UP Jal Kal vibhag and STC, No KRMPL representatives was present during survey work after informed by UPJN to KRMPL. UPJN has issued a letter enclosure with site layout sketch vide UPJN letter no.282/w-4/83 dated 06.05.2022. But KRMPL has not started renovation work of pump house no. 3 at Parmat IPS.
- 3) Under renovation work plastering work, painting work, cracks repairing work are doing by KRMPL for Inlet chamber, Pump houses 1,2 and 3 Nos., DG set room and Panel room but quality of work is very poor.
- 4) New pumps 3 Nos. with motors (1320 cum/hr) for Pump house no. 2 have been received at site on 18.02.22, 19.02.22 and 21.02.22 but their installation work has not started yet.
- 5) In Pump house no.2 pump no 01 is in under maintenance since long time.
- 6) This IPS is not overflow/Bypass condition.
- 7) KRMPL is not maintaining proper O&M work during renovation period.
- 8) Material Inward and outward registers has not maintained properly by KRMPL.
- 9) Log book of pumps and DG set are not being maintained by KRMPL.
- 10) KRMPL has not arranged adequate numbers of staff (Operators, Sweepers and relievers) for proper O&M of IPS and attendance register manipulated staff details.

**JAJMAU (PHASE – 1) 130 MLD STP**

- During NMCG meeting held on 05.09.2022 it was decided that Power backup for 130 MLD STP operations is to be provided by KRMPL for the plant's continuous operation.
- O&M of 130 Mld STP plant Phase 1 and their facilities found unsatisfactory during site visit of NMCG, SMCG, CPCB, UPPCB, District level Officials UPJN and STC officials and intimate to KRMPL taken necessary action to avoid overflow/ByPass condition.
- NMCG officials, SMCG and UPJN intimate to KRMPL many time to operate proper 130 MLD plant and their facilities and maintain all records because (MaghMela) is start from January 2022 to March 2022.
- ED (T) Shri D.P Mathuria and SWMS Mr. R.K Gupta visited site on 12.04.2022 and instructed to KRMPL to operate the IPSs and STPs properly without any negligence.
- DG (NMCG), ED (T) Shri D.P Mathuria and SWMS Mr. R.K Gupta visited site 06.06.2022 and instructed to KRMPL to operate the IPSs and STPs properly without any negligence.
- ED (Projects), NMCG Shri Himanshu Badoni and Mr. Rajat Gupta visited on 08.08.2022 instructed to KRMPL to operate the IPSs and STPs properly without any negligence.

The KRMPL has submitted a renovation work plan from 10-may-2021 to 9-Aug-2022 which has been approved by UPJN. Milestones are to be completed as below:-

1. 1<sup>ST</sup> Milestone, (Duration 10<sup>th</sup> May 2021 to 15<sup>th</sup> Oct 2021)  
Scheduled Progress Percentage- 25%
2. 2<sup>nd</sup> Milestone, (Duration 16<sup>th</sup> Oct 2021 to 15<sup>th</sup> March 2021)  
Scheduled Progress Percentage- 25%
3. 3<sup>rd</sup> Milestone ,( Duration 16<sup>th</sup> March 2022 to 15<sup>th</sup> June 2022)  
Scheduled Progress Percentage- 25%
4. 4<sup>th</sup> Milestone ,( Duration 16<sup>th</sup> June 2022 to 9<sup>th</sup> August 2022)  
Scheduled Progress Percentage- 25%

The KRMPL shall submit the draft O&M manual at least 30 days prior to the Scheduled Construction Completion date for its review and approval but KRMPL Has not completed the renovation work as per schedule completion date. The KRMPL has submitted the list of adequate staff deployed for proper renovation and O&M of 130 MLD Jajmau phase-I facilities, which is not properly qualified & experienced.

#### **MILESTONE WISE ACTIVITIES AND PROGRESS: -RENOVATION OF 130MLD STP JAJMAU FACILITIES**

1. The Duration of 1<sup>st</sup> milestone was 10<sup>th</sup> may 2021 to 15<sup>th</sup> Oct 2021 as per approved renovation plan.
  - KRMPL could not complete the 1<sup>st</sup> milestone as per approved renovation plan. Completion certificate has been recommended form PE for 1<sup>st</sup> milestone with considering part of 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> Milestone vide letter no. STC 1289A dated 27.11.2021.
  - Scheduled date for Completion of STP Renovation is 09.08.2022
  - Total 2 milestones completed. 3<sup>rd</sup> Milestone period was from 16<sup>th</sup> March 2022 to 15<sup>th</sup> June 2022 and KRMPL has missed the target.
  - Renovation work has not done by KRMPL as per approved renovation plan taken 1 stream at a time.
  - PE informed about Manpower deployed by KRMPL for renovation is only 22 nos. for civil work and 8 nos. for Mechanical works. Till date only 2 milestones out of total 4 could be completed by KRMPL. The final, 4<sup>th</sup> milestone is due on 09/08/2022 which will also be missed by KRMPL.
  - KRMPL neither has adequate number of installation & commissioning personnel, nor are they experienced for installation & commissioning work, which are the root causes for the delay of scheduled works and failure of installed equipment.
  - Till date overall progress is **62.3 %** as on 30 september 2022.
  - During Site visit of ED (Projects), NMCG on 08.08.2022 at 130 MLD STP Jajmau facilities PE informed that differential Ultrasonic level sensor (06 Nos.) and teeth bar are



damaged. KRMPL has not been installed Mechanical screens properly. NMCG ED (P) directed KRMPL to make arrangements as needed ASAP.

- Bio remediation work started form 28.1.2022 by KRMPL and stopped by KRMPL from 01.06.2022. Bioremediation was carried out form 28.1.2022 until 30.05.2022. Improvement in outlet parameters was seen initially. However, due to operational issues at the Plant, including power outages, aerators malfunction and inability to waste sludge, Bioremediation was discontinued. PE noted that bioremediation can be resumed as soon as:
  - a. A minimum of 12 out of 18 aerators can operate continuously in aeration tanks for providing necessary air supply and,
  - b. Thickener No.1 & No.2 are made operational for sludge removal from PSTs and FSTs.

PE further noted that once the above are accomplished, the 130 MLD STP can be quickly stabilized with the help of bioremediation while remaining works at PST 3, FST 3, etc.,at the Plant continue. KRMPL confirmed that 2 new Aerators have been installed and as on date a total of 8 existing Aerators had been replaced. Additional 4 new aerators will be installed by 5<sup>th</sup> August 2022. PE recommended installing such that 2 out of 3 Aeration Tanks receive the new Aerators installation. PE further advised that subsequently the 3<sup>rd</sup> Aeration Tank with existing 6 Nos. aerators to be shutdown so that the de-sludging, civil repair and aerators replacement works can be carried out. ED (P) agreed to PE's recommendations and directed KRMPL to follow the same and expedite the work at Aeration tanks. KRMPL committed to start shutdown of one of the Aeration tanks after installation of the remaining 4 Nos. new aerators by 5<sup>th</sup> August 2022 on this KRMPL has started Sludge cleaning work of Aeration tank no. 2 on 12.08.2022 and their repairing work also is in progress simultaneously. Currently 12 Nos. of aerators are running in Aeration tank 01 and Aeration tank 03.

- During site visit of NMCG ED (P) on 08.08.2022 at 130 MLD STP Jajmau facilities, PE informed that a gap was found between squeegee blade and RCC floor was not as per approved drawing for PST no.1. As per drawing, the gap should be 10-12mm but at the site gap was found to be varying from almost zero upto 350mm, which was not acceptable to UPJN & STC team. Mr. Rajat Gupta informed that during NMCG meeting on 02.08.22 it was finalized that the decision had taken already regarding minimum gap clearance consider upto 130mm.NMCG ED (P) directed KRMPL the designer / vendor should visit the site and clarify the above stated issue on priority basis. KRMPL has commissioned the PST 01 from 23.08.2022 but KRMPL has not conduct performance test of the unit.
- PST 02 re-commissioned on 21.09.2022 after completion of Civil and Mechanical works. KRMPL has not done proper O&M so PST 02 gone non functional since commissioning date now KRMPL started mechanical work for PST 02 as on 24.08.2022 and re-commisioned on 21.09.2022.

- KRMPL has started renovation work of PST 3 from 23.09.2022 but till date sludge removal work could not done by KRMPL.
- During site visit of NMCG ED(P) on 08.08.2022 at 130 MLD STP Jajmau facilities , it was found that excessive sludge was found in the tank, scraper mechanism was non-functional and scum removal is non-functional from March 2022. NMCG ED (Project) directed KRMPL to make PST 02 functional within a week but KRMPL made functional on 21.09.2022.
- FST no. 1 Mechanical Bridge collapsed on 15.01.2022.KRMPL need to renovated FST 01 with all respect on urgent basis.
- FST 02 commissioned on 05.02.2022 after completion of Civil and Mechanical works but KRMPL has not conduct performance test of the unit.
- Sludge thickener 02 and blending tank commissioned from 31.05.2022 but KRMPL has not done proper O&M of sludge thickener 02 so it gone non functional from 08.06.2022.
- Sludge thickener 01 commissioned from 04.06.2022 but KRMPL has not done proper O&M of sludge thickener 01 so it gone non functional from 13.06.2022.
- During site visit of NMCG ED(P) on 08.08.2022 at 130 MLD STP Jajmau facilities ,PE & Ajay Kanojiya, UPJN informed ED(P), it was found that Sludge thickener No.1 & 2 are non-functional due to failure of commissioning, and it was not done in presence of E&M vendor. PE observations on Sludge thickener No. 1 & 2 KRMPL have not been complied. ED (P) directed KRMPL to make Sludge thickener No.1 & 2 functional ASAP.
- NMCG ED (T) has also instructed KRMPL to submit revised renovation plan during site visit on 12.04.2022.
- ED (T) instructed KRMPL during site visit of 12.04.2022 at Jajmau facilities to submit QAP and Technical data sheet within 18.04.2022 and PE will recommend within 20.04.2022 and after installation of flow meters will be installed within 45 days at Nawabganj IPS, Parmat IPS, Baba Ghat IPS, and Guptar Ghat& CSPS Jajmau. Flow meters are only available at Permiya IPS and Shisamau IPS but their calibration certificates are still pending by KRMPL. UPJN has issued a letter to KRMPL vide STC letter no. STC/PE/KNP/1601/Jajmau date 03.05.2022 and UPJN letter no. 827/w-3/153 dated 12.05.2022.
- Retrofication of PST 01, Secondary sedimentation tank -1, Primary sludge digester.
- PM1, UPJN noted that no-flow condition Flow meters shows 60-65 MLD at 130 MLD STP, and similarly 20- 25 MLD at 43 MLD STP. PE noted that on-site calibration of the Flow meters at 130 MLD STP, 43 MLD STP, Sisamau Nalla IPS have not been done and the calibration report has been asked from KRMPL through several letters and the same has been reported in PE's monthly inspection reports but KRMPL is yet to comply on the same. CE UPJN and ED(P), NMCG directed KRMPL to calibrate all Flow meters including 130 MLD STP, 43 MLD STP, and at IPS locations and submit the report immediately. Mr.

Prakash Shukla, KRMPL committed to call for the vendors to calibrate all Flow meters and submit the calibration reports within 2 weeks, by 16/08/2022.

- Fixing of next 6 nos. of aerators is under progress.
- Utility shifting estimation amount has been already released by NMCG to UPJN with vide NMCG letter No F.No. Pr-12012/7/2018/PPP/NMCG dated 25.11.2021
- KRMPL has started excavation work of new TEPH, Chlorination tank on 23.02.22, 24.02.22, 24.07.2022 and 25.07.22 but KRMPL has not completed excavation work.
- An incident of the Collapse of Existing Effluent Channel that occurred on 15.09.2022 at 3:00am:
  1. KRMPL is required constructing new TEPH and CCT units for the effluent from 130MLD STP Phase 1, 43 MLD STP Jajmau Phase II and 36 MLD CETP Jajmau as per scope of work in CA.
  2. The required land for construction work of new CCT and TEPH was provided by UPJN nearby the existing TEPH unit.
  3. The provided land area had existing utilities including,
    - i. Electrical cable and pole (Shifting work was completed on 15.04.2022.)
    - ii. Effluent MS pipeline from existing TEPH of 130 MLD STP to Irrigation channel (Shifting work completed)
    - iii. Internal power cables of 43 MLD STP (Shifting work is pending).
    - iv. Effluent brick channel from 36 MLD CETP and 43 MLD STP Jajmau facilities Phase II (Shifting work is pending)
    - v. Underground RCC channel from Bypass chamber to Air-force nala (Shifting work is pending)
    - vi. Internal PVC pipeline 160mm for dewatering purpose from existing TEPH (Shifting work is pending)
- During NMCG meeting on 02.08.2022 it was instructed by ED (Projects) NMCG to KRMPL that Power backup for 130 MLD STP operations is to be provided by KRMPL for the plant's continuous operation.
- ED (Technical) clarified KRMPL that during replacement of raw sewage pumps KRMPL needs to replace all associated equipment including but not limited to valves and instrumentation needs to complete renovation works in all respects without any negligence.
- ED (Technical) strictly instruct to KRMPL during site visit on 12.04.2022 at Jajmau facilities that they are responsible to comply to the inspection reports issued by PE and UPJN for all site but KRMPL has not submitted compliances of inspection reports issued by PE.
- KRMPL has submitted revised C&I documents for IPSs and CSPS under Jajmau facilities vide KRMPL letter no. 1456 dated 13.05.2022. It is under review of It PE.
- During site visit of NMCG ED (P) on 08.08.2022 at 130 MLD STP Jajmau facilities ,ED (P) instructed KRMPL to take sampling of inlet and outlet from the units separately and do



whatever is required for the improvement of KPIs. But KRMPL has not taken any necessary action on it.

**Summary and Milestone wise activities and their progress of work for 130 MLD STP Jajmau Phase-1 facilities are given in below table**

**Summary of overall progress at 130MLD STP JAJMAU PHASE-1 FACILITIES**

Milestone	Schedule Completion date	Actual Completion date	Milestone Amount	Targeted progress till 30.09.2022		
				Milestone Amount	% Target	% Achieved
1 <sup>st</sup> Milestone	15.10.2021	15.10.2021	240160000.00	201620564	25%	20.98%
2 <sup>nd</sup> milestone	15.03.2022	15.03.2022	240160000.00	181014478	25%	18.84%
3 <sup>rd</sup> milestone	15.06.2022	Not completed	240160000.00	130354045	25%	13.56%
4 <sup>th</sup> milestone	09.08.2022		240160000.00	85715986	25%	8.92%
Overall progress	960640000.000			598705072.98	100%	62.3%
<b>Total %</b>	<b>100%</b>				<b>100%</b>	<b>62.3%</b>

Milestone wise activities and their progress of work for 130MLD STP Jajmau Phase-1 facilities are given in Table.

Table 7.1: Milestone wise progress – 130 MLD Jajmau Phase I STP

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
I	Design & Drawing of STP																	
i.	On approval of BEP	480,32,000.00	100%	480,32,000.00	100%	480,32,000.00				-				-				-
ii.	On approval of design & drawings for Civil works	480,32,000.00	25%	120,08,000.00	25%	120,08,000.00	75%	360,24,000.00	75%	360,24,000.00				-				-
										-				-				-
II	REHABILITATION/ RENOVATION OF EXISTING STP & IPSs																	
A.	Civil Work																	
i.	Retrofication for Collection chamber	51,87,456.00	100%	51,87,456.00	100%	51,87,456.00				-				-				-
ii.	Retrofication for Fine Screen Channel(Mechanical)	181,56,096.00	35%	63,54,633.60	35%	63,54,633.60	30%	54,46,828.80	30%	54,46,828.80	35%	63,54,633.60	35%	63,54,633.60				-
iii.	Retrofication for Fine Screen Channel(Man	51,87,456.00	100%	51,87,456.00	100%	51,87,456.00				-				-				-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	ual)																	
iv.	Retrofication for Grit Chamber	181,56,096.00	35 %	63,54,633.60	35 %	63,54,633.60	30 %	54,46,828.80	30%	54,46,828.80	35 %	63,54,633.60	35 %	63,54,633.60				-
v.	Retrofication for Parshall Flume	51,87,456.00	10 0%	51,87,456.00	10 0%	51,87,456.00		-		-				-				-
vi.	Retrofication for Distribution Chamber for Primary Clarifier	51,87,456.00	10 0%	51,87,456.00	10 0%	51,87,456.00		-		-				-				-
vii.	Retrofication for Primary Sedimentation Tank	181,56,096.00	35 %	63,54,633.60	35 %	63,54,633.60	30 %	54,46,828.80	30%	54,46,828.80	35 %	63,54,633.60	10 %	18,15,609.60				-
viii.	Retrofication for Distribution chamber for Aeration Tank	51,87,456.00	10 0%	51,87,456.00	10 0%	51,87,456.00		-		-		-		-				-
ix.	Retrofication for Aeration Tank	181,56,096.00	30 %	54,46,828.80		-	35 %	63,54,633.60		-	35 %	63,54,633.60		-				-
x.	Retrofication for Distribution Chamber for final Sedimentation Tank	51,87,456.00	10 0%	51,87,456.00	10 0%	51,87,456.00		-		-		-		-				-
xi.	Retrofication		30		30		35		35%		35		10					

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th Oct'21		1st Milestone 10th May'21 to 15th Oct'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	for final Sedimentation Tank	181,56,096.00	%	54,46,828.80	%	54,46,828.80	%	63,54,633.60		63,54,633.60	%	63,54,633.60	%	18,15,609.60			%	-
xii.	Retrofication for Blending Tank	51,87,456.00	100%	51,87,456.00	100%	51,87,456.00				-		-		-				-
xiii.	Retrofication for Gravity Sludge Thickener	181,56,096.00		-			50%	90,78,048.00	50%	90,78,048.00	50%	90,78,048.00	50%	90,78,048.00				-
xiv.	Retrofication for Thickened Sludge Sump	51,87,456.00		-			100%	51,87,456.00	100%	51,87,456.00		-		-		-		-
xv.	Retrofication for Primary Sludge Digestor	181,56,096.00		-			50%	90,78,048.00	50%	90,78,048.00	50%	90,78,048.00	10%	18,15,609.60		-		-
xvi.	Retrofication for Secondary Digestor	77,81,184.00		-			100%	77,81,184.00	26.56%	20,66,458.90		-		-		-		-
xvii.	Retrofication for Digested Sludge Sump	51,87,456.00		-			100%	51,87,456.00	100%	51,87,456.00		-		-		-		-
xviii.	Retrofication for Gas Holder	51,87,456.00		-			50%	25,93,728.00	50%	25,93,728.00	50%	25,93,728.00	50%	25,93,728.00		-		-
xix.	Retrofication for Return Sludge Sump	51,87,456.00		-			100%	51,87,456.00	100%	51,87,456.00		-		-		-		-
xx.	Retrofication for Centrate/Supernatant Sump	51,87,456.00		-			100%	51,87,456.00	100%	51,87,456.00		-		-		-		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
xxi.	Retrofication for MCC Panel Room	77,81,184.00	-				50 %	38,90,592.00	50%	38,90,592.00	50 %	38,90,592.00	50 %	38,90,592.00	-			-
xxii.	Retrofication for Gas Engine Room	77,81,184.00	-				50 %	38,90,592.00	50%	38,90,592.00	50 %	38,90,592.00	50 %	38,90,592.00	-			-
xxiii.	Retrofication for Return Sludge Pump House	77,81,184.00	-				50 %	38,90,592.00	50%	38,90,592.00	50 %	38,90,592.00	50 %	38,90,592.00				-
xxiv.	Retrofication for Thickened Sludge Pumping Station	77,81,184.00	-				50 %	38,90,592.00	50%	38,90,592.00	50 %	38,90,592.00	50 %	38,90,592.00	-			-
xxv.	Retrofication for Digested Sludge Pump Station	51,87,456.00	-				50 %	25,93,728.00	50%	25,93,728.00	50 %	25,93,728.00	50 %	25,93,728.00	-			-
xxvi.	Retrofication for Centrifuge building/belt filter press bldg	103,74,912.00	-				50 %	51,87,456.00	50%	51,87,456.00	50 %	51,87,456.00	50 %	51,87,456.00				-
xxvii.	Retrofication for Digester Sludge Pumping Station (Building)	51,87,456.00	-				50 %	25,93,728.00	50%	25,93,728.00	50 %	25,93,728.00	50 %	25,93,728.00	-			-
xxviii.	Retrofication for Biogas Compressor Room	51,87,456.00	-					-		-	50 %	25,93,728.00	50 %	25,93,728.00	50 %	25,93,728.00	50%	25,93,728.00

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
xxix.	Retrofication for Gas Flaring Unit	25,93,728.00		-				-		-	50 %	12,96,864.00	50 %	12,96,864.00	50 %	12,96,864.00	50%	12,96,864.00
xxx.	Retrofication for Cooling Tower	12,96,864.00		-				-		-	50 %	6,48,432.00	50 %	6,48,432.00	50 %	6,48,432.00	50%	6,48,432.00
xxxi.	Retrofication for Scrubber Unit	12,96,864.00		-				-		-	50 %	6,48,432.00	50 %	6,48,432.00	50 %	6,48,432.00	50%	6,48,432.00
B.	Mechanical Work(Renovation/New Procurement )																	
i.	Mechanical Fine Screen - Supply	77,81,184.00	80 %	62,24,947.20	80 %	62,24,947.20		-		-		-		-		-		-
ii.	Mechanical Fine Screen - Installation		7.0 %	5,44,682.88	7%	5,44,682.88	7.0 %	5,44,682.88	7%	5,44,682.88	6%	4,66,871.04	6%	4,66,871.04		-		-
iii.	Manual Fine Screen - Supply	51,87,456.00	80 %	41,49,964.80	80 %	41,49,964.80		-		-		-		-		-		-
iv.	Manual Fine Screen - Installation		20 %	10,37,491.20	20 %	10,37,491.20		-		-		-		-		-		-
v.	Grit Mechanism - Supply	77,81,184.00	80 %	62,24,947.20	80 %	62,24,947.20		-		-		-		-		-		-
vi.	Grit Mechanism - Installation		7.00 %	5,44,682.88	7%	5,44,682.88	6.0 %	4,66,871.04	6%	4,66,871.04	7%	5,44,682.88	7%	5,44,682.88		-		-
vii.	Primary Clarifier	77,81,184.00		-		-	80 %	62,24,947.	80%	62,24,947.		-		-		-		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	Mechanism - Supply							20		20								
viii.	Primary Clarifier Mechanism - Installation			-		-	9%	7,00,306.56	6%	4,66,871.04	11%	8,55,930.24		-		-		-
ix.	Surface Aerator - Supply	259,37,280.00	25%	64,84,320.00	25%	64,84,320.00	25%	64,84,320.00	25%	64,84,320.00	30%	77,81,184.00	30%	77,81,184.00				-
x.	Surface Aerator - Installation		6.5%	16,86,883.84	6.5%	16,85,923.20	6.22%	16,11,953.92	3%	7,78,118.40	7.3%	18,88,233.98		-		-		-
xi.	FST Mechanism - Supply	103,74,912.00		-		-	40%	41,49,964.80	40.0%	41,49,964.80	40%	41,49,964.80	40%	41,49,964.80		-		-
xii.	FST Mechanism - Installation	-		-		-		-		-	20%	20,74,982.40	12%	12,44,989.44		-		-
xiii.	Return Sludge Pumps - Supply	103,74,912.00		-		-	40%	41,49,964.80	40%	41,49,964.80	40%	41,49,964.80	40%	41,49,964.80		-		-
xiv.	Return Sludge Pumps - Installation	-		-		-				-				-	20%	20,74,982.40	20%	20,74,982.40
xv.	Gravity Thickener Mechanism - Supply	103,74,912.00		-		-		-		-	80%	82,99,929.60	80%	82,99,929.60				-
xvi.	Gravity Thickener Mechanism - Installation			-		-				-				-	20%	20,74,982.40	20%	20,74,982.40
xvii.	Digester Feed Pumps -	103,74,912.00	60%	62,24,947.2		-	20%	20,74,982.		-		-		-		-		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	Supply	0		0				40										
xviii.	Digester Feed Pumps - Installation			-		-	20 %	20,74,982.40		-		-		-		-		-
xix.	Sludge Digester Mixer - Primary - Supply	51,87,456.00	80 %	41,49,964.80		-		-		-		-		-		-		-
xx.	Sludge Digester Mixer - Primary - Installation			-		-	20 %	10,37,491.20		-		-		-		-		-
xxi.	Digester Sludge Recirculation Pump - Supply	51,87,456.00		-		-	80 %	41,49,964.80		-		-		-		-		-
xxii.	Digester Sludge Recirculation Pump - Installation			-		-		-		-		-		-	20 %	10,37,491.20		-
xxiii.	Digester Sludge Heating System and Ancilliary Equipment-Supply	51,87,456.00		-		-	80 %	41,49,964.80		-		-		-		-		-
xxiv.	Digester Sludge			-		-		-		-		-		-	20 %	10,37,491.		-



Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	Heating System and Ancillary Equipment-Installation															20		
xxv.	Digested Sludge /Centrifuge Feed Pumps - Supply	51,87,456.00		-		-	80 %	41,49,964.80		-		-		-				-
xxvi.	Digested Sludge /Centrifuge Feed Pumps - Installation			-		-				-	20 %	10,37,491.20		-		-		-
xxvii.	Centrifuge Machine - Supply	51,87,456.00		-		-		-		-	80 %	41,49,964.80		-				-
xxviii.	Centrifuge Machine - Installation			-		-				-				-	20 %	10,37,491.20		-
xxix.	Supertanant Pumps - Supply	51,87,456.00	80 %	41,49,964.80		-		-		-		-		-		-		-
xxx.	Supertanant Pumps - Installation			-		-	20 %	10,37,491.20		-		-		-		-		-
xxxi.	Gas Scrubber with ancilliary equipment - Supply	51,87,456.00		-		-		-		-		-		-	80 %	41,49,964.80		-
xxxii.	Gas Scrubber with ancilliary equipment -			-		-		-		-		-		-	20 %	10,37,491.20		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	Installation																	
xxxiii.	Gas Engine with ancilliary equipment - Supply	51,87,456.00	-		-		-		-		-		-		80 %	41,49,964.80	80%	41,49,964.80
xxxiv.	Gas Engine with ancilliary equipment - Installation		-		-		-		-		-		-		20 %	10,37,491.20		-
xxxv.	Gas Flaring System - Supply	51,87,456.00	-		-		-		-		-		-		80 %	41,49,964.80	80%	41,49,964.80
xxxvi.	Gas Flaring System - Installation		-		-		-		-		-		-		20 %	10,37,491.20		-
xxxvii.	Agitator for blending tank - Supply	51,87,456.00	80 %	41,49,964.80	80 %	41,49,964.80			-				-					-
xxxviii.	Agitator for blending tank - Installation		-		-		-		-		20 %	10,37,491.20	20 %	10,37,491.20				-
xxxix.	Agitator for Digester Feed Sump - Supply	51,87,456.00	80 %	41,49,964.80	80 %	41,49,964.80			-				-					-
xxxx.	Agitator for Digester Feed Sump - Installation		-		-		-		-		20 %	10,37,491.20		-				-
xxxxi.	Agitator for Centrifuge Feed Sump - Supply	51,87,456.00	80 %	41,49,964.80	80 %	41,49,964.80			-				-					-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
xxxxii .	Agitator for Centrifuge Feed Sump - Installation			-		-		-		-	20 %	10,37,491.20		-		-		-
xxxxii i.	Agitator for Poly Dosing Tank - Supply	51,87,456.00	80 %	41,49,964.80	80 %	41,49,964.80		-		-		-		-		-		-
xxxxi v.	Agitator for Poly Dosing Tank - Installation			-		-		-		-	20 %	10,37,491.20		-		-		-
xxxxv .	Poly Dosing Pumps - Supply	51,87,456.00	80 %	41,49,964.80	80 %	41,49,964.80		-		-		-		-		-		-
xxxxv i.	Poly Dosing Pumps - Installation			-		-		-		-	20 %	10,37,491.20		-		-		-
xxxxv ii.	Valves - Supply	103,74,912.00		-		-		-		-	80 %	82,99,929.60	25 %	25,93,728.00		-		-
xxxxv iii.	Valves - Installation			-		-		-		-	10 %	10,37,491.20	5%	5,18,745.60	10 %	10,37,491.20		-
xxxxi x.	Gates (Open Channel ) - Supply	103,74,912.00		-		-		-		-	80 %	82,99,929.60	60 %	62,24,947.20		-		-
xxxxx .	Gates (Open Channel ) - Installation			-		-		-		-	10 %	10,37,491.20	12 %	12,44,989.44	10 %	10,37,491.20		-
xxxxx i.	Existing Duel Fuel Generators	51,87,456.00		-		-				-				-	100 %	51,87,456.00		-
xxxxx ii.	Gas Holder Dome-	51,87,456.00		-		-				-				-	100 %	51,87,456.00		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	Fabrication															00		
xxxxx iii.	Borewell Pump - Supply	51,87,456.00	-		-		80 %	41,49,964.80	80%	41,49,964.80		-		-		-		-
xxxxx iv.	Borewell Pump - Installation		-		-			-		-	20 %	10,37,491.20	10 %	5,18,745.60		-		-
xxxxx v.	Service Water Pump - Supply	51,87,456.00	80 %	41,49,964.80	80 %	41,49,964.80		-		-		-		-		-		-
xxxxx vi.	Service Water Pump - Installation		-		-		20 %	10,37,491.20		-		-		-		-		-
xxxxx vii.	Overhead Tank - Supply	51,87,456.00	-		-			-		-		-		-	80 %	41,49,964.80		-
xxxxx viii.	Overhead Tank - Erection		-		-			-		-		-		-	20 %	10,37,491.20		-
xxxxx ix.	Dewatering Pump for Dry well - Supply	51,87,456.00	-		-		80 %	41,49,964.80	80%	41,49,964.80		-		-		-		-
xxxxx x.	Dewatering Pump for Dry well - Erection		-		-		10 %	5,18,745.60		-	10 %	5,18,745.60		-		-		-
xxxxx xi.	Monorail for lifting arrangement - Supply	51,87,456.00	80 %	41,49,964.80	80 %	41,49,964.80				-				-				-
xxxxx xii.	Monorail for lifting arrangement		20 %	10,37,491.20	20 %	10,37,491.20				-				-				-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	- Installation																	
xxxxx xiii.	DI Pipes & Fittings - Supply	51,87,456.00	-		-		40 %	20,74,982.40	10%	5,18,745.60	40 %	20,74,982.40	-				-	
xxxxx xiv.	DI Pipes & Fittings - Installation		-		-				1%	51,874.56	20 %	10,37,491.20	-				-	
xxxxx xv.	MS Pipes & Fittings - Supply	51,87,456.00	-		-		40 %	20,74,982.40	40%	20,74,982.40	40 %	20,74,982.40	40 %	20,74,982.40			-	
xxxxx xvi.	MS Pipes & Fittings - Erection		-		-				-		20 %	10,37,491.20	-				-	
xxxxx xvii.	SS Pipes & Fittings - Supply	51,87,456.00	-		-		40 %	20,74,982.40	10%	5,18,745.60	40 %	20,74,982.40	-				-	
xxxxx xviii.	SS Pipes & Fittings - Erection		-		-				-		20 %	10,37,491.20	1%	51,874.56			-	
xxxxx xix.	Lab Equipment - Supply	51,87,456.00	-		-				-				-		80 %	41,49,964.80	-	
xxxxx xx.	Lab equipment-Installation		-		-				-				-		20 %	10,37,491.20	-	
xxxxx xxi.	Testing & Commissioning for Mechanical Items	129,68,640.00	-		-				-		-		-		100 %	129,68,640.00	30.00 %	38,90,592.00
C.	Electrical Work(Renovation/New																	

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th Octber'21		1st Milestone 10th May'21 to 15th Octber'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	<b>Procurement )</b>																	
i.	Supply of DP structure	48,03,200.00				-		-		-				-	80 %	38,42,560.00	80%	38,42,560.00
ii.	Installation of DP structure					-		-		-				-	20 %	9,60,640.00	20%	9,60,640.00
iii.	Supply of HT Metering Panel	48,03,200.00				-				-		-		-	80 %	38,42,560.00		-
iv.	Installation of HT Metering Panel					-				-		-		-	20 %	9,60,640.00		-
v.	Supply of HT VCB panel	96,06,400.00				-				-		-		-	80 %	76,85,120.00	80%	76,85,120.00
vi.	Installation of HT VCB panel					-				-		-		-	20 %	19,21,280.00		-
vii.	Supply of Transformer	96,06,400.00	80 %	76,85,120.00	80 %	76,85,120.00				-				-		-		-
viii.	Installation of Transformer					-				-	20 %	19,21,280.00	20 %	19,21,280.00		-		-
ix.	Supply of Main PCC panel	96,06,400.00	80 %	76,85,120.00		-				-				-		-		-
x.	Installation of Main PCC panel					-				-	20 %	19,21,280.00		-		-		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
xi.	Supply of Other equipments panel (MCC-2 PANEL)/Bar screen panel/Thicker Panel	96,06,400.00				-				-				-	80 %	76,85,120.00	10%	9,60,640.00
xii.	Installation of Other equipments panel (MCC-2 PANEL)/Bar screen panel/Thicker Panel					-				-				-	20 %	19,21,280.00	1%	96,064.00
xiii.	Supply of Digestor system panel (MCC-3 PANEL)	96,06,400.00				-				-				-	80 %	76,85,120.00		-
xiv.	Installation of Digestor system panel (MCC-3 PANEL)					-				-				-	20 %	19,21,280.00		-
xv.	Supply of APFCR panel with AL reactor	48,03,200.00				-				-				-	80 %	38,42,560.00		-
xvi.	Installation of APFCR panel with AL reactor					-				-				-	20 %	9,60,640.00		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
xvii.	Supply of Aerators & Other equipment panel (MCC-1 PANEL)	48,03,200.00				-				-				-	80 %	38,42,560.00		-
xviii.	Installation of Aerators & Other equipment panel (MCC-1 PANEL)					-				-				-	20 %	9,60,640.00		-
xix.	Supply of LPBS for Motors	48,03,200.00				-		-		-				-	80 %	38,42,560.00		-
xx.	Installation of LPBS for Motors					-		-		-				-	20 %	9,60,640.00		-
xxi.	Supply of Cable Tray	48,03,200.00				-				-		-		-	80 %	38,42,560.00	80%	38,42,560.00
xxii.	Installation of Cable Tray					-				-		-		-	20 %	9,60,640.00	10%	4,80,320.00
xxiii.	Supply of LT Cable	48,03,200.00				-				-		-		-	80 %	38,42,560.00	80%	38,42,560.00
xxiv.	Installation of LT Cable					-				-		-		-	20 %	9,60,640.00	8%	3,84,256.00
xxv.	Supply of Street Light Fixture	48,03,200.00				-				-				-	80 %	38,42,560.00	72%	34,58,304.00



Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
xxvi.	Installation of Street Light Fixture					-				-				-	20 %	9,60,640.00	18%	8,64,576.00
xxvii.	Earthing Work	48,03,200.00				-				-				-	100 %	48,03,200.00	80%	38,42,560.00
xxviii.	Testing & Commissioning for Electrical Items	48,03,200.00		-		-				-		-		-	100 %	48,03,200.00	40%	19,21,280.00
D.	<b>SUMP CUM PUMP HOUSE (200 MLD)</b>																	
a.	<b>CIVIL WORK</b>																	
i.	Excavation	17,53,168.00	100 %	17,53,168.00	70 %	12,27,217.60		-		-				-				-
ii.	PCC	35,06,336.00	100 %	35,06,336.00		-		-		-				-				-
iii.	Raft Foundation/Raft	52,59,504.00		-		-	100 %	52,59,504.00		-				-		-		-
iv.	Column & Beam work	52,59,504.00		-		-	100 %	52,59,504.00		-				-		-		-
v.	Wall 50% of total lift work	52,59,504.00		-		-		-		-	100 %	52,59,504.00		-		-		-
vi.	Walls (balance 50% of Total Lift)	52,59,504.00		-		-		-		-	100 %	52,59,504.00		-		-		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	work)																	
vii.	Ground Floor Slab	17,53,168.00	-		-		-		-		100%	17,53,168.00	-		-		-	
viii.	Roof Slab	17,53,168.00	-		-		-		-		100%	17,53,168.00	-		-		-	
ix.	Brickwork & Plaster	35,06,336.00	-		-		-		-		-		-		100%	35,06,336.00		-
x.	Finishing Work	17,53,168.00	-		-		-		-		-		-		100%	17,53,168.00		-
b.	<b>MECHANICAL WORK</b>																	
	<b>PUMPING SYSTEM</b>																	
	(i) On supply of machinery/equipment at site	230,55,360.00			-				-		60%	138,33,216.00	60%	138,33,216.00	40%	92,22,144.00	40%	92,22,144.00
	(ii) On completion of erection works	43,22,880.00			-				-					-	100%	43,22,880.00	6%	2,59,372.80
	(iii) On completion of Testing of equipment	14,40,960.00			-				-					-	100%	14,40,960.00		-
	<b>EOT/HOIST WORKS</b>																	

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	(i) On supply of machinery/equipment at site	61,48,096.00				-				-	100%	61,48,096.00	100%	61,48,096.00				-
	(ii) On completion of erection works	11,52,768.00				-				-				-	100%	11,52,768.00		-
	(iii) On completion of Testing of equipment	3,84,256.00				-				-				-	100%	3,84,256.00		-
	<b>ELECTRICAL WORK</b>																	
	(i) On supply of machinery/equipment at site	49,95,328.00				-				-	100%	49,95,328.00	50%	24,97,664.00				-
	(ii) On completion of erection works	9,36,624.00				-				-				-	100%	9,36,624.00		-
	(iii) On completion of Testing of equipment	3,12,208.00				-				-				-	100%	3,12,208.00		-
										-				-				-
E.	<b>Chlorination Tank Area</b>																	

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
i.	Excavation	4,80,320.00	10 0%	4,80,320.00		-				-				-				-
i.	PCC	9,60,640.00	10 0%	9,60,640.00		-				-				-				-
ii.	RCC Foundation/R aft	14,40,960.00		-		-	10 0%	14,40,960. 00		-				-				-
iii.	Wall 50% of total lift work	19,21,280.00		-		-	10 0%	19,21,280. 00		-				-				-
iv.	Walls (balance 50% of Total Lift work)	19,21,280.00		-		-		-		-	10 0%	19,21,280. 00		-				-
v.	Baffle Walls work	9,60,640.00		-		-		-		-	10 0%	9,60,640.0 0		-				-
vi.	Brickwork & Plaster	14,40,960.00		-		-		-		-	10 0%	14,40,960. 00		-		-		-
ix.	Finishing Work	4,80,320.00		-		-				-				-	10 0%	4,80,320.0 0		-
F	<b>Chlorination Room Area</b>																	
i.	Excavation	4,80,320.00	10 0%	4,80,320.00		-				-				-				-
i.	PCC	9,60,640.00	10 0%	9,60,640.00		-				-				-				-
ii.	RCC Foundation/C olumn Footing	14,40,960.00		-		-	10 0%	14,40,960. 00		-				-				-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th Octber'21		1st Milestone 10th May'21 to 15th Octber'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
iii.	Column & Beam work	19,21,280.00		-		-	10 0%	19,21,280.00		-				-				-
iv.	Ground Floor Slab	19,21,280.00		-		-		-		-	10 0%	19,21,280.00		-				-
v.	Roof Slab	9,60,640.00		-		-		-		-	10 0%	9,60,640.00		-				-
vi.	Brickwork	9,60,640.00		-		-		-		-	10 0%	9,60,640.00		-		-		-
ix.	Plaster	4,80,320.00		-		-				-	10 0%	4,80,320.00		-		-		-
x.	Finishing Work	4,80,320.00		-		-				-				-	10 0%	4,80,320.00		-
a.	<b>MECHANICAL WORK</b>																	
	<b>CHLORINATION SYSTEM</b>																	
	(i) On supply of machinery/equipment at site	207,49,824.00				-				-		-		-	10 0%	207,49,824.00	100 %	207,49,824.00
	(ii) On completion of erection works	38,90,592.00				-				-				-	10 0%	38,90,592.00		-
	(iii) On completion of Testing of	12,96,864.00				-				-				-	10 0%	12,96,864.00		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	equipment																	
	<b>HOIST WORKS</b>																	
	(i) On supply of machinery/equipment at site	34,58,304.00				-				-	100%	34,58,304.00	80%	27,66,643.20				-
	(ii) On completion of erection works	6,48,432.00				-				-				-	100%	6,48,432.00		-
	(iii) On completion of Testing of equipment	2,16,144.00				-				-				-	100%	2,16,144.00		-
	<b>ELECTRICAL &amp; INSTRUMENTATION WORK</b>																	
	(i) On supply of machinery/equipment at site	57,63,840.00				-				-	100%	57,63,840.00		-				-
	(ii) On completion of erection works	10,80,720.00				-				-				-	100%	10,80,720.00		-
	(iii) On completion of	3,60,240.00				-				-				-	100%	3,60,240.00		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	Testing of equipment															0		
III.	<b>RENOVATION WORK for IPS (4 nos) &amp; CSPS (1no)</b>																	
a.i.	<b>Civil Works</b>									-				-				-
	<b>(i) Nawabganj IPS</b>									-				-				-
	a. Retrofication of Inlet Chamber	13,44,896.00	10 0%	13,44,896.00	10 0%	13,44,896.00				-				-				-
	b. Retrofication of Screen Chamber	13,44,896.00	10 0%	13,44,896.00	10 0%	13,44,896.00				-				-				-
	c. Retrofication of Wet Well	13,44,896.00				-	10 0%	13,44,896.00	100 %	13,44,896.00				-				-
	d. Retrofication of Pump House	13,44,896.00				-	10 0%	13,44,896.00	100 %	13,44,896.00				-				-
a. ii.	<b>Mechanical Work(Servicing &amp; Overhauling/ New Procurement )</b>																	

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	(i) Nawabganj IPS									-				-				-
	a. Supply of Centrifugal Pump	13,44,896.00				-	80 %	10,75,916.80	72%	9,68,325.12				-				-
	b. Installation of Centrifugal Pump					-				-	20 %	2,68,979.20		-				-
	c. SS/MS Structural Work - Supply	6,72,448.00				-	80 %	5,37,958.40	40%	2,68,979.20				-				-
	d. SS/MS Structural Work - Fabrication					-				-	20 %	1,34,489.60	10 %	67,244.80				-
	e. Valves and NRV - Supply	13,44,896.00				-				-	80 %	10,75,916.80		-				-
	f. Valves and NRV - Installation					-				-				-	20 %	2,68,979.20		-
	g. Pipe & Fitting - Supply	6,72,448.00				-				-	80 %	5,37,958.40		-				-
	h. Pipe & Fittings - Erection					-				-				-	20 %	1,34,489.60		-
	i. Monorail for lifting arrangement - Supply	6,72,448.00	80 %	5,37,958.40	70 %	4,70,713.60				-				-				-
	j. Monorail for lifting					-	20 %	1,34,489.6	14%	94,142.72				-				-



Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	arrangement - Installation							0										
	k. Dewatering Pump for dry well - Supply	6,72,448.00	80 %	5,37,958.40	-				-				-				-	
	l. Dewatering Pump for dry well - Installation				-		20 %	1,34,489.60	-				-				-	
a. iii.	Electrical Work(Servicing & Overhauling/ New Procurement)	13,44,896.00	-		-		-		-		50 %	6,72,448.00	-		50 %	6,72,448.00	-	
a. iv.	Testing & Commissioning	13,44,896.00	-		-		-		-		-		-		100 %	13,44,896.00	-	
b.i.	Civil Works																	
	(i) Parmat IPS																	
	a. Retrofication of Inlet Chamber	13,44,896.00	100 %	13,44,896.00	100 %	13,44,896.00			-				-				-	
	b. Retrofication of Screen Chamber	13,44,896.00	100 %	13,44,896.00	100 %	13,44,896.00			-				-				-	
	c. Retrofication of Wet Well	13,44,896.00			-		100 %	13,44,896.00	100 %	13,44,896.00			-				-	

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th Octber'21		1st Milestone 10th May'21 to 15th Octber'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	d. Retrofication of Pump House	13,44,896.00				-	10 0%	13,44,896.00	100 %	13,44,896.00				-				-
ii.	<b>Mechanical Work(Servicing &amp; Overhauling/ New Procurement )</b>																	
	<b>(i) Parmat IPS</b>									-				-				-
	a. Supply of Centrifugal Pump	13,44,896.00				-	80 %	10,75,916.80	80%	10,75,916.80				-				-
	b. Installation of Centrifugal Pump					-				-	20 %	2,68,979.20	5%	67,244.80				-
	c. SS/MS Structural Work - Supply	6,72,448.00				-	80 %	5,37,958.40	70%	4,70,713.60				-				-
	d. SS/MS Structural Work - Fabrication					-				-	20 %	1,34,489.60	14 %	94,142.72				-
	e. Valves and NRV - Supply	13,44,896.00				-				-	80 %	10,75,916.80		-				-
	f. Valves and NRV - Installation					-				-				-	20 %	2,68,979.20		-
	g. Pipe & Fitting -	6,72,448.00				-				-	80 %	5,37,958.4		-				-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th Oct'21		1st Milestone 10th May'21 to 15th Oct'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	Supply											0						
	h. Pipe & Fittings - Erection					-				-				-	20 %	1,34,489.60		-
	i. Monorail for lifting arrangement - Supply	6,72,448.00	80 %	5,37,958.40	70 %	4,70,713.60				-				-				-
	j. Monorail for lifting arrangement - Installation					-	20 %	1,34,489.60	14%	94,142.72				-				-
	k. Dewatering Pump for dry well - Supply	6,72,448.00	80 %	5,37,958.40		-				-				-				-
	l. Dewatering Pump for dry well - Installation					-	20 %	1,34,489.60		-				-				-
iii.	Electrical Work(Servicing & Overhauling/ New Procurement )	13,44,896.00		-		-		-		-	50 %	6,72,448.00		-	50 %	6,72,448.00		-
iv.	Testing & Commissioning	13,44,896.00		-		-		-		-		-		-	100 %	13,44,896.00		-
c.i.	Civil Works																	
	(i) Baba Ghat IPS																	

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	a. Retrofication of Inlet Chamber	13,44,896.00	10 0%	13,44,896.00	10 0%	13,44,896.00				-				-				-
	b. Retrofication of Screen Chamber	13,44,896.00	10 0%	13,44,896.00	10 0%	13,44,896.00				-				-				-
	c. Retrofication of Wet Well	13,44,896.00				-	10 0%	13,44,896.00	100 %	13,44,896.00				-				-
	d. Retrofication of Pump House	13,44,896.00				-	10 0%	13,44,896.00	100 %	13,44,896.00				-				-
ii.	<b>Mechanical Work(Servicing &amp; Overhauling/ New Procurement )</b>																	
	<b>(i) Baba Ghat IPS</b>									-				-				-
	a. Supply of Submersible Pump alongwith Electric Motor	13,44,896.00				-	80 %	10,75,916.80	80%	10,75,916.80				-				-
	b. Installation of Submersible Pump					-				-	20 %	2,68,979.20	15 %	2,01,734.40				-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	alongwith Electric Motor																	
	c. SS/MS Structural Work - Supply	6,72,448.00			-		80 %	5,37,958.40	70%	4,70,713.60			-				-	
	d. SS/MS Structural Work - Fabrication				-					-	20 %	1,34,489.60	14 %	94,142.72			-	
	e. Valves and NRV - Supply	13,44,896.00			-					-	80 %	10,75,916.80		-			-	
	f. Valves and NRV - Installation				-					-				-	20 %	2,68,979.20		-
	g. Pipe & Fitting - Supply	6,72,448.00			-					-	80 %	5,37,958.40	70 %	4,70,713.60			-	
	h. Pipe & Fittings - Erection				-					-				-	20 %	1,34,489.60	14%	94,142.72
	i. Monorail for lifting arrangement - Supply	6,72,448.00	80 %	5,37,958.40	70 %	4,70,713.60				-				-			-	
	j. Monorail for lifting arrangement - Installation				-		20 %	1,34,489.60	14%	94,142.72				-			-	
	k. Dewatering Pump for dry well - Supply	6,72,448.00	80 %	5,37,958.40		-				-				-			-	

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	I. Dewatering Pump for dry well - Installation					-	20 %	1,34,489.60		-				-				-
iii.	Electrical Work(Servicing & Overhauling/ New Procurement )	13,44,896.00		-		-		-		-	70 %	9,41,427.20		-	30 %	4,03,468.80		-
iv.	Testing & Commissioning	13,44,896.00		-		-		-		-		-		-	100 %	13,44,896.00		-
d.i.	Civil Works																	
	(i) Guptar Ghat IPS																	
	a. Retrofication of Inlet Chamber	13,44,896.00	100 %	13,44,896.00	100 %	13,44,896.00				-				-				-
	b. Retrofication of Screen Chamber	13,44,896.00	100 %	13,44,896.00	100 %	13,44,896.00				-				-				-
	c. Retrofication of Wet Well	13,44,896.00				-	100 %	13,44,896.00	100 %	13,44,896.00				-				-
	d. Retrofication of Pump House	13,44,896.00				-	100 %	13,44,896.00	100 %	13,44,896.00				-				-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th Octber'21		1st Milestone 10th May'21 to 15th Octber'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
ii.	Mechanical Work(Servicing & Overhauling/ New Procurement )																	
	(i) Guptar Ghat IPS								-				-					-
	a. Supply of Centrifugal Pump	13,44,896.00			-		80 %	10,75,916.80	-				-					-
	b. Installation of Centrifugal Pump				-				-		20 %	2,68,979.20	-					-
	c. SS/MS Structural Work - Supply	6,72,448.00			-		80 %	5,37,958.40	-				-					-
	d. SS/MS Structural Work - Fabrication				-				-		20 %	1,34,489.60	-					-
	e. Valves and NRV - Supply	13,44,896.00			-				-		80 %	10,75,916.80	-					-
	f. Valves and NRV - Installation				-				-				-		20 %	2,68,979.20		-
	g. Pipe & Fitting - Supply	6,72,448.00			-				-		80 %	5,37,958.40	-					-
	h. Pipe & Fittings - Erection				-				-				-		20 %	1,34,489.60		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	i. Monorail for lifting arrangement - Supply	6,72,448.00	80 %	5,37,958.40	-	-			-	-			-	-			-	-
	j. Monorail for lifting arrangement - Installation				-	-	20 %	1,34,489.60	-	-			-	-			-	-
	k. Dewatering Pump for dry well - Supply	6,72,448.00	80 %	5,37,958.40	-	-			-	-			-	-			-	-
	l. Dewatering Pump for dry well - Installation				-	-	20 %	1,34,489.60	-	-			-	-			-	-
iii.	Electrical Work(Servicing & Overhauling/ New Procurement )	13,44,896.00	-	-	-	-			-	-	50 %	6,72,448.00	-	-	50 %	6,72,448.00	-	-
iv.	Testing & Commissioning	13,44,896.00	-	-	-	-			-	-			-	-	10 0%	13,44,896.00	-	-
e.i.	Civil Works																	
	(i) CSPS - Jajmau																	
	a. Retrofication of Inlet Chamber	13,44,896.00	10 0%	13,44,896.00	10 0%	13,44,896.00			-	-			-	-			-	-



Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	b. Retrofication of Screen Chamber	13,44,896.00	100%	13,44,896.00	100%	13,44,896.00				-				-				-
	c. Retrofication of Wet Well	13,44,896.00				-	100%	13,44,896.00	100%	13,44,896.00				-				-
	d. Retrofication of Pump House	13,44,896.00				-	100%	13,44,896.00	100%	13,44,896.00				-				-
ii.	<b>Mechanical Work(Servicing &amp; Overhauling/ New Procurement )</b>																	
	<b>(i) CSPS - Jajmau</b>									-				-				-
	a. Supply of Centrifugal Pump	13,44,896.00				-	80%	10,75,916.80		-				-				-
	b. Installation of Centrifugal Pump					-				-	20%	2,68,979.20		-				-
	c. SS/MS Structural Work - Supply	6,72,448.00				-	80%	5,37,958.40		-				-				-
	d. SS/MS Structural Work - Fabrication					-				-	20%	1,34,489.60		-				-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	e. Valves and NRV - Supply	13,44,896.00				-				-	80 %	10,75,916.80		-				-
	f. Valves and NRV - Installation					-				-				-	20 %	2,68,979.20		-
	g. Pipe & Fitting - Supply	6,72,448.00				-				-	80 %	5,37,958.40		-				-
	h. Pipe & Fittings - Erection					-				-				-	20 %	1,34,489.60		-
	i. Monorail for lifting arrangement - Supply	6,72,448.00	80 %	5,37,958.40		-				-				-				-
	j. Monorail for lifting arrangement - Installation					-	20 %	1,34,489.60		-				-				-
	k. Dewatering Pump for dry well - Supply	6,72,448.00		-		-	80 %	5,37,958.40		-				-				-
	l. Dewatering Pump for dry well - Installation					-	20 %	1,34,489.60		-		-		-				-
	k. Mechanical & Manual Bar Screen - Supply	6,72,448.00	80 %	5,37,958.40		-		-		-		-		-		-		-
	l. Mechanical & Manual Bar Screen -	-		-		-	20 %	1,34,489.60		-		-		-		-		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th Oct'21		1st Milestone 10th May'21 to 15th Oct'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	Installation																	
iii.	Electrical Work(Servicing & Overhauling/ New Procurement )	6,72,448.00	-		-		-		-		51.5%	3,46,214.66	-		49%	3,26,617.60	-	
iv.	Testing & Commissioning	13,44,896.00	-		-		-		-		-		-		100%	13,44,896.00	-	
IV.	RTOLM WORK for STP ,IPS & CSPS Aea																	
1	STP Aea																	
i.	Supply of Local Field Instruments for STP facility	33,62,240.00	-		-				-		80%	26,89,792.00	10%	3,36,224.00		-		-
ii.	Installation of Local Field Instruments for STP facility		-		-				-		20%	6,72,448.00	-			-		-
iii.	Supply of Remote Field Instruments for STP facility	33,62,240.00	-		-				-		80%	26,89,792.00	-			-		-
iv.	Installation of Remote Field		-		-				-		20%	6,72,448.00	-			-		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th Oct'21		1st Milestone 10th May'21 to 15th Oct'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	Instruments for STP facility											0						
v.	Supply of False Floor at PLC Control Room for STP facility	24,01,600.00		-		-				-	80 %	19,21,280.00		-		-		-
vi.	Installation of False Floor at PLC Control Room for STP facility			-		-				-	20 %	4,80,320.00		-		-		-
vii.	Supply of AC at PLC Control Room for STP facility	9,60,640.00		-		-				-		-		-	80 %	7,68,512.00		-
viii.	Installation of AC at PLC Control Room for STP facility			-		-				-		-		-	20 %	1,92,128.00		-
ix.	Supply of PLC Panel for STP facility	33,62,240.00		-		-				-		-		-	80 %	26,89,792.00		-
x.	Installation of PLC Panel for STP facility			-		-				-		-		-	20 %	6,72,448.00		-
xi.	Supply of AC at RIO Panel Room for STP facility	9,60,640.00		-		-				-		-		-	80 %	7,68,512.00		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
xii.	Installation of AC at RIO Panel Room for STP facility			-		-				-		-		-	20 %	1,92,128.00		-
xiii.	Supply of RIO Panel for STP facility	24,01,600.00		-		-				-		-		-	80 %	19,21,280.00		-
xiv.	Installation of RIO Panel for STP facility			-		-				-		-		-	20 %	4,80,320.00		-
xv.	Supply of UPS & UPS ACDB for STP facility	24,01,600.00		-		-				-		-		-	80 %	19,21,280.00		-
xvi.	Installation of UPS & UPS ACDB for STP facility			-		-				-		-		-	20 %	4,80,320.00		-
xvii.	Supply of Instrument, Control & Bus Cable Work for STP facility	48,03,200.00		-		-				-		-		-	80 %	38,42,560.00	30%	14,40,960.00
xviii.	Installation of Instrument, Control & Bus Cable Work for STP facility			-		-				-		-		-	20 %	9,60,640.00	5%	2,40,160.00
xix.	Testing & Commissioning of PLC &	24,01,600.00		-		-				-		-		-	100 %	24,01,600.00		-

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	RIO for STP facility																	
2	<b>IPS &amp; CSPS Aea</b>																	
i.	Supply of Local Field Instruments for IPS & CSPS facility	33,62,240.00	-		-				-		80 %	26,89,792.00	-				-	
ii.	Installation of Local Field Instruments for IPS & CSPS facility		-		-				-		13 %	4,37,091.20	-		7%	2,35,356.80	-	
iii.	Supply of Remote Field Instruments for IPS & CSPS facility	33,62,240.00	-		-				-		-		-		80 %	26,89,792.00	-	
iv.	Installation of Remote Field Instruments for IPS & CSPS facility		-		-				-		-		-		20 %	6,72,448.00	-	
v.	Supply of RTU/RIO Panel for IPS & CSPS facility	28,81,920.00	-		-				-		-		-		80 %	23,05,536.00	-	
vi.	Installation of RTU/RIO Panel for IPS & CSPS facility		-		-				-		-		-		20 %	5,76,384.00	-	

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th October'21		1st Milestone 10th May'21 to 15th October'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
vii.	Supply of UPS for IPS & CSPS facility	24,01,600.00		-		-				-				-	80 %	19,21,280.00		-
viii.	Installation of UPS for IPS & CSPS facility			-		-				-				-	20 %	4,80,320.00		-
ix.	Supply of Instrument, Control & Bus Cable Work for IPS & CSPS facility	48,03,200.00		-		-		-		-		-		-	80 %	38,42,560.00		-
x.	Installation of Instrument, Control & Bus Cable Work for IPS & CSPS facility			-		-		-		-		-		-	20 %	9,60,640.00		-
xi.	Testing & Commissioning of RTU/RIO for IPS & CSPS facility	24,01,600.00		-		-		-		-		-		-	10 0%	24,01,600.00		-
xii.	Testing & Commissioning of Cloud based RTOLMS facility	24,01,600.00		-		-		-		-		-		-	10 0%	24,01,600.00		-
				-						-				-				-
V	TRIAL RUN & COMMISSIO																	

Sr. No.	Description of Items	BOQ Amount	1st Milestone 10th May'21 to 15th Octber'21		1st Milestone 10th May'21 to 15th Octber'21 Achieved		2nd Milestone 16th Oct'21 to 15th March'22		2nd Milestone 16th Oct'21 to 15th March'22 Achieved		3rd Milestone 16th March'22 to 15th June'22		3rd Milestone 16th March'22 to 15th June'22 Achieved		4th Milestone 16th June'22 to 9th Aug'22		4th Milestone 16th June'22 to 9th Aug'22 Achieved	
			%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount
	<b>NING</b>																	
1	Trial Run & Commissioning					-				-				-				-
		9606,40,000.00		2401,60,000.00		2016,20,564.16		2401,60,000.00		1810,14,478.10		2401,60,000.00		1303,54,044.80		2401,60,000.00		857,15,985.92



**130MLD STP JAJMAU Site Pictures during renovation period (Updated as on 30.09. 2022)**



**Renovation of Aeration tank 02 started from 12.08.2022**



**KRMPL has not done Construction LT HT Panel room in August 2022**



**KRMPL has not done Construction of New CCT TEPH in August 2022**



**Renovation work done at PST 02 and re-commissioned on 21.09.2022**

**Following points are to be addressed by the KRMPL:**

- i. **Compliance of Inspection Reports** has not submitted inspection done by NMCG/UPJN and STC team.

Inspection done details with their compliance status given below for 130 MLD STP and IPSs Jajmau Phase-I :-

S.N	Inspection done dated	Description of Inspection details	Compliances reports status
1.	02.09.2021	Inspection report issued on 06.09.2021	Not complied by KRMPL
2.	18.09.2021	Inspection report issued on 24.09.2021	Not complied by KRMPL
3.	30.09.2021	Inspection report issued on 01.10.2021	Not complied by KRMPL
4.	07.10.2021	Inspection report issued on 31.10.2021	Not complied by KRMPL
5.	10.10.2021		
6.	23.10.2021		
7.	28.10.2021		
8.	29.10.2021		
9.	23.11.2021	Inspection report issued on 30.11.2021	Compliance report submitted by KRMPL
10.	27.11.2021		
11.	10.12.2021	Inspection report issued on 27.12.2021 for 130MLD STP Jajmau	Compliance report submitted by KRMPL
12.	15.12.2021		
13.	16.12.2021		
14.	04.01.2022	Inspection report issued on 10.1.2022 for 130 MLD STP, IPSs and CSPS.	Compliance report submitted by KRMPL
15.	01.02.2022	Inspection report issued on 07.2.2022 and 25.02.2022 for 130 MLD STP, IPSs and CSPS Jajmau	Not complied by KRMPL
16.	03.02.2022		
17.	25.02.2022		
18.	02.03.2022	Inspection report issued on 09.03.2022	Not complied by KRMPL
19.	05.04.2022	Inspection report issued on 08.04.2022 for 130 MLD STP Jajmau	Not complied by KRMPL
20.	07.04.2022	Inspection report issued on 07.04.2022 for 130 MLD IPSs facilities.	Not complied by KRMPL
21.	12.04.2022	ED(T)D.P Mathuria Sir Site visit and Inspection report issued on 20.04.2022 for 130 MLD STP and CSPS facilities	KRMPL has submitted compliance report vide KRMPL letter no. UPJN/KRMPL/Kanpur/2022-23/O&M/009 dated 13.06.2022 received our office on 17.06.2022
22.	19.04.2022	Inspection report issued on 20.04.2022 for 130 MLD STP and CSPS Jajmau facilities	KRMPL has submitted compliance report vide KRMPL letter no. UPJN/KRMPL/Kanpur/2022-23/O&M/009 dated



			13.06.2022 received our office on 17.06.2022
23.	05.05.2022	Inspection report issued on 20.05.2022 for 130 MLD & 43 MLD IPSs and STP Jajmau facilities	Not complied by KRMPL
24.	18.05.2022	Inspection report issued on 21.05.2022 for 130 MLD STP Jajmau	KRMPL has submitted compliance report vide KRMPL letter no.2495 dated 27.05.2022
25.	20.05.2022	Inspection report issued on 25.05.2022 for Nawabganj IPS	Not complied by KRMPL
26.	01.06.2022	Inspection report issued on 01.06.2022	Not complied by KRMPL
27.	06.06.2022	DG,NMCG,ED(T) and Rajat Gupta Sir site visited on 06.06.2022 and instructed to KRMPL as per M.O.M	Not complied by KRMPL
28.	14.06.2022	Inspection report issued on 14.06.2022	Not complied by KRMPL
29.	06.06.2022, 07.06.2022 and 20.06.2022	Inspection report of 130 MLD, 43 MLD,IPSs and CSPS Jajmau on 29.06.2022	Not complied by KRMPL
30.	23.06.2022	Inspection report of 130 MLD STP Jajmau facilities Phase 1,Inspection report issued on 27.06.2022	Not complied by KRMPL
31.	11.07.2022, 6.07.2022, 21.07.2022, 23.07.2022 and 25.07.2022	Inspection report of 130 MLD STP and IPSs of Jajmau facilities Phase 1,Inspection report issued on 28.07.2022	Not complied by KRMPL
32.	08.08.2022	ED(P),NMCG and Rajat Gupta Sir site visited on 06.06.2022 and instructed to KRMPL as per M.O.M	Not complied by KRMPL
33.	02.08.2022 and 23.08.2022.	Inspection report of 130 MLD STP Jajmau facilities phase 1, inspection report issued 31.08.2022	Not complied by KRMPL
34.	06.09.2022 ,05.09.2022, 20.09.2022 and 23.09.202	Inspection report of 130 MLD STP Jajmau facilities phase 1, inspection report issued 30.09.2022	Not complied by KRMPL

**Unit wise description of 130 MLD JAJMAU Phase -1****i. Collection Chamber**

Collection chamber Retrofication work partially completed without testing, commissioning, permission of UP Jal Nigam /STC. Renovation of free board need to be done for all Collection chamber area. Handrailing fixing and flooring work of platform is still pending.

**ii. Gates / Valves**

Gates/ Valves are painted and Overhauling has been done but as per UP Jal Nigam /PE directed to Concessionaire all gates / valves need to be replaced.

**iii. Fine Screen Chamber (Mechanical / Manual)**

1. The existing mechanical fine screens (No 1. , No2. & No.3) were replaced with new fine screens during October 2021 and numerous installation issues are not addressed till date. Just after the installation, UPJN and PE personnel found that the teeth of the raking arm of Mechanical screen no.1 found to be damaged. PE mentioned in their inspection report issued vide PE letter no. 1230 dated 30.10.2021. KRMPL did not take any rectification work.
2. ED (T) NMCG in April 2022 during the site visit instructed KRMPL to repair mechanical screen no.1 which was lying outside the channel within 7 days as a priority (No.2 & 3 need to be addressed also at the earliest) . However, KRMPL has installed a manual bar screen instead on 19.04.2022.
3. KRMPL has reinstalled mechanical screens 01, 02 and 03 in 04.06.2022 and set in operation without any prior inspection request to STC and UPJN representative. During the joint site visit of J & PE, still found gaps and submitted findings to KRMPL vide PE letter no. 1701 dated 13.07.2022. KRMPL has not rectified till date.
4. Screened material need to be dispose regularly as per CPCB, UPPCB guidelines.
5. MS shed pipes are corroded & colour of shed also worn out. UP Jal Nigam /PE directed to Concessionaire need to paint the MS shed pipes.
6. Mechanical Screen not working with atomization system and without sensor .Need to be fixed the auto system immediately.
7. New Cables for mechanical screen should be laid properly in cable trays.

**iv. Grit Chamber**

- Screw conveyor no 1 and organic pumps no. 3 needs to be repired.
- Grit mechanism system No. 3 has installed and in running condition, PE commented on the installation of Grit mechanism system No. 3 vide STC letter no 1378 dated 10.1.2022. KRMPL has not complied the PE comments till date.
- Organic pump no.01, 02 and 03 have been installed as per approved drawing.
- Garbage, grit quantity and sludge are not being disposed at the location (Sanigawan) as decided by UPJN.
- Regarding E&M equipments installation works, KRMPL is required to schedule inspection of E&M works with PE and further obtain approval of UPJN before

testing, commissioning and charging the raw sewage in respective E&M equipments. Only upon inspection and witnessing dry runs by PE and satisfactory completion of proposed works.

- Handrails fixing and flooring work of platform is still pending.

#### **v. Inlet Flow meter**

1. Channel renovation work done but hydro test of this channel is pending.
2. Inlet flow meter has been installed by KRMPL without getting checked & taking any permission for installation /Erection work of Inlet flow meter from PE/UPJN.
3. Power backup of flow meter installed at site on 19.02.22.
4. Calibration of Plant Inlet flow meter needs to be done by KRMPL because during “No-flow condition in Parshall flume channel flow meter shows 64 MLD” that is not acceptable by UPJN and STC on this KRMPL has arranged service engineer of ABB had visited the site on 10.09.2022 for calibration of Ultrasonic flow meter, however the same had not been formally informed to PE in writing. Kindly note our observations of M/s ABB Service Engineer’s report and recommendations below:  
A. Service engineer of M/s. ABB has recommended for installation of Plate at zero level in the Parshall Flume, so that the transmitter can measure the zero height. Therefore, Concessionaire may be directed to make the recommended arrangement at the earliest. Further, considering the site environment, the plate is recommended to be of SS 316 material.  
B. Also, as communicated earlier vide various inspection reports and letters, the Concessionaire shall be directed to provide Uninterrupted Power Supply for the flow meter.
5. CCTV cameras need to be installed on urgent basis.

#### **vi. Primary Sedimentation Tank**

1. Commissioning work of PST 02 done at 29.01.2022 as directed by UPJN. Sludge removal from PST 02 did not conduct properly and their scraper and scum removal mechanism found non-functional due to excess sludge load from 02.03.2022. UPJN and STC instructed KRMPL to resolve this matter as per inspection report vide STC letter no.1489 dated 09.03.2022 but KRMPL has not done proper O&M of PST 02 recommissioned on 21.09.2022 and renovation of PST 3 has started from 23.09.2022
2. KRMPL has started sludge removal work from PST-01 drain from 26.02.2022 and commissioned on 23.08.2022.
3. KRMPL has not started renovation of primary sedimentation tank 03 as per approved renovation plan.
4. Concessionaire has submitted and PE approved their submitted datasheet for Primary Sedimentation mechanism vide STC Letter No 505 dated 19.09.2020. KRMPL has not supplied the mechanical equipments for PST 01 and 03 till date.
5. KRMPL has not started renovation of Primary sedimentation tank 03 which was started from 16<sup>th</sup> March 2022 and renovation work should be complete till end of 3<sup>rd</sup> milestone duration as 15<sup>th</sup> June 2022.

#### **vii. Sludge thickener Tank**

1. Mechanical bridge has installed of sludge thickener No.02 on 26.02.22 and balance equipments commissioning work is in progress.
2. Sludge removal work of Sludge Thickener from 03.02.22 to 22.02.22 and Dismantled the scraper system done on 23.02.22 and 24.02.22 respectively.
3. KRMPL has issued RFI for inspection of Sludge thickener 02 and blending tank on 09.04.2022 and informed UPJN/PE to inspect the units on 12.04.2022. PE and UPJN representative visited the site on 13.04.2022 and found KRMPL did not complete civil and E&M works completely. PE has issued a letter to complete the work all respect vide PE letter no. 1558 dated 14.04.2022. KRMPL issued RFI on 17.05.2022 after completed balance work of Sludge thickner 02, On this UPJN and STC conduct a joint site visit inspection on 19.05.2022 and provided conditional clearance for commissioning of Sludge thickener 02 and blending tank vide letter no. 1619 dated 19.05.2022 but KRMPL has commissioned Sludge thickener 02 and blending tank on 31.05.2022 but KRMPL has not done proper O&M of sludge thickener 02 it gone to under breakdown since 08.06.2022.
4. ED (T) instructed KRMPL to complete renovation work of sludge thickener 01 within 15.05.2022 but KRMPL has not completed all renovation work till 15.05.2022, KRMPL has completed renovation work and issued RFI on 26.05.2022 for inspection by UPJN and STC representatives. UPJN and STC representatives conducted a joint visit on 26.05.2022 and provided conditional clearance for commissioned the sludge thickener 01 and TSPH vide STC letter no. 1632 dated 28.05.2022 but KRMPL has not done proper O&M of sludge thickener 01 it gone to under breakdown since 13.06.2022.
5. Sludge line for Inlet and Outlet flow need to be clean and repaired for sludge thickener 01 and 02.
6. Epoxy paint need to be done as per approved specification of sludge thickener 01 and 02.
7. Hydro test need to be done under this renovation period.

#### **viii. Blending tank agitator**

1. Concessionaire has submitted and PE approved their submitted revised datasheet vide STC Letter No 1265 dated 16.11.2021, but KRMPL has not supplied the equipments.
2. Concessionaire removed sludge from the tank on 03.02.2022 to 22.02.22 completely.
3. KRMPL has issued RFI for inspection of Sludge thickener 02 and blending tank on 09.04.2022 and informed UPJN/PE to inspect the units on 12.04.2022. PE and UPJN representative visited the site on 13.04.2022 and found KRMPL did not complete civil and E&M works completely. PE has issued a letter to complete the work all respect vide PE letter no. 1558 dated 14.04.2022. KRMPL issued RFI on 17.05.2022 after completed balance work of Sludge thickner 02, On this UPJN and STC conduct a joint site visit inspection on 19.05.2022 and provided conditional clearance for commissioning of Sludge thickener 02 and blending tank vide letter no. 1619 dated 19.05.2022 but KRMPL has commissioned Sludge thickener 02 and blending tank on 31.05.2022.

#### **ix. Aeration Tank**

1. KRMPL has started civil renovation work of Aeration tank 02 from 12.08.2022.
2. KRMPL done renovation work only Outer face of RCC wall and RCC channel.
3. Incoming line of sewage need to be clean and repaired if required.
4. Outlet line of sludge to blending tank need to be cleaned and repaired.

5. ED (T) instructed KRMPL to installed next new 6 Nos. of aerators within 15.05.2022 but KRMPL has not supplied complete material of aerators so that installation of balance aerators have not done till 30.06.2022.
6. Concessionaire promised to replace all 18 nos. of aerators. 06 nos. of new aerators has been installed at aeration chamber and PE &UPJN has been submitted observation vide PE letter no.1287 dated 26.11.2021 but KRMPL has not submitted any compliance report as same. Remaining 12 nos. of aerators will be ordered by 18th Oct. 2021, but till date 12 Nos. Aerators not reached at site. PO order has submitted by KRMPL vide their letter No 2054 dated 30.12.2021.

**x. Return sludge pump House**

1. Plastering work, Painting work of outer surface of Pump house done by Concessionaire.
2. Sump cleaning work done by KRMPL partially.
3. Concessionaire fixed 2 nos. of new RSPH pumps, which will reach site on 15th Oct. 2021 and 2 nos. of overhauling pump. Concessionaire will keep repairing the old pumps in a proper manner so that the functioning will not be disturbed till remaining 2 nos. of new pump. 2 nos. new pumps has been installed BY KRMPL at site but KRMPL without getting checked & taking any permission for installation /Erection work of RSPH pumps from PE/UPJN.
4. PO order has submitted by KRMPL vide their letter No 2054 dated 30.12.2021.
5. Installation of pump no. 3 is done but KRMPL has not raised RFI for jointly inspection the installation of work of the Pump by UPJN and STC.

**xi. Treated effluent pump house:**

1. Out of 11 Nos. of TEPH pumps, pump nos. 02, 04,07, and 11 are found non-operational.
2. Motor of pump no. 2 found burnt from 31.03.2022; KRMPL has not repaired till 30.06.2022.
3. Pump no.7 & 6 non-functional since long time.
4. New Pump no. 11 installed but their commissioning is still pending.
5. New TEPH construction work has not started by KRMPL.
6. PE has been recommended the TEPH piping GAD vide Letter No. 1414 dated 31.1.2022.KRMPL has not supplied the TEPH piping arrangements.

**xii. Centrifuge System**

1. UP Jal Nigam has directed to Concessionaire to replace 4 Nos. Centrifuges from approved vendors as per CA and approved BEP. Any alternate technology, including Belt Filter Press, may be considered by Concessionaire at no additional cost and the same will be designed as per CPHEEO guidelines, and procured from only approved vendors.
2. PE has been recommended vendor for Belt Filter Press vide Letter No. 1362 dated 30.12.2021.KRMPL has submitted revised Technical Data sheet for Approval.
3. PE has comments on compliance report of Technical Data Sheet of BFP vide PE letter no. 1439 dated 16.02.2022.KRMPL has complied the compliance report of PE for recommendation of Technical data sheet vide KRMPL letter no. 2393 dated 19.04.2022.PE reviewed and issued a letter regarding observation vide PE letter no.1603 A dated 04.05.2022.KRMPL has not submitted any compliances till date.
4. KRMPL has submitted GA, data sheet of Air compressor for Belt filter press at 130 MLD STP Jajmau Phase-1 vide KRMPL letter no. 2409 dated 26.04.2022,PE reviewed



the submitted documents and submitted their observations vide PE letter no. 1604 dated 04.05.2022. KRMPL has not submitted compliance till 31.05.2022.

5. PE has been recommended the submersible mixer vide Letter No. 1413 dated 31.1.2022. KRMPL has not supplied the as state above.
6. KRMPL has submitted revised GAD and RCC of new belt filter press building vide KRMPL Letter no. 2598 dated 24.08.2022- **Submission of Revised Design Report and RCC drawing of Belt Filter Press Building for 130 MLD Jajmau facilities**, PE reviewed and submitted their observations vide PE letter no. 1780 dated 27.08.2022. KRMPL has not submitted compliance report with incorporating observation given by PE.

#### **xiii. Supernatant pumps**

1. PE has commented on Compliance reports of Technical data sheet for supernatant pumps at 130 MLD STP vide STC letter no. 1452 dated 25.02.22, KRMPL has submitted compliance report vide KRMPL letter no. 2234 dated 24.02.2022, PE review the documents and recommended for approval vide PE letter no. 1483 dated 08.03.2022.

#### **xiv. Sludge Digester**

1. Concessionaire has done partially cleaning work of primary digester tank.
2. KRMPL has been started the cleaning of the Secondary digester tank.
3. Concessionaire need to arrange sufficient Nos. of labour for renovate the work.
4. Concessionaire has submitted the technical data sheet of sludge digester as per their letter No.1979 dated 02.12.2021 and PE has commented vide Letter No 1305 dated 03.12.2021 and KRMPL has been submitted the compliance report vide Letter No 2038 dated 22.12.2021 and PE commented on compliance report vide STC letter no 1367 dated 04.01.2022.

#### **xv. Final Sedimentation Tank**

1. KRMPL has commissioned FST 02 dated 05.02.2022 after completion of civil and Mechanical works.
2. The renovation of FST 01 is progressing at a very slow pace targeted to complete the work by 10.05.2022. The work started with the removal of sludge on 02.04.2022 followed by the scraper mechanism replacement. However, the sludge scraper clearance is not proper varying the gap up to 350mm instead of 10-20mm as per vendor recommendation. This issue was brought to the notice of DG, NMCG during his site visit on 06.06.2022. DG has instructed KRMPL to attend to this issue within 3 days. However, KRMPL has not attended to this issue till date.
3. Concessionaire has submitted and PE approved their submitted datasheet for Final Sedimentation mechanism vide STC Letter No 505 dated 19.09.2020. KRMPL has not supplied the mechanical equipments for FST 01 and 03 till date.
4. Concessionaire promised that the equipment of 130 MLD FST no. 2 will be inspected tomorrow i.e, on 11<sup>th</sup> Oct. 2021 & will reach site by 20th Oct. 2021. The Equipment of 130 MLD FST 02 will reach site till 20th Oct. 2021. Concessionaire also promised to complete the equipment installation work of FST 02 by December end. But only FST No. 2 material supplied at site and commissioned on 05.02.22. FST No.1 & 3 yet not supplied & their installation work of Mechanical equipment has not started till date.

#### **xvi. New CCT and TEPH**

1. The exaction works of the TEPH & CCT is going on at a very slow pace, the major pending items need to be addressed at the earliest,

- 
- a. Construction of bypass channel for the treated effluent of 36 MLD CETP to the existing 130 MLD TEPH Sump.
  - b. The electrical cables are still left behind (Electrical Pole Relocation is done) and need to be removed at the earliest.
  - c. The demolition of existing RCC bypass channel (connected to Agriculture Channel) is pending.
  - d. The provided land area had existing utilities including,
    - i. Electrical cable and pole (Shifting work was completed on 15.04.2022.)
    - ii. Effluent MS pipeline from existing TEPH of 130 MLD STP to Irrigation channel (Shifting work completed)
    - iii. Internal power cables of 43 MLD STP (Shifting work is pending).
    - iv. Effluent brick channel from 36 MLD CETP and 43 MLD STP Jajmau facilities Phase II (Shifting work is pending)
    - v. Underground RCC channel from Bypass chamber to Air-force nala (Shifting work is pending).
    - vi. Internal PVC pipeline 160mm for dewatering purpose from existing TEPH (Shifting work is pending).
    - vii. Underground HDPE pipeline that is choked from 36 MLD CETP to existing 130 MLD STP Jajmau Phase 1 (Removal work is pending)
- ☐ KRMPL has been already submitted a price variation for utilities shifting work and it was recommended by STC (STC Letter No. 1241 dated 01.01.2021) and approved by UPJN (UPJN letter no. 101/W-4/24 dated 27.11.2021 and NMCG New Delhi. Utility shifting estimation amount has been already released by NMCG to UPJN with vide NMCG letter No F.No. Pr 12012/7/2018/PPP/NMCG dated 25.11.2021.
- It is to be noted that it has been over 11 months since the approval of the said work, and KRMPL has not taken this on priority and several activities are still pending, as noted above (#3). This has been conveyed to KRMPL several times and was instructed by UPJN and STC during onsite inspections and meeting but KRMPL has not expedited the work as needed to meet the Project milestone schedule. KRMPL has not submitted work plan for shifting the utilities on priority for starting the execution work of new CCT and TEPH unit at Jajmau facilities. On this regard, KRMPL's compliance is pending for STC Letter No.1655 dated 14.06.2022.
- Excavation work of New CCT and TEPH units:
- i. This work was started by KRMPL on 20.3.2022 and 20.3.2022 (2 days), without any safety measure and without any prior approval from STC and UPJN.
  - ii. After that, KRMPL had resumed balance excavation work from 15.6.2022 to 24.06.2022 before completing balance utilities shifting work and without taking safety measures and excavated upto a depth of 3 meters.
  - iii. Also, since 24.06.2022 until the incident date of 15.09.2022, when the existing effluent channel of 43 MLD STP & 36 MLD CETP collapsed, the excavated pit area was left without any barricading and shoring/ sheet piling etc.
- KRMPL had failed to take precautionary measures and follow standard procedures during the execution of excavation work for the New CCT and TEPH units. Your

attention is drawn to the fact that any excavation work for depth 1.5 to 3.0 mtr should be IS 3764:1992 which clearly requires that,

i. Loose soil area should be protected from shoring shuttering work in form of sheathing, wale, strut and sheet piling.

a. Minimum berm should be provided as per IS code 3764

b. Excavated material shall be kept away from the edge of the trench to provide a clear berm of a width of not less than one third the final depth of excavation or as required by design.

ii. In special cases, where the disposal area is limited or where the application of this requirement is impracticable, the person in charge may adopt a berm of reduced width in any case not less than 1 m provided the material being excavated is sufficiently stable and the shoring is designed to carry the additional load. In all such cases substantial toe-boards shall be provided to prevent 'roll backs' into the trench.

a. Edge of excavation should be clearly identified

b. Care shall be taken to keep tools or material, such as wheelbarrows, shovels, picks, tile, cement and lumber, far enough from the edge of the trench to prevent their being inadvertently knocked into the trench.

c. No material or load shall be placed or stacked or removed near the edge of any excavation, shaft, pit or opening in the ground as it may endanger the persons employed below. Additionally, it is to be noted and strongly recommended as standard practices that,

i. Soil excavation pit sides slope shall be at least 45° to avoid sudden slides of slopes slips.

ii. Slide berms are required to reduce chances of slip at the excavated areas.

iii. Loose soil slopes and excavated area should be protected with shoring.

iv. Excavation work should be at least 3 meters from existing construction site or utilities.

v. Arrangement of proposed construction shall be in such way that excavated area will be completed before rainy season.

KRMPL had started Brick channel Utilities shifting work 23.07.2022. During site visit by UPJN

PM-1 and STC officials on 25.07.2022, it was found that KRMPL has not completed excavation work of brick channel and it was found that the backfilled area was with loose soil. So, KRMPL is required to provide >95% soil compaction as required.

Compaction was recommended to be carried by mechanical compactors / sheep foot roller as per CA. PE has also issued a letter regarding soil compaction test for diversion Brick channel for 36 MLD CETP at Jajmau facilities

Phase 1 vide STC letter no. 1725 dated 25.07.2022. KRMPL has neither arranged their lab equipment nor has been able to conduct compaction test which was very mandatory. Compliance for the same is pending till date by KRMPL. Collapse of existing Effluent Brick Channel of 43 MLD STP & 36 MLD CETP Incident: i. During 15.09.2022 at 3:00am, due to sliding of loose soil the existing Brick channel

collapsed due to which the 130 MLD STP, 43 MLD STP and 36 MLD CETP was shutdown. The demolition of existing RCC bypass channel (connected to Agriculture Channel) is pending.

**xvii. Power backup(DG set and DFG)**

- As present condition is very crucial because at time of Kesco power supply goes to under maintenance that time only 5 nos. TEPH pump operate and balance STP plant system goes to non-functional. KRMPL need to arrange sufficient power backup arrangement at site for proper operation of STP Plant.
- KRMPL has submitted QAP and technical data sheet for 2nos. of DG sets of 625 KVA vide KRMPL letter no. 2403 dated 22.04.2022. PE reviewed and provide conditional recommendation vide PE letter no. 1593 dated 30.04.2022.
- It has been decided and agreed by KRMPL that two gas engines of 800Kw will provided and as remaining requirement. KRMPL to provide the Technical Data Sheet of DG set.
- Plaster work is doing by KRMPL in DFG room.

**xviii. RTOLMS**

1. ED (T) instructed KRMPL to submit QAP and Technical data sheet on 18.04.2022 with sensors (pH, temperature, COD, TSS, Flow, etc) and will install them at the earliest.
2. KRMPL has submitted C&I documents vide KRMPL letter no.2424 dated 29.03.2022, PE has reviewed and commented vide PE letter no. 1581 dated 22.04.2022. KRMPL has not submitted any compliances for 130 MLD STP Jajmau.

**xix. Sludge disposal system**

1. PE informed ED (T) that the performance of plant is very poor because KRMPL did not arrange proper sludge handling system.
2. UPJN Chemist, Mr. Ajay Kanojiya noted that sludge is recirculation in the civil units. KRMPL is not pumping out the sludge from the biological system to either sludge handling unit or sludge drying bed, while there are sufficient sludge drying beds capacity currently available for disposal. KRMPL has not done required amount of sludge withdrawal and disposal.
3. ED (T) found 10 Nos. of sludge drying bed empty and available for sludge disposal and instructed KRMPL that KRMPL have sole responsibility of performance of 130 MLD plant and maintain the sludge records and all sludge disposal details to be submit within the next 15 days. KRMPL has not submitted sludge disposal details yet.

**xx. New laboratory**

1. ED (T) directed KRMPL during site visit on 12.04.2022 at Jajmau facilities to establish a common laboratory for 130 and 43 MLD STP Jajmau at earliest for proper testing work. KRMPL has not taken any necessary action.

**xxi. Scrubbing & Flaring System**

1. Concessionaire has been submitted the QAP and datasheet of scrubbing and

flaring system as per KRMPL letter No. 1972 dated 01.12.2021 and PE recommended for approval for Gas flaring unit as per STC letter No 1326 dated 13.12.2021 and for Gas scrubber system as per STC letter No 1329 dated 14.12.2021. KRMPL has not been supplied the equipments.

2. Plastering work, Painting work done by KRMPL under renovation work.

**xxii. Combined sewage pumping station(CSPS Jajmau)**

1. Concessionaire has been submitted the QAP and datasheet of CSPS and PE has been recommended vide STC letter No 1286 dated 12.11.2021.

**xxiii. Substation**

- DP structure has been erected by KRMPL without getting approval of Drawing and layout plan & taking any permission for installation /Erection work of DP structure work from PE/UPJN.
- KRMPL has submitted LT Panel documents for IPS & CSPS for 130 MLD STP facility vide KRMPL letter no 2066 dated 06.01.2022. PE reviewed and commented vide STC letter no 1401 dated 20.01.22. After KRMPL has submitted compliance vide KRMPL letter no. 31.01.2022, PE reviewed the compliance and found KRMPL has not complied PE comments, PE issue a letter to KRMPL vide PE letter no 1434 dated 10.02.2022. KRMPL has submitted revised LT panel documents and compliance for IPS and CSPS under 130 MLD Jajmau facilities vide KRMPL letter no 2189 dated 12.02.22 and it is under review of PE.
- PE has commented on submission of revised LT panel documents and compliance for IPS & CSPS under 130 MLD Jajmau facilities phase-1 vide STC letter no. 1434 dated 10.02.22, KRMPL has not submitted compliance of PE comments till date.
- KRMPL has started exaction work of LT HT Panel room from 20.06.2022 but KRMPL has not followed quality norms at site during construction work of footings and column of R.C.C work. PE also issued a letter regarding during RCC work of LT HT Panel room 1717 dated 22.07.2022 KRMPL has submitted compliance report but No further execution work started by KRMPL.

**xxiv. Joint sampling and testing by NABL Lab**

- Testing reports from Spectra research Lab ventures (P) Ltd. of the Joint sample taken on 02.10.2021, 27.11.2021 and 31.12.2021 test reports yet not submitted by concessionaire.
- Shri Ram Institute for Industrial Research New Delhi of the joint sample taken on 3-4th Dec 2021, 16-17th Dec 2021, 22-23th Dec 2021 and 31th Dec 2021 with UPJN, STC and KRMPL representatives.
- Test results reports are submitted only Shri Ram Institute for Industrial Research New Delhi of the joint sample on 3-4th Dec 2021, 16-17th Dec 2021, and 22-23th Dec 2021 and 31<sup>st</sup> dec 2021 by KRMPL.
- UPJN instructed KRMPL to discontinue weekly sampling & testing from M/S Shriram labs as the test results of Shriram labs is very much different from others and directed
- KRMPL to conduct weekly sampling & testing from IIT Kanpur from february 2022 onwards instead of M/S Shriram labs but KRMPL is still continuing to get sampling and testing done by Shriram labs. The weekly results submitted for the month of feb

---

2022 have not been considered as per instruction of UPJN.

- KRMPL has not started the weekly sampling & testing to be done by IIT Kanpur as per instructions of UPJN for the month of February 2022, March 2022, April 2022, May 2022 and June 2022, PE has issued several letter to do testing as per instruction given by NMCG, UPJN and STC vide STC letter no. 1676 dated 27.06.2022.
- IIT Kanpur has taken only composite sample on 28.05.2022 and already submitted in our office.
- IIT Kanpur has taken only composite sample on 29.06.2022 and already submitted in our office.
- IIT Kanpur has taken only composite sample on 20.07.2022 and already submitted in our office.
- IIT Kanpur has taken only one composite sample on 23-24.08.2022, test result has not submitted by KRMPL.
- IIT Kanpur has taken only one composite sample on 23.09.2022 and test result has not submitted by KRMPL.

**Annexure: Monthly Activity Report of 130 MLD STP Jajmau and facilities Phase 1 for September 2022 submitted by KRMPL**

Attached separately

**Annexure-3.2**

**Annexure: Site Inspection Reports for the Month of September 2022 (130 MLD IPSs and STP Jajmau Phase 1)**

Attached separately

**Annexure-3.3**

## **7.2 43 MLD JAJMAU PHASE II**

Schedule handing over date for 43 MLD Jajmau phase-II facilities was 1.10.2019 as per CA. As per CA COD for 130 MLD Jajmau Phase-I and 43 MLD Jajmau phase-II was same as per CA, therefore the Concessionaire was reluctant to take over 43 MLD Jajmau phase-II .NMCG has

separated COD of Jajmau by NMCG letter no.F.No.pr-12012/7/2018/PPP/NMCG dated 02.08.2021. Ultimately 43 MLD Jajmau phase-II facilities were takeover by KRMPL conditionally on 25.08.2021. COD for 43 MLD Jajmau phase-II has been declared as per UPJN letter No 144/M-23/4 dated 14.12.2021. The KRMPL has submitted the list of staff deployed for proper O&M of 43 MLD Jajmau phase-II facilities as per KRMPL letter No 1920 dated 16.11.2021 and PE STC commented for manpower qualification & experience for plants under O&M as per STC letter No 1272 dated 18.11.2021.

It has been observed that O&M of 43 MLD Jajmau phase-II is not up to the mark from handover date.

- **Parmiya Nala IPS 3.5 MLD** Handover Date-25.08.2021
- **Shishamau IPS(Khalasi Lane Chouraha) 45 MLD** Handover Date- 25.08.2021

### 1. Parmiya Nala IPS

1. This IPS is in overflow/Bypass condition since Handover.
2. KRMPL did not take any necessary action to preventing overflow condition.
3. Calibration of flow meter are not arranging by KRMPL.
4. Raw sewage pumps no. 2 found non-functional. KRMPL needs to repair on urgent basis.
5. Auto starter of DG has not installed by KRMPL.
6. Material Inward and outward registers has not maintained properly by KRMPL.
7. Log book of pumps and DG set are not being maintained by KRMPL.
8. KRMPL has not arranged adequate number of staff (Operators, Sweepers and relievers) for proper O&M of IPS and attendance register manipulated staff details.
9. Refilling of fire exhaustor has not done by KRMPL.
10. Sand buckets were not available at site.

### 2. Shishamau IPS (Khalasi Lane Chauraha)

1. ED (T) instructed to KRMPL regarding 2 Nos. additional pumps as spares are required to supply at site to handle any breakdown and quickly swap them.
2. During NMCG meeting held on 05.09.2022 Regarding overflow at Sisamau Nallah, PE and UPJN noted the following:
  - a. KRMPL has been advised for Desilting at Sisamau nallah at the I&D and increase the weir wall height to increase holding capacity and prevent overflow into Ganga. This has not been done by KRMPL yet.
  - b. Also, one of the Gate Valve is to be rectified at the I&D facility.
  - c. Sisamau Nallah Flowmeter has not been calibrated despite several letters and monthly inspection reports raising concern about the same. So, KRMPL was urged to calibrate the flowmeter and submit calibration report to PE and UPJN.



- 
- d. Sisamau Nallah IPS and other IPS facilities are being operated by manpower supplied by ACHME, who do not have appropriate experience or qualifications and are unauthorised vendor. They are also not properly monitored by KRMPL personnel. This is also another reason for overflows occurring at Sisamau Nallah location.
  - e. Several long pending issues have been raised in PE's monthly inspection reports, which have not been addressed / rectified by KRMPL.
3. During NMCG meetings on 02.08.2022 regarding Sisamau IPS some decision taken followings:-
- I. Sisamau Nallah Flowmeter has not been calibrated despite several letters and monthly inspection reports raising concern about the same. So, KRMPL was urged to calibrate the flowmeter and submit calibration report to PE and UPJN.
  - II. Sisamau Nallah IPS and other IPS facilities are being operated by manpower supplied by ACHME, who do not have appropriate experience or qualifications and are unauthorized vendor. They are also not properly monitored by KRMPL personnel. This is also another reason for overflows occurring at Sisamau Nallah location.
4. Several long pending issues have been raised in PE's monthly inspection reports, which have not been addressed / rectified by KRMPL.
  5. This IPS is not in overflow/Bypass condition.
  6. Mechanical screens No.01 & 02 found under maintenance since 23.07.2022 and April 2022 respectively. KRMPL needs to repair on urgent basis.
  7. KRMPL did not operate IPS pumps properly during peak hour.
  8. Auto starter of DG has not installed by KRMPL.
  9. Calibration of flow meter are not arranging by KRMPL.
  10. Material Inward and outward registers has not maintained properly by KRMPL.
  11. Log book of pumps and DG set are not being maintained by KRMPL.
  12. KRMPL has not arranged adequate number of staff (Operators, Sweepers and relievers) for proper O&M of IPS and attendance register manipulated staff details.
- 
- O&M of 43mldstp plant Phase II and their facilities found unsatisfactory during site visit of NMCG, SMCG, CPCB, UPPCB, District level Officials UPJN and STC officials and intimate to KRMPL taken necessary action to avoid overflow/By-Pass



condition..

- NMCG has instructed to KRMPL that “MAGH MELA” is ongoing to start from Jan 2022, No untreated sewage should be flow to river Ganga.
  - During site visit of ED (T) on 12.04.2022 at Jajmau facilities it was clarified that handover note of 43 MLD STP will consider “Null & void”. Hence KRMPL will install all the E&M at site according to CA.
  - During Site visit of DG, NMCG on 06.06.2022 at Jajmau facilities it was found that the O&M of 43 MLD STP was not found to be in order with visibly septic conditions in aeration tank, recurrent operational issues with thickener, sludge pumps etc leading to sludge buildup. KRMPL committed to improve the O&M and compliance to the KPIs by 30.06.2022. DG, NMCG directed to ensure compliance else necessary stringent actions as deemed suitable under concession agreement and in accordance with order legal provisions shall be considered but KRMPL has not resolved the sludge recirculation till 30.06.2022.
  - During site visit of NMCG ED(P) on 08.08.2022 at 130 & 43 MLD STP Jajmau facilities ,ED (P) instructed KRMPL to take sampling of inlet and outlet from the units separately and do whatever is required for the improvement of KPIs.
  - During site visit of NMCG ED(P) on 08.08.2022 at 130 & 43 MLD STP Jajmau facilities ,PE and UPJN Chemist Shri Ajay Kanojiya, informed ED (P), it was found that Centrifuge Panel has not been replaced by KRMPL. ED (P) directed KRMPL to replace them on priority basis.
1. During NMCG meeting held on 05.09.2022 it was decided that 43 MLD STP Jajmau Phase-ii:
    - i. Regarding DG set PM1 informed that variation may be considered for KRMPL on the condition that OCEMS is to be provided by KRMPL.
    - ii. Regarding power backup, KRMPL informed that inspection will be done by Sep. end. Gas engine has been received at site.
  2. PE noted that KRMPL have not submitted compliance to several Inspection Reports of various facilities under HAM Kanpur Project. ED-Projects, NMCG expressed displeasure to KRMPL for not promptly responding to PE’s inspection reports and directed KRMPL to submit all pending compliance reports within 3 days from this meeting date.
  3. PE Noted that solid waste materials generated on site at Bingawan and Jajmau STP facilities, including screenings, grit and bio-solids, are not being sent for disposal at the designated landfill site at Sanigawan, and are beings spread across within the STP premises. This is in violation of CA conditions. Mr. Prakash Shukla, KRMPL promised to ED-Projects, NMCG that the disposal will be done from 20<sup>th</sup> September 2022 onwards.
  4. Since the Concessionaire is unable to secure funding to expedite the balance works, and as this is the main reason for the delay in the HAM Project, ED-Projects, NMCG proposed

for advancing payment to facilitate completion of the Project without further delays. PM1 noted that if such provision is made by NMCG then the terms and conditions shall be such that the funds are utilized by the Concessionaire for HAM Kanpur Project work only.

**Following points are to be addressed by the KRMPL:-**

**i. Compliance of Inspection Reports.**

PE/UPJN/NMCG inspected 43 MLD STP Jajmau Phase-II on the following dates:-

Compliance of the above inspection reports have not been submitted by KRMPL yet.

S.N	Inspection done dated	Description of Inspection details	Compliances reports status
1.	21.09.2021	Inspection report issued on 30.09.2021	Not complied by KRMPL
2.	30.09.2021	Inspection report issued on 01.10.2021	Not complied by KRMPL
3.	08.10.2021,	Inspection report issued on 30.10.2021	Not complied by KRMPL
4.	25.10.2021	Inspection report issued on 30.10.2021	Not complied by KRMPL
5.	28.10.2021	Inspection report issued on 30.10.2021	Not complied by KRMPL
6.	27.11.2021	Inspection report issued on 30.11.2021(enclosed)	Not complied by KRMPL
7.	ED (Technical) Mr. D.P Mathuria inspected on 08.10.2021 and ED(Project) Mr. Ashok Kumar Singh, IAS inspected on 10.10.2021.MOM of Both inspection has been issued by STC Letter No.1215 dated 27.10.2021		
8.	Ms. Nidhi Dwivedi, Project Officer (Technical), NMCG, Mr. Bhaskar Ray, TL and Mr. Dinesh Chamoli, O&M Expert, PMC inspected site on 28.10.2021.		
9.	15.12.2021	Inspection report issued on 27.12.2021 for 43 MLD STP IPS facilities Jajmau	Not complied by KRMPL
10.	21.12.2021		
11.	10.12.2021	Inspection report issued on 27.12.2021 for 43 MLD STP Jajmau Phase II	Not complied by KRMPL
12.	16.12.2021		
13.	20.12.2021		

14.	21.12.2021		
15.	18.01.2022	Inspection report issued on 31.01.2022 for 43 MLD STP Jajmau Phase II.	Not complied by KRMPL
16.	15.02.2022	Inspection report issued on 25.02.2022 and 28.02.2022	Not complied by KRMPL
17.	16.02.2022		
18.	25.02.2022		
19.	15.03.2022	Inspection report issued on 26.03.2022 and 02.04.2022	Not complied by KRMPL
20.	30.03.2022		
21.	07.04.2022	Inspection report issued on 07.04.2022 for 43 MLD Phase-II IPSs facilities	KRMPL has submitted compliance report vide KRMPL letter no. UPJN/KRMPL/Kanpur/2022-23/O&M/009 dated 13.06.2022 received our office on 17.06.2022
22.	12.04.2022	ED(T) Shri D.P Mathuria and Shri Rajat Kumar Gupta(SWMS) visited at Jajmau site on 12.04.2022	
23.	19.04.2022	Inspection report issued on 20.04.2022 for 43 MLD STP Jajmau Phase II	
24.	05.05.2022	Inspection report issued on 20.05.2022 for 130 MLD & 43 MLD IPSs and STP Jajmau facilities	Not complied by KRMPL
25.	01.06.2022	Inspection report issued on 01.06.2022	Not complied by KRMPL
26.	06.06.2022	DG,NMCG,ED(T) and Rajat Gupta Sir site visited on 06.06.2022 and instructed to KRMPL as per M.O.M	Not complied by KRMPL
27.	06.06.2022, 07.06.2022	Inspection report of 130 MLD, 43 MLD,IPSs and CSPS Jajmau on 29.06.2022	Not complied by KRMPL

28.	14.06.2022	Inspection report issued on 14.06.2022	Not complied by KRMPL
29.	11.07.2022,16.07.2022,21.07.2022 ,25.07.2022 and 27.07.2022	Inspection report issued on 28.07.2022	Not complied by KRMPL
30.	08.08.2022	ED(P),NMCG and Rajat Gupta Sir site visited on 06.06.2022 and instructed to KRMPL as per M.O.M	Not complied by KRMPL
31.	02.08.2022 and 23.08.2022.	Inspection report of 43 MLD STP Jajmau facilities phase II, inspection report issued 31.08.2022	Not complied by KRMPL
32.	05.09.2022,13.09.2022,20.09.2022 and 23.09.2022	Inspection report of 43 MLD STP Jajmau facilities phase II, inspection report issued 30.09.2022	Not complied by KRMPL

## ii. O&M Manual

- KRMPL has resubmitted the O&M manual and PE compliance for 43 MLD STP vide KRMPL letter no 2411 dated 26.04.2022 received our office on 29.04.2022,PE reviewed the compliances of revised O&M manual and issued a letter of O&M manual for recommendation of approval vide PE letter no.1590 dated 29.04.2022
- KRMPL has submitted revised Schedule Maintenance plan for first year of 43 MLD Jajmau Phase-II facilities vide KRMPL letter no.2406 dated 23.04.2022,PE reviewed and submitted comments on revised Schedule Maintenance plan vide PE letter no.1597 dated 02.05.2022.KRMPL has submitted revised Schedule Maintenance plan after incorporating comments given by PE vide KRMPL letter no. KRMPL letter no. UPJN/KRMPL/Kanpur/2022-23/2441 dated 07.05.2022,PE reviewed the schedule maintenance plan and recommended for approval vide PE letter no. 1626 dated 25.05.2022.

## iii. Insurance Policies

- UPJN provided insurance appreciated value of 43 MLD Jajmau Facilities Phase II for the year of 2021-2022 is Rs. 6675.10 Lakh as per UPJN vide Letter No 180/w-4/42 dated 29.12.2021.
- KRMPL has not submitted IAR policy from the COD declaration date 25.08.2021 to 27.04.2022 (247 days).
- KRMPL has submitted a letter for industrial all risk insurance policies that they have applied for IAR policy for 43 MLD STP and IPSs vide KRMPL letter no.2417 dated 29.04.2022. KRMPL has submitted notarized copy of IAR policy having policy number 12453442 for the duration of 28-04-2022 to 27-04-2023 vide KRMPL letter no. KRMPL letter no. UPJN/KRMPL/Kanpur/2459/2022-23 dated 14.05.2022 PE reviewed the IAR policy and submitted their observation vide STC letter no. 1620

dated 19.05.2022. KRMPL has submitted compliance to PE observations vide KRMPL letter no. 2475 dated 23.05.2022. Necessary action to be taken by UPJN as per observation of STC letter no. 1620 dated 19.05.2022.

#### iv. Monthly Activity Report of July month

- KRMPL has submitted Monthly Activity report vide KRMPL letter KRMPL letter no. 107 dated 08.09.2022 hard copy received our office on 21.09.2022
- After review PE has given comments on Monthly Activity report for 43 MLD Jajmau Phase-II vide PE letter no. 1821 dated 29.09.2022. KRMPL is yet to resubmit Monthly performance report for the month of January, February, March, April, May, June and July 2022 after incorporating comments on compliance report given by PE.

#### v. Mechanical Screens (Fine Screens)

- Both Mechanical screens & conveyer belt found non-operational every time when officials of PE/UPJN visited the site. It was started when asked by the visiting team.
- Auto System of both Mechanical Screens has not been repaired by KRMPL yet.
- Fine screen no.02 operational since 11.04.2022.
- Concessionaire promised automation of mechanical screens of 43 MLD STP within a week during the visit of ED (technical) on 08.10.2021. But no action has been taken up by KRMPL.

#### vi. Grit removal System

- Grit removal system is functional but classifier system is not functional since handover.
- Most of the time it was found that total flow was being bypassed. Concessionaire promised to rectify the grit classifier of 43 MLD STP within 7 days during the visit of ED (technical) on 08.10.2021. But no action has been taken up by KRMPL.
- KRMPL has started to repair the grit classifier system during 08.03.2022 to 17.03.2022 but KRMPL has not repaired properly.

#### xxv. Flow meter

- Log book of flow meter are not maintain by KRMPL properly.
- Totalizer reading of parshall flume found not Ok, Calibration report and power backup needs to be arranged by KRMPL and in parshall flume, flow level scales are needs to be paint.
- Power backup arrangement has not arranged by KRMPL.
- Level scale has not arranged by KRMPL.

#### xxvi. Primary sedimentation Tank

- Primary sludge wastage is not adequate due to which excessive gas bubbles were found on the surface of the clarifier. KRMPL needs to arrange proper sludge disposal system.
1. The scraper mechanism of PST has failed on 28.06.2022 and continued to operate till 10.07.2022 without wasting sludge from PST.
    - a. KRMPL initiated bypassing flow on 11.07.2022 from PTU units (Collection chamber, Mechanical screen chamber, Grit chamber, Parshall Flume) diverting flows to 130 MLD STP (only 3 to 7 MLD has been shifted to aeration basins of 43 MLD).

b. KRMPL has started the rectification work on 11.07.2022 and submitted RFI to UPJN /PE for inspection (25.07.2022) of completed renovation work. UPJN/PE conducted site inspection and found the work is still incomplete (STC letter no. 1723 dated 25.07.2022). The following are the major observations ,

- Primary settling tank was shut down by KRMPL on 11.07.2022 without written information to UPJN & STC.
- Compliance to UPJN/PE inspection report issued with STC Letter No. 1712 dated 19.07.2022.
- It was observed during the UPJN/PE inspection on 19.07.2022 and 25.07.2022 that the gap between squeegee / scraper blade and RCC floor was not as per similar unit of 130 MLD. The gap should be 10mm to 12 mm but at the site gap was found to be varying from zero up to 120mm, which was not acceptable to UPJN and STC. It is recommended to rectified civil tank floor and adjusts the scrapper arrangement as needed to maintain a 10mm to 12 mm gap.
- KRMPL has commissioned PST as on 27.07.2022 without any prior approval from STC and UPJN.
- Digital indicator & load cell (Torque meter) should be procured, installed & tested to trip when load exceeds set value.
- PST deflector box has been corroded & not properly aligned. Scum baffle plate should be aligned. Work is still pending.
- Primary settling tank bridge has been severely corroded. Therefore, all corroded parts should be replaced & painted.
- Civil repair work is pending with leakages found in the launder at more than 20 locations.
- Sludge removal arrangement are not being done by KRMPL due to excess sludge in Primary sedimentation tank ,sludge outlet line got choked by sludge, Now the PST are not functional as required and its directly affect the KPIs value.
- Cracks repairing work need to be done.
- Painting work needs to be done.
- "V" notch need to replace.
- Alignment need to be rectified for PST.
- Log book need to be maintained.

**xxvii. Sludge Digester System**

- Sludge digested system is not in working condition since handover.
- Digester Need to be cleaned.
- Civil Leakage need to be repaired.
- Pressure relives valve need to be calibration.
- All four nos. of motors need to be repaired.
- Canopies need to be replaced.
- HDPE gas pipe line need to be proper support.

**xxviii. Air Blower system and Aeration Tank**

- Air blower no. 2 is under maintenance since 15.08.2022 it needs to be repaired.
- 4 nos diffusers out of 880 non-operational since 28.06.2022.

**xxix. Centrifuge system**

- Both Centrifuges needs to be repair.
- Need to be overhauled & servicing.
- Pipe support shall be installed properly for sludge feed line and dosing line.

**xxx. Sludge Thickener**

- The sludge thickener operation needs immediate attention since the supernatant from the thickener is discharging heavy solids into the PST inlet distribution chambers overloading the PST system. Thickened sludge pump 2 no. is under maintenance since 01.06.2022 its needs to be repaired.
- Need to be Overhaul and servicing.
- Sludge thickener non-functional since handover.
- Need to be Clean weir plates
- Sludge cleaning need to be done.
- Need to be painted.

**xxxi. Final Sedimentation Tank**

- Cleaning work need to be done.
- Painting work needs to be done.
- Alignment of Mechanism needs to be rectified.
- "V" notch need to be replaced.

**xxxii. Disposal Sludge**

- Disposal of sludge is to be done by the KRMPL as per UPPCB norms.

**xxxiii. RSPH**

- RSPH (excess sludge) pumps no. 3 is under maintenance since 07.08.2022 it needs to be repair.

**xxxiv. DG set(Power Backup)**

- In present there is no power backup at site since handover. At the time of power cut whole plant goes to shutdown in all respect. PE has submitted their suggestion to UP Jal Nigam to direct the concessionaire to installed DG set & RTOLMS system vide STC letter no. 898 dated 11.06.2021.
- ED (Technical) directed KRMPL during site visit of 12.04.2022 at Jajmau facilities to provide Power backup as per CA article 8.7(b) and 8.4(b).KRMPL has not taken any action. UPJN and STC also issued a letter to KRMPL for arrange adequate power backup at 43 MLD STP Jajmau Phase II vide STC letter no. 1600 dated 03.05.2022,UPJN letter no. 740/w-34/21 dated 07.05.22,KRMPL has not submitted load calculation and technical data sheet of DG set.
- During NMCG meeting on 02.08.2022 regarding DG set and RTOLMS, Mr. Rajat Gupta, NMCG directed UPJN and KRMPL to resolve the issue of 43 MLD STP Jajmau Phase-2.

**xxxv. RTOLMS:-**

- ED (T) instructed KRMPL to submit QAP and Technical data sheet on 18.04.2022 with sensors (pH, temperature, COD, TSS, Flow, etc) and will install them at the



earliest. KRMPL has not submitted any QAP and technical data sheet till date. UPJN and STC also issued a letter to KRMPL to submitted technical data sheet of RTLOMS for 43 MLD STP Jajmau phase II facilities vide STC letter no. 1600 dated 03.05.2022, UPJN letter no. 740/w-34/21 dated 07.05.22, KRMPL has not submitted technical data sheet for review.

**xxxvi. Chlorination system:-**

- ED (T) instructed KRMPL regarding arrangement of temporary chlorination system at earliest on 12.04.2022 during site visit of Jajmau facilities.
- KRMPL has not arranged temporary chlorination system till 30.06.2022

**xxxvii. Joint sampling and testing by NABL Lab**

- Testing reports from Spectra research Lab ventures (P) Ltd. of the Joint sample taken on 28.08.2021, 04.09.2021, 11.09.2021, 18.09.2021, 25.09.2021, 02.10.2021, 09.10.2021, 16.10.2021, 23.10.2021, 06.11.2021, 27.11.2021 and 31.12.2021 test report yet not submitted by concessionaire.
- Shri Ram Institute for Industrial Research New Delhi of the joint sample taken on 3-4<sup>th</sup> Dec 2021, 16-17<sup>th</sup> Dec 2021, 22-23<sup>th</sup> Dec 2021, 31<sup>th</sup> Dec 2021, 7<sup>th</sup> January 2022, 13<sup>th</sup> January 2022, 21<sup>st</sup> January 2022, 28<sup>th</sup> January 2022 with UPJN, STC and KRMPL representatives and result submitted by KRMPL.
- Joint sample taken by IIT Kanpur on 29.01.2022 and their results submitted by KRMPL vide their letter no. 2230 dated 23.02.22
- UPJN instructed KRMPL to discontinue weekly sampling & testing from M/S Shriram labs as the test results of Shriram labs is very much different from others and directed KRMPL to conduct weekly sampling & testing from IIT Kanpur from February 2022 onwards instead of M/S Shriram labs but KRMPL is still continuing to get sampling and testing done by Shriram labs. The weekly results submitted for the month of feb 2022 have not been considered as per instruction of UPJN.
- KRMPL has not started the weekly sampling & testing to be done by IIT Kanpur as per instructions of UPJN for the month of February 2022, March 2022, April 2022, May 2022 and June 2022, PE has issued several letter to do testing as per instruction given by NMCG, UPJN and STC vide STC letter no. 1676 dated 27.06.2022.
- IIT Kanpur has taken only composite sample on 28.05.2022 and submitted test results.
- IIT Kanpur has taken only composite sample on 29.06.2022 and submitted test results.
- IIT Kanpur has taken only composite sample on 30 and 31<sup>st</sup> July 2022 and submitted test results.
- IIT Kanpur has taken only one composite sample on 23-24.08.2022, test result awaited.
- IIT Kanpur has taken only one composite sample on 23.09.2022, and their test result awaited.

**xxxviii. KPIs Adherence Report:-**

- As per the direction given by PM-1 UPJN, KPI adherence report of 43 MLD STP Jajmau Phase II from Feb. 2022 months onward, will be sent on the basis of IIT Kanpur test reports.
- In this regard, STC letter no. 1469, 1505 & 1523 dated 28.02.2022, 21.03.2022 &



31.03.2022 respectively, may be referred.

- KRMPL has not submitted IIT Kanpur test reports for the month of February, March 2022, April 2022, May 2022 and June 2022 for all weeks. Hence it is not possible for PE to send KPI adherence report till the submission of IIT Kanpur test reports.

**Site photographs of 43 MLD STP Jajmau**



**Over flow condition at Permiya IPS**



**Over flow condition happens during peak hour at Shishamau IPS**



**PST under operation of 43 MLD STP Jajmau**



**Aeration tank under operation of 43 MLD STP Jajmau**



**Grit mechanism under Operation of 43 MLD STP Jajmau**



**Only 2 out of 3 nos. Air blower under operation of 43 MLD STP Jajmau**

**Annexure : Monthly Activity Report of 43 MLD STP Jajmau and facilities Phase II for September 2022 submitted by KRMPL**

Attached separately

**Annexure-3. 3**

**Annexure-3.4**

**Annexure: Site Inspection Reports for the Month of September -2022 (43 MLD IPSs and STP Jajmau Phase II)** Attached separately



### 7.3 210 MLD BINGAWAN STP

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. Commercial Operation Date of Bingawan facility declared by UPJN as 10.08.2020 vide their letter no. 2324/w-37/100 dated 10.09.2020.

Renovation (Installation of RTOLMS and rectification of pumps) completion certificate have been issued by UPJN as 10.08.2020 vide their letter no. 2033/w-37/67 dated 18.08.2020 but calibration certificate with witness certificate is yet to be submitted by KRMPL. During NMCG meeting dated 11.04.2022, ED (T) directed KRMPL that under RTOLMS, all equipments and instruments including flow meters at the inlet & outlet of Bingawan STP, are in the scope of KRMPL to install and commission. Apart from this, ED (T) directed KRMPL that PLC & SCADA have also to be installed by KRMPL All of these are in the scope of KRMPL. Out of 2 nos. electro-magnetic flow meters in inlet, 01 no. was installed after rectification at site and it was synchronised with RTOLMS but at present it is non- functional and not calibrated. Calibration report needs to be provided. Other 2<sup>nd</sup> no. electro-magnetic flow meter has not been installed yet.

#### Following points need to be addressed:-

##### I. Compliance of Inspection Reports

- PE/UPJN inspected 210 MLD Bingawan facilities on the following dates
    1. 12.11.2020- Inspection report issued on 21.11.2020
    2. 02.01.2021- Inspection report issued on 19.01.2021
    3. 02.02.2021- Inspection report issued on 04.02.2021
    4. 15.06.2021- Inspection report issued on 23.06.2021
    5. 12.07.2021- Inspection report issued on 20.07.2021
    6. 06.08.2021- Inspection report issued on 10.08.2021
    7. 18.08.2021
    8. 25.08.2021
    9. 26.08.2021
    10. 31.08.2021
    11. 10.10.2021
    12. 26.10.2021
    13. 29.10.2021
    14. 16.12.2021 - STP Inspection report issued on 24.12.2021.
    15. 22.01.2022
    16. 25.01.2022
    17. 27.01.2022
    18. 20.01.2022- IPS Inspection report issued on 31.01.2022.
    19. 18.02.2022
- Inspection report issued on 31.08.2021  
 Inspection report issued on 31.10.2021.  
 STP Inspection report issued on 31.01.2022.  
 STP Inspection report issued on 28.02.2022.

- 
20. 22.02.2022
  21. 26.02.2022- IPS Inspection report issued on 28.02.2022.
  22. 25.03.2022- STP Inspection report issued on 31.03.2022.
  23. 24.06.2022- IPS Inspection report issued on 27.06.2022.
  24. 30.06.2022- STP Inspection report issued on 01.07.2022.
  25. 26.07.2022- STP Inspection report issued on 29.07.2022.
  26. 29.07.2022- IPS Inspection report issued on 04.08.2022.
  27. 25.08.2022- STP Inspection report issued on 29.08.2022
  28. 25.08.2022 -IPS Inspection report issued on 29.08.2022
  29. 31.08.2022- STP Inspection report issued on 21.09.2022
  30. 27.09.2022- IPS Inspection report issued on 28.09.2022

Compliance of the above inspection reports have not been submitted by KRMPL yet.

31. Bingawan STP's inspection done on 27.05.2022 and inspection report issued on 31.05.2022

Compliance of the above inspection report was submitted by KRMPL vide KRMPL letter no. 34 dated 04.07.2022 which was verified by PE & UPJN and it was found that almost all the issues which were indicated as rectified/ compliant in the compliance report are found still non-compliant. It shows that KRMPL is continuously submitting false and misleading compliance report. STC Letter no. 1721 dated 23.07.2022 may be referred regarding this.

32. Bingawan IPS's inspection done on 24.05.2022 and inspection report issued on 28.05.2022 respectively.

Compliance of the above inspection reports was submitted by KRMPL vide KRMPL letter no. 33 dated 04.07.2022 which was verified by PE and it was found that again KRMPL is extending the dates of rectification, compliance of which is still pending and even not following ED (T) NMCG instructions as mentioned in NMCG MOM dated 11.04.2022 & 12.04.2022. STC Letter no. 1722 dated 23.07.2022 may be referred regarding this.

33. Bingawan STP's inspection done on 25.08.2022 and inspection report issued on 29.08.2022 respectively.

Compliance of the above inspection reports was submitted by KRMPL vide KRMPL letter no. 110 dated 09.09.2022 which was verified by PE and it was found that again KRMPL is extending the dates of rectification, compliance of which is still pending and even not following ED (T) NMCG instructions as mentioned in NMCG MOM dated 11.04.2022 & 12.04.2022. STC Letter no. 1809 dated 17.09.2022 may be referred regarding this.

- Since 28<sup>th</sup> January 2020, rectifications of various defects indicated in different inspection reports have not been done by the KRMPL and they are extending dates continuously every month which is clear from the inspection report of September 2022 of Bingawan facilities (Copy of inspection report enclosed.)

## **II. O&M Manual**

- Revised O&M manual of Bingawan has been approved by UPJN on 24.08.2020.

## **III. Insurance Policies**

- STC insurance expert report has been submitted and KRMPL was required to submit all insurance policies according to advice of STC insurance expert.
- Again, KRMPL has submitted industrial all risk insurance policy vide its letter no. 1958 dated 18.11.2021 for year 2<sup>nd</sup> (i.e, Nov. 2020 to Nov. 2021) without enhancement of the insured amount by 5 % and without including the cost of RTOLMS.
- KRMPL has not yet submitted the revised Insurance Policies for year 2<sup>nd</sup> (i.e, Nov. 2020 to Nov. 2021) incorporating the points raised in STC letter no. 1325A.
- KRMPL has submitted industrial all risk insurance policy vide its letter no. 2009 for year 3<sup>rd</sup> (i.e, Nov. 2021 to Nov. 2022). On a total, the value of IAR policy has to be increased to Rs 284,00,40.000/- (i.e, 10.25 % to that of 1st yr. value, considering 5% increment to 1st yr value & then 5% increment to that of 2nd yr. value) excluding RTOLMS value but the submitted IAR policy value is Rs 280,65,44,000/- which is only 8.95% to that of 1st yr. value. Apart from the above, the cost of RTOLMS was to be included in the industrial all risk insurance policy but not included yet. On this, STC has issued a letter no. 1351 for compliance.
- Again KRMPL has submitted letter no. 2069 on which PE has issued a detailed explanation letter no. 1387 along with detailed attachment for compliance. All the issues had already been thoroughly mentioned in past PE's letter no. 1325A & 1351 but instead of complying them, KRMPL is providing misleading information.
- KRMPL has submitted revised IAR policy vide KRMPL letter no. 2259 after correcting the address of Sajari only, rest points of PE letter no. 1387 dated 12.01.2022 are still not complied. PE has issued letter no. 1502 dated 14.03.2022 explaining the above.
- KRMPL has issued letter no. 2298 dated 16.03.2022 to which PE letter no. 1519 dated 30.03.2022 may be referred.

## **IV. MPS**

- After almost 2.3 years of non-operational since 28.01.2020, the mechanical coarse screen no. 1 is now made operational on 27.05.2022 but still the rake is

not properly aligned yet and uneven gap was found between rake teeth and plate/ screen bar.

- Out of 2 nos Mechanical coarse screen all are non functional since 28.01.2022no.
- Out of 12 nos. pumps installed, 6 nos. of pumps i.e., pump no. 1,4, 7, 8,9 & 12 are not working. Apart from this, various indicators, ammeters, voltmeters etc of pump starter panels & MPS MCC Panel are not working.

In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to rectify the issue till 21.04.2022 but not rectified yet.

- MPS sump level transmitters are not working properly and its calibration is still pending.

#### V. Inlet Chamber

- Out of 3 nos. fine mechanical screen, all are non functional since 28.01.2020.

In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to rectify the issue till 18.04.2022 but not rectified yet.

- Out of 04 grit removal system, Grit classifier no. 1, 2 & 3 are not functioning properly.
- Parshall flume ultrasonic level sensor along with measuring scale had not been installed yet since handover dated 08.07.2019.
- Some of the leakages in Civil Structure have not been attended yet by KRMPL.

#### VI. Cleaning and reactivation of UASB Reactors

All the KPIs excluding TSS are not being met during the month of April 2022 as per KRMPL's report. There is huge difference between KRMPL lab results and NABL lab results/ IIT Kanpur lab results. Out of 16 reactors, 11 nos. of UASB reactors (i.e. reactor no. 1, 2, 3, 4, 8, 5, 12, 9, 10, 6 & 11) have been cleaned & refilled for reactivation. UASB reactors processing still needs to be optimized. Reactor no. 6 was taken up for cleaning from April 2021 and has finally been cleaned in Jan. 2022. Reactors no. 9, 10 & 11 were taken up for cleaning in July 2021, from which Reactor no. 9 & 10 were cleaned in Dec. 2021 & Reactor no. 11 was cleaned on 25.04.2022. Reactor no.16 has been taken up for cleaning from Sept. 2021, Reactor no. 14 has been taken up for cleaning from 30.11.2021 (Nov. 2021) & Reactor no. 15 has been taken up for cleaning from 03.01.2022 (Jan. 2022)

From July-2021 only six reactors i.e., reactor no. 5, 12, 9, 10, 6 & 11 have been cleaned till date.

KRMPL had promised to clean reactor no. 11 till 31.12.2021, reactor no. 15 & 16 till 31.01.2022 & 15.01.2022, reactor no. 13 & 14 till 28.02.2022 & 15.02.2022 respectively vide KRMPL letter dated 11.10.2021. Again KRMPL vide its letter no. 1840 dated 26.10.2021, promised to clean reactor no. 11 till 15.12.2021, reactor no. 16 till 31.01.2022, reactor no. 15 till 15.02.2022, reactor no. 13 & 14 till 31.03.2022 & 15.03.2022 respectively but till date out of the above 5 reactors, only one reactor (i.e. reactor no. 11) has been cleaned.

During NMCG meeting dated 17.02.2022, KRMPL promised to clean 5 UASB reactors i.e, one reactor in February 2022, 2 reactors in March 2022 & 2 reactors in April 2022 but out of the 5 reactors, only one reactor i.e., reactor no. 11 has been cleaned till date.

During NMCG meeting dated 11.04.2022, KRMPL again promised to complete one reactor till 16.04.2022 (whose work was completed on 25.04.2022) and rest 4 reactors till May 2022 (whose cleaning/ renovation works are still not completed).

KRMPL has raised RFI on 26.07.2022 for inspection of UASB reactor no. 13 on 28.07.2022. UPJN & PE inspected the reactor on the same day i.e. on 26.07.2022 and found some works still pending which have been informed to the plant in-charge for compliance. On this note, Bingawan site in-charge confirmed that the pending works of UASB reactor no. 13 will take additional time for completion and UPJN & PE will be notified once they are completed.

## VII. Aeration Lagoon & Final Polishing Unit

Aeration lagoons are filled with sludge and now the sludge can be seen above the surface water level of aeration lagoon also which is clearly mentioned and shown with picture in PE's Jan. 2022, Feb. 2022, Mar. 2022, April 2022 ,May 2022 ,June 2022,July 2022 ,Aug 2022 & Sep.2022 inspection reports.

Final polishing units are completely filled with sludge and it can be clearly seen above surface water level of the unit.

During NMCG meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to submit cleaning schedule of aeration lagoon & final polishing pond within 7 days (i.e. 18.04.2022).

KRMPL has submitted the cleaning schedule of aeration lagoon & final polishing pond vide KRMPL letter no. 2407 dated 23.04.2022 received at STC office on 26.04.2022. In the submittal, KRMPL is taking 10 days (from 09.05.2022 to 18.05.2022) for cleaning of polishing pond tank no. 1 and 42 days (from 20.06.2022 to 31.07.2022) for cleaning of polishing pond tank no. 2. It is not clear why the 2nd polishing tank, which is of similar size as the other, and is equally filled with sludge, will take 4 times longer to clean. Apart from this, KRMPL is proposing to clean one aeration lagoon at a time out of 2. Bypass arrangement for aeration lagoon is being prepared/ constructed just because cleaning of one aeration lagoon out of 2 at a time, is not possible due to a hole in the partition wall between aeration lagoons, as claimed by KRMPL. Hence, for the same reason, taking aeration lagoon for cleaning one at a time may not work. Both aeration lagoons may need to be taken for cleaning simultaneously.

In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to submit complete and detailed plan & schedule for bypass line within 7 days (i.e., 18.04.2022).

KRMPL has submitted plan for bypass arrangement vide KRMPL letter no. 2412 dated 28.04.2022. Regarding this, STC letter no. 1609, 1649 & 1650 dated 09.05.2022, 09.06.2022 & 09.06.2022 respectively may be referred.

KRMPL has submitted revised plan (Alternate route) for bypass arrangement vide KRMPL



letter no. 43 & 52 dated 08.07.2022 & 19.07.2022. On this, STC Letter no. 1714 dated 21.07.2022 may be referred.

KRMPL has submitted revised plan for bypass arrangement vide KRMPL letter no. 101 dated 03.09.2022. On this, STC letter no.1796 dated 07.09.2022 may be referred. UPJN has issued letter regarding submit detailed design, drawing & estimation for bypass arrangement vide UPJN letter 583/w-12/59 dated 08.09.2022.

#### **VIII. Belt Filter Press**

Out of 3 nos. of Belt Filter Press (BFP) system, BFP no. 1 which was non-operational since 23.09.2021 and made operational on 22.02.2022 was again found non-operational since 27.05.2022 is now made operational but not being operated because one sludge feed pump is non-operational. All BFPs are operational. Out of 3 nos. poly dosing pumps installed, 1 no. is not in working condition due to diaphragm portion fully damaged. This matter has been pending since 07.10.2020.

Also 1 out of 3 nos. of sludge feed pump was found non-operational since 25.05.2022.

For disposal of sludge, only two trolleys and two tractors are available. One spare trolley is required for the time when one trolley goes for disposal.

It has been found that the sludge withdrawal is not being done daily from each reactor. On an average, sludge withdrawal is taking place from 6 to 8 reactors only on a daily basis.

#### **IX. Chlorination System**

- The missing tonners were finally brought at site on 11.12.2021 which was missing since handover dated 08.07.2019.
- Chlorine dosing is not found proper as per the flow. In the month of Oct. 2021, Nov. 2021, Dec. 2021 & Jan. 2022; 6055.3 kg, 4885.95 Kg, 1250.75 kg & 1076.25 kg respectively of chlorine has been consumed less than required (@ 5ppm). Chlorine dosing rate to be calculated to control fecal coliform within limit and accordingly chlorine dosing should be adjusted.
- As of now, chlorine dosing has not been improved yet and the same was observed by CE, UPJN also during his visit to 210 MLD Bingawan STP on 29.01.2022 and he also observed that the chlorine dosing is not proper. Mr Ajay Kanaujia (Chemist, UPJN) get the chlorine tested in his presence on 19.01.2022 & 25.01.2022 and found zero chlorine in the treated effluent (PE's letter no. 1406 dated 25.01.2022 may be referred regarding this issue). Also on 02.02.2022 and on various inspection dates in Feb. 2022, chlorine concentration was checked in presence of UPJN & PE officials and still found zero chlorine in the treated effluent.
- During site inspection on dated 22.02.2022, when UPJN & PE get the tonners wt. measured on dated 22.02.2022, chlorine was found 3730 kg but the chlorine entry at the end of previous day was written as 3355 kg. It means that KRMPL is not doing chlorine dosing and falsely showing consumption of chlorine in their record.

- KRMPL has started doing sodium hypochlorite solution dosing from Feb. 2022 which is also not proper as per the requirement and residual chlorine at the injection point of sodium hypochlorite solution dosing was also found zero. Also no record of sodium hypochlorite solution consumption is being maintained by KRMPL.
- PE got the chlorine tested in his presence on 25.03.2022 and the residual Chlorine measured at the injection points was found to be 0.1 mg/l and 0.0 mg/l in the treated effluent at all other points.
- During NMCG meeting dated 11.04.2022, PE informed ED (T) that KRMPL is dosing insufficient chlorine resulting in not meeting Fecal coliform within permissible limit. Chlorination system is not working from months and till date, the system has not been rectified. On this, KRMPL informed ED (T) that the spares of the system will arrive on 12.04.2022 and then after the system will be rectified but KRMPL was unable to propose any date for the rectification of chlorination system.

ED (T) raised concern and instructed UPPCB for auditing chlorine dosing & fecal coliform in treated effluent.

- Chlorination system is still not rectified for proper dosing of chlorine and still zero chlorine is being found at every point in treated effluent. From May 2022, KRMPL has stopped doing sodium hypochlorite solution dosing.

#### **X. Sludge Disposal**

As instructed by ED (Technical) on 08.10.2021 & 11.04.2022 that sludge disposal is to be done as per norms of UPPCB. KRMPL and UPJN are required to follow the norms of UPPCB for disposal of sludge. Before disposal, analysis of sludge is to be done for heavy metals as directed by ED (Technical).

KRMPL was given the place of disposal by UPJN behind Polishing pond but KRMPL is disposing sludge near BFP and at other locations inside the plant without any permission.

KRMPL is still not following UPPCB norms for sludge disposal.

#### **XI. Joint Sampling and Testing by NABL Lab.**

- Testing reports from Spectra research Lab ventures (P) Ltd. of the Joint sample taken on 29.09.2020, 16.10.2020, 18.03.2021, 09.04.2021, 15.07.2021, 30.07.2021, 27.11.2021 have not been submitted by concessionaire.
- KRMPL has started taking weekly samples from August 2021.
- KRMPL has started weekly sample testing by NABL accredited Sri Ram Labs from Dec. 2021.
- UPJN instructed KRMPL to discontinue weekly sampling & testing from M/s Sriram labs as the test results of Sriram labs is very much different from others and directed KRMPL to conduct weekly sampling & testing from IIT Kanpur from

February 2022 onwards instead of M/s Sriram labs but KRMPL is still continuing to get sampling and testing done by Sriram labs. The weekly results submitted for the month of Feb. 2022 have not been considered as per instructions of UPJN.

- During NMCG meeting dated 11.04.2022, KRMPL demonstrated that M/s Sriram lab is highly recognised laboratory. On this ED (T) rejected the statement of KRMPL and clarified that the results of M/s Sriram laboratory are misleading and can't be trusted.

ED (T) stated that CPCB, UPPCB results will be believed in this matter.

- KRMPL has not started the weekly sampling & testing to be done by IIT Kanpur as per instructions of UPJN for the month of February 2022, March 2022, April 2022, May 2022, June 2022 July 2022, Aug 2022 & Sep.2022. Instead of weekly sampling & testing by IIT Kanpur, KRMPL is still proposing monthly sampling and testing by IIT Kanpur. In regard, STC Letter no. 1639 & 1676 dated 02.06.2022 & 27.06.2022 respectively may be referred.
- KRMPL has submitted one grab sample testing report on 07.05.2022 whose sample was taken by KRMPL and sent to IIT Kanpur for testing on 01.04.2022 (April 2022). No sample either composite or grab was taken up by IIT Kanpur in May 2022.
- One composite sample was taken by IIT Kanpur on 01.06.2022 whose report has been submitted by KRMPL on 08.07.2022 and large difference is found between IIT K results and KRMPL lab results for the same day.
- Two composite samples were taken by IIT Kanpur in July 2022 i.e. on 05.07.2022 & 16.07.2022, of which report of 05.07.2022 has been submitted by KRMPL on 20.07.2022 and the report of 16.07.2022 has not yet submitted. Large difference is found between IIT K results and KRMPL lab results for 05.07.2022.
- One composite sample was taken by IIT Kanpur on 05.07.2022 and report has been submitted by KRMPL.
- One composite sample was taken by IIT Kanpur on 29.08.2022 and report has been submitted by KRMPL.(Copy of IITK Lab report enclosed)
- One composite sample was taken by IIT Kanpur on 26.09.2022 and report has been not submitted by KRMPL

## **XII. Gas Holder**

- Out of 2 nos. gas holder installed, Gas holder no. 1 which was not in working condition since 28.01.2020 has now been made operational on 18.02.2022. Now both Gas holders are non - operational.
- Pressure gauges are still not been provided on the gas holders which are pending since 28.01.2020.

## **XIII. Gas Scrubber Unit**

- Scrubber is not working since 28.01.2020.
- On 18.02.2022, PE & UPJN officials visited Bingawan STP and it was found that blowers before scrubber unit were not working. Inlet pipe line to scrubber unit is

found leaking and huge water splashing was found from the leakage point which also indicates that moisture removal equipments of the gas generation system are not working properly and not able to remove moisture from the bio gas which may further damage the processing of the scrubber. Also, KRMPL was unable to get the pressure checked at the outlet of scrubber unit and no pressure gauge was available at the outlet of scrubber unit.

- UPJN letter no. 116/w-12/12 dated 28.02.2022 may please be referred regarding above.
- A joint site visit was conducted by UPJN & PE on 27.05.2022, in which it was found that the PG after scrubber unit was not working and KRMPL was unable to get the pressure checked at the outlet of scrubber unit. KRMPL has not installed any permanent gas analyser yet for checking gas quality.
- Third party analysis of bio gas and scrubbed gas through approved agency from UPJN, needs to be conducted and witnessed by UPJN & PE and report needs to be submitted to check whether operation is corrected or not as claimed by KRMPL. STC Letter no. 1636, 1685 & 1686 dated 31.05.2022, 01.07.2022 & 01.07.2022 respectively may be referred regarding this.

#### XIV. Housekeeping:-

- On 08.07.2021 & 11.04.2022, NMCG team instructed KRMPL for improvement in housekeeping works.
- Also in Oct. 2021, ED (Technical), ED (Projects) & Project Officer (T) of NMCG have visited the site and raised concern over not deploying enough man power for housekeeping works.
- No Improvement has been made in the housekeeping works. Needs to be done on regular basis. Regarding this, UPJN Letter no. 636/w-15A/33 dated 21.09.2022 may be referred.

#### XV. Outdoor Lights:-

- Some of the outdoor lights in the campus of 210 MLD STP have been replaced but some outdoor lights are still to be replaced.
- In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to install all lights within a day (i.e. 13.04.2022) and must ensure its 100% availability/ functioning but not replaced/ rectified yet by KRMPL.

#### XVI. Schedule Maintenance Works for 1<sup>st</sup> & 2<sup>nd</sup> year

- Schedule maintenance works as per approved O&M manual were to be started from 1/08/2020, but not started yet.

- KRMPL has not done any schedule maintenance works for year-1 as approved.
- 2<sup>nd</sup> year Schedule maintenance submitted by KRMPL vide letter no. 936 dated 19.02.2021. STC commented on Schedule maintenance vide letter no. 795 dated 15.04.2021. Schedule maintenance works are to be started after the plant is fully operational. Now again KRMPL has submitted the schedule maintenance plan for year 2<sup>nd</sup> vide KRMPL letter no. 1782 dated 29.09.2021 which is not to be considered till the plant is fully operational as the plant is in breakdown condition at present.
- Again KRMPL has submitted a letter no. 1887 dated 02.11.2021 for schedule maintenance programme on which we have issued a letter no. 1249 dated 09.11.2021, for making revision and resubmission of schedule maintenance programme year 02 after excluding breakdown maintenance items. KRMPL has not submitted the revised schedule maintenance programme year 02 yet.
- In the NMCG meeting dated 11.04.2022, ED (T) asked about the schedule maintenance works on which PE informed that KRMPL is only doing breakdown maintenance work and no schedule maintenance work are being done by KRMPL. PE informed that, STC letter no. 1249 dated 09.11.2021 had already been issued regarding submitting revised Schedule maintenance plan after removing breakdown maintenance works but till date the revised plan has not been submitted by KRMPL.

ED (T) directed KRMPL to submit revised schedule maintenance plan complying STC letter no. 1249 dated 09.11.2021

- KRMPL has submitted revised schedule maintenance plan vide KRMPL Letter no. 2496 dated 31.05.2022 which was found incomplete and the dates were found false. In this matter, a meeting was organised by PE with KRMPL (in presence of KRMPL O&M In-charge) on 02.06.2022 and various points were discussed like past dates for work schedule needs to be corrected, schedule maintenance and breakdown maintenance works need to be separated and the dates for breakdown maintenance works also need to be mentioned & several items / works which were missing in the schedule maintenance plan sheet, needs to be considered and included. KRMPL has agreed to address the above points as discussed and will resubmit the plan. Regarding this, STC Letter no. 1640 dated 02.06.2022 may be referred.

## **XVII. KPIs Adherence Report**

- As per the direction given by PM-1 UPJN, KPI adherence report of Bingawan from Feb. 2022 months onward, will be sent on the basis of IIT Kanpur test reports.
- In this regard, STC letter no. 1459, 1505, 1523, 1628, 1639 and 1676 dated 25.02.2022, 21.03.2022, 31.03.2022, 25.05.2022, 02.06.2022 and 27.06.2022 respectively, may be referred.

- 
- During NMCG meeting dated 11.04.2022, ED (T) stated that CPCB, UPPCB results will be believed in this matter.
  - KRMPL has not submitted IIT Kanpur weekly testing reports for the month of February, March, April, May, June, July & Aug-2022. Hence it is not possible for PE to sent KPI adherence report till the submission of IIT Kanpur weekly test reports / CPCB or UPPCB weekly test reports.

**Annexure 1: Monthly Activity Report of Bingawan for September 2022**

**Enclosure: Site Inspection Report for the Month of September -2022 (Bingawan STP)**

Attached separately

**Enclosure: Site Inspection Report for the Month of September-2022 (Bingawan IPS)**

Attached separately

**7.4 42 MLD SAJARI STP**

42 MLD Sajari facilities were handed over to KRMPL on 29/05/2019 but as per CA schedule handing over date for Sajari Facilities is Effective Date i.e. 11/10/2019. Therefore, ultimate handing over date of Sajari has been treated as effective date i.e. 11.10.2019. 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. 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. All the 12 aerators got functional on 04/01/2020 in the presence of Mr. J. P. Tripathi, O & M Engineer STC. After that it has been observed that since 04/01/2020 all the parameters of treated effluent are within prescribed limits except for the days when parameters of raw sewage are above the prescribed limits for which concessionaire is not responsible. Hence there is no need for any improvement in the plant as suggested by KRMPL.

Commercial Operation Date was declared as 20.06.2020 vide UPJN letter no. 1545/w-20/127 dated 17.06.2020 and again revised as 11.10.2019 i.e. effective date of the CA by UPJN vide their letter no. 2574/w-20/267 dated 26.09.2020. O&M charges from 11.10.2019 to sept.2020 have been paid to the concessionaire.

**Following points are to be addressed by the KRMPL:-**

**ii. Compliance of Inspection Reports.**

- PE/ UPJN Inspected 42 MLD Sajari facilities on the following dates
  1. 20.10.2021- IPS Inspection report issued on 25.10.2021
  2. 18.11.2021- IPS Inspection report issued on 27.11.2021
  3. 14.12.2021- IPS Inspection report issued on 24.12.2021
  4. 21.12.2021 } STP Inspection report issued on 30.12.2021
  5. 22.12.2021 }
  6. 11.01.2022- STP Inspection report issued on 17.01.2022.
  7. 20.01.2022- IPS Inspection report issued on 31.01.2022.
  8. 08.02.2022- STP Inspection report issued on 10.02.2022.
  9. 26.02.2022- IPS Inspection report issued on 28.02.2022.
  10. 07.03.2022- STP Inspection report issued on 08.03.2022.
  11. 31.03.2022- IPS Inspection report issued on 02.04.2022.
  12. 27.04.2022- IPS Inspection report issued on 30.04.2022.
  13. 08.06.2022- STP Inspection report issued on 15.06.2022.
  14. 24.06.2022- IPS Inspection report issued on 27.06.2022.
  15. 12.07.2022- STP Inspection report issued on 18.07.2022.
  16. 29.07.2022- IPS Inspection report issued on 03.08.2022.
  17. 17.08.2022 -STP Inspection report issued on 19.08.2022



- 
18. 25.08.2022-IPS inspection report issued on 29.08.2022
  19. 20.09.2022-STP inspection report issued on 21.09.2022
  20. 30.09.2022- IPS inspection report issued on 30.09.2022

Compliance of the above inspection reports have not been submitted by KRMPL yet.

21. STC STP inspection done on 10.05.2022 and inspection report issued on 13.05.2022 respectively.

Compliance of the above inspection report was submitted by KRMPL vide KRMPL letter no. 36 dated 05.07.2022 which was verified by PE & UPJN and it was found that various issues which were indicated as rectified/ compliant in the compliance report are found still non-compliant. It shows that KRMPL is submitting false and misleading compliance report. STC Letter no. 1707 dated 18.07.2022 may be referred regarding this.

22. STC IPS inspection done on 24.05.2022 and inspection report issued on 28.05.2022 respectively.

Compliance of the above inspection report was submitted by KRMPL vide KRMPL letter no. 36 dated 05.07.2022 which was verified by PE & UPJN and it was found that the compliance report is not totally correct. STC Letter no. 1748 dated 03.08.2022 may be referred regarding this.

### iii. O&M Manual

O&M Manual already approved by UP Jal Nigam.

### iv. Insurance Policies

- STC insurance expert report has been submitted and KRMPL was required to submit all insurance policies according to advice of STC insurance expert.
- Again, KRMPL has submitted industrial all risk insurance policy vide its letter no. 1958 for year 2<sup>nd</sup> (i.e. Nov. 2020 to Nov. 2021). Previously it was taken for 68.8 crore that was to be increased by 5% and cost of DG set and online monitoring system was to be included but instead of increasing and including the cost of DG set and online monitoring system, the insured value has been decreased from 68.8 crore to 49.19 crore, which is not acceptable.
- KRMPL has not yet submitted the revised Insurance Policies for year 2<sup>nd</sup> (i.e. Nov. 2020 to Nov. 2021) incorporating the points raised in STC letter no. 1325A.
- KRMPL has submitted industrial all risk insurance policy vide its letter no. 2009 for year 3<sup>rd</sup> (i.e. Nov. 2021 to Nov. 2022). In which, whether 5% increment to 1st yr value & then 5% increment to that of 2nd yr. value is considered or not in the submitted 3rd yr. IAR policy, is not clear from the submittal. Also, the value addition for DG set & OCEMS is not given separately and whether 5% increment was made or not on 2nd yr. value for DG set & OCEMS, is not clear. On this, STC has issued a letter no. 1351 for compliance.
- Again KRMPL has submitted letter no. 2069 on which PE has issued a detailed explanation letter no. 1387 along with detailed attachment for compliance. All the



issues had already been thoroughly mentioned in past PE's letter no. 1325A & 1351 but instead of complying them, KRMPL is providing misleading information.

- KRMPL has submitted revised IAR policy of Sajari vide KRMPL letter no. 2259 after correcting the address of Sajari only, rest points of PE letter no. 1387 dated 12.01.2022 are still not complied. PE has issued letter no. 1502 dated 14.03.2022 explaining the above.
- KRMPL has issued letter no. 2298 dated 16.03.2022 to which PE letter no. 1519 dated 30.03.2022 may be referred.

#### **v. Performance of Plant**

All KPIs were within prescribed limit since 04.01.2020 but concessionaire started operating one stream from 22.06.2021. KPIs are coming within prescribed limit from the month of Oct. 2021. KRMPL has started operating both the stream from 18.10.2021. Now, KRMPL started operating only one stream from 06.12.2021.

All KPIs are within prescribed limit of treated effluent.

#### **vi. Mechanical Screens (Coarse & Fine Screens)**

Auto system of one mechanical coarse screen has been installed but not functioning properly. Auto system of 2<sup>nd</sup> no. mechanical coarse screen is not installed yet. Auto system of both fine mechanical screens is not functional. This issue is long pending.

Mechanical coarse screen no. 1 which was non-operational since 20.09.2022 and Mechanical coarse screen no. 2 which was non-operational since 11.04.2022 was made operational on 14.06.2022. Now only Mechanical screen no.2 is operational.

#### **vii. Main pumping Station**

- Out of 5 pumps, pump no.3 is not functioning since 19.09.2022.
- Electro-magnetic flow meter has been calibrated and now working properly.

#### **viii. Inlet Chamber**

- Level sensors are not provided yet for mechanical fine screen atomization.
- Out of 02 grit removal system, Grit classifier no. 1 is not functioning properly.
- Parshall flume ultrasonic level sensor along with flow measuring chart had not been installed yet since handover dated 11.10.2019.

#### **ix. Return Sludge Pump House**

- Return sludge pump no. 3 is non-operational since 19.09.2022 and the pressure gauge of pump no. 3 is not available.
- Return sludge pump no. 1 & 2 are operational since 17.08.2022.

#### **x. Chlorination System**

- The missing tonners were finally brought at site on 11.12.2021 which was missing since 04.01.2020.
- Weighing machine is now available at site.
- Chlorination leak detecting device is not working since 31.07.2021.

#### **xi. Sludge Thickener**

- After around 10 months of non-operational since 03.03.2021, Sludge thickener no. 2 was made operational on 07.01.2022.
- It has been observed that both the thickeners are only rotating and not thickening the sludge properly.
- Sludge thickeners are filled with sludge and proper sludge extraction is not being done by KRMPL.
- When UPJN & STC team reached site on 10.05.2022, it was found that sludge thickener was in still condition, no incoming sludge or dilution water was taking place and no supernatant overflow was taking place which means KRMPL is either not operating the thickener or not operating the thickener properly. Many times instructions have been given to operate the thickener properly but still not operating properly. Also, at various points weir plate was found damaged & choked.
- When UPJN & PE team reached site on 20.09.2022, it was found that no supernatant was overflowing through the weir notch and water level inside thickener was found approx. 300 mm below weir notch. Many times instructions have been given to operate the thickener properly but still not operating properly. Also, at various points, weir plate was found damaged & choked. Apart from this, no record of dilution water pumping was available at site.
- Sludge thickener's processing is still not optimised perfectly.

#### **xii. Gas Generators**

- 2 out of 3 nos. of Gas Generators are in working condition and one gas generator is non-operational since 15.04.2022. Gas is available to operate only one gas generator for 2 to 4 hours a week.
- One Bio gas flow meter is non-operational since long back.
- It is being observed that the biogas generation in the month of Aug. 2022 is very less. As per process design, for half flow capacity, 2622 cum per day of bio gas must be generated but on an average only 254.88 cum per day of bio gas was generated in Aug.2022 which raises concern on the Biogas collection system.

#### **xiii. Sludge Digester**

- Out of 2 nos. sludge digester mixers installed, 01 no. (no.2) is not in working condition since June 2020. Also, EMF at the outlet of the digester installed is not in working condition.
- PE along with UPJN has inspected digester no. 2 on 11.01.2022 (PE's Letter no. 1385 should be referred regarding Digester no. 2 inspection) and it was found that the replaced impeller is colliding with the surrounding DI pipe which means installation work is not properly done which is required to be rectified. This is producing noise which may result in breakdown.
- KRMPL has again raised inspection call on 14.02.2022 on which PE along with UPJN have re-inspected digester no. 2 on 15.02.2022 (PE's Letter no. 1440 should be

referred regarding Digester no. 2 re-inspection) and it was found that none of the issues raised by PE vide PE letter no. 1385 was complied by KRMPL.

- M/s Voltas Ltd. had inspected digester no. 2 on 07.03.2022 and submitted the inspection report vide KRMPL letter no. 2281 dated 07.03.2022. PE has reviewed the observation made in the inspection report of M/s Voltas Ltd. and recommended for consideration & acceptance as against point no. 2 in STC letter no. 1440 dated 16.02.2022. Rest issues like coal tar painting, rusted Nut bolt replacement etc were found not complied during PE visit to Sajari STP on 07.03.2022 & 31.03.2022. STC letter no. 1526 dated 01.04.2022 may be referred regarding the above.
- KRMPL has charged digester no. 2 without complying PE comments made in STC letter no. 1526 dated 01.04.2022.
- Now, both the digesters are working but not generating proper volume of bio gas as per process design.

#### **xiv. Joint Sampling and Testing by NABL Lab.**

- Testing reports from NABL accredited Laboratory Spectro Research Lab Ventures (P) Ltd of joint samples taken on 18.08.2020, 15.09.2020, 19.10.2020, 13.11.2021, 27.11.2021 have not been received yet.
- KRMPL has started weekly sample testing by NABL accredited Sri Ram Labs from Dec. 2021.
- UPJN instructed KRMPL to discontinue weekly sampling & testing from M/s Sriram labs as the test results of Sriram labs is very much different from others and directed KRMPL to conduct weekly sampling & testing from IIT Kanpur from February 2022 onwards instead of M/s Sriram labs but KRMPL was continuing to get sampling and testing done by Sriram labs. The weekly results submitted for the month of Feb. 2022 have not been considered as per instructions of UPJN.
- During NMCG meeting dated 11.04.2022, KRMPL demonstrated that M/s Sriram lab is highly recognised laboratory. On this ED (T) rejected the statement of KRMPL and clarified that the results of M/s Sriram laboratory are misleading and can't be trusted.

ED (T) stated that CPCB, UPPCB results will be believed in this matter.

- KRMPL has not started the weekly sampling & testing to be done by IIT Kanpur as per instructions of UPJN for the month of February 2022, March 2022, April 2022, May 2022, June 2022, July 2022, Aug. 2022 & Sep. 2022. Instead of weekly sampling & testing by IIT Kanpur, KRMPL is still proposing monthly sampling and testing by IIT Kanpur. In regard, STC Letter no. 1639 & 1676 dated 02.06.2022 & 27.06.2022 respectively may be referred.
- KRMPL has submitted one grab sample testing report on 07.05.2022 whose sample was taken by KRMPL and sent to IIT Kanpur for testing on 01.04.2022 (April 2022). Only one composite sample was taken up by IIT Kanpur on 30.05.2022 (for May 2022) and (instead of 4 samples in a month).

- No samples were taken by IIT Kanpur in June 2022 for testing.
- Two composite samples were taken by IIT Kanpur in July 2022 i.e. on 02.07.2022 & 19.07.2022, of which report of 02.07.2022 has been submitted by KRMPL on 20.07.2022 and the report of 19.07.2022 has been submitted by KRMPL vide letter no.106 dated 08.09.2022.
- One composite sample was taken by IIT Kanpur in August 2022 i.e. on 26.08.2022 and the report has been submitted by KRMPL.( Copy of IITK Lab report enclosed))
- One composite sample was taken by IIT Kanpur in September 2022 i.e. on 21.09.2022 to 22.09.2022 and the report has not been submitted KRMPL

#### xv. Power backup and Online Monitoring System

DG set for power backup handed over to KRMPL by UPJN on 08.08.2020. Outlet Analyzer Panel with sensor installed at site and synchronized with RTOLMS. OCEMS has been installed and calibrated, and finally handed over by UPJN to KRMPL on 09.06.2022.

#### xvi.Sludge Disposal

- As instructed by ED (Technical) on 08.10.2021 & 11.04.2022 that sludge disposal is to be done as per norms of UPPCB. KRMPL and UPJN are required to follow the norms of UPPCB for disposal of sludge. Before disposal, analysis of sludge is to be done for heavy metals as directed by ED (Technical).
- Sludge drying beds are not being emptied as per cycle and sludge is not been disposed off regularly.
- Out of 18 sludge drying beds, 11 nos. of sludge drying beds are completely filled with sludge, 3 beds are in process of cleaning and 4 beds are empty.

#### xvii. Schedule Maintenance Programme

KRMPL has not done any schedule maintenance works as per approved O&M manual for the first year. KRMPL has submitted the schedule maintenance programmes for the 2<sup>nd</sup> year vide letter no.1135 dated 06.04.2021. PE commented on schedule maintenance programmes -2<sup>nd</sup> year vide letter no.788 dated 12.04.2021. KRMPL has submitted compliance report on schedule maintenance programmes -2<sup>nd</sup> year vide letter no.1266 dated 20.05.2021. UPJN instructed KRMPL to resubmit revised schedule maintenance program for year-2 for Sajari facilities incorporating the comments of PE vide letter no.1489/w-20/102 dated 09.06.2021 and start the works of schedule maintenance by taking shut down of one stream altogether. KRMPL has been operating only one stream from 22.06.2021 but no labour force has been deployed to start schedule maintenance work yet.

Both the streams had been started by KRMPL since 18.10.2021 without doing any schedule maintenance works. Now, KRMPL started operating only one stream from 06.12.2021. Still KRMPL has not started schedule maintenance works.

#### xviii. Outdoor Lights:-

- Some outdoor lights in the campus of 42 MLD STP have been replaced and some are yet to be replaced/ rectified.
- In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to install all lights within a day (i.e. 13.04.2022) and must ensure its 100% availability/ functioning but not replaced/ rectified yet by KRMPL.

---

**xix.KPIs Adherence Report**

- a. As per the direction given by PM-1 UPJN, KPI adherence report of Sajari from Feb. 2022 months onward, will be sent on the basis of IIT Kanpur test reports.
- b. In this regard, STC letter no. 1459, 1505, 1523, 1628, 1639 and 1676 dated 25.02.2022, 21.03.2022, 31.03.2022, 25.05.2022, 02.06.2022 and 27.06.2022 respectively, may be referred.
- c. During NMCG meeting dated 11.04.2022, ED (T) stated that CPCB, UPPCB results will be believed in this matter.
- d. KRMPL has not submitted IIT Kanpur weekly testing reports for the month of February, March, April, May, June and July 2022. Hence it is not possible for PE to sent KPI adherence report till the submission of IIT Kanpur weekly test reports / CPCB or UPPCB weekly test reports.

**Annexure 1: Monthly Activity Report of Sajari for September 2022****Enclosure: Site Inspection Report for the Month of September 2022 (Sajari STP)**

Attached separately

**Enclosure: Site Inspection Report for the Month of September 2022 (Sajari IPS)**

Attached separately

**Enclosure: IIT Kanpur Lab report for the month of August 2022 (Sajari & Bingawan )**

Attached separately

## 8. CONCESSIONAIRE'S PENDING REPRESENTATION / SPECIFIC IMPROVEMENT OF QUALITY

NIL. There is no specific pending representation from the Concessionaire and no improvement in quality for the month of Sep. 2022.

## 9. STATUS OF BEP & OTHER DETAILS

Status of BEPs & other detail are given in following table 8.1:

**Table 8.1: BEPs and Design & Drawings detail**

SN	STP Facility	Status / Remarks				
		BEPs	Structure Design & Drawings	Sewer Network	Construction Plan	O&M
<b>A</b>	<b>New Facilities</b>					
i	30 MLD STP - Pankha	Approved	All Approved	Approved	Revised CP (R2) vetted by PE letter no. 832/13.05.2021. Approved by UPJN	-
ii	15 MLD STP - Unnao	Approved	All Approved	Approved	Revised CP vetted by PE letter no. 826A/10.05.2021. Approved by UPJN letter vide no. 1291/M-18/09 dated 31.05.2021.	-
iii	05 MLD STP – Shuklaganj	Approved	MPS, Sludge Thickener, GR, BW, SBR, SQ, CCT, Admin Building, Blower Room & Centrifuge vetted by PE & IIT (R), under approval at UPJN;	Vetted by STC letter no. 1052 dated 12.08.2021	CP vetted by PE letter no.865/25.05.2021. Approved by UPJN letter vide no. 1379/WS-97/152 dated 09.06.2021	-
<b>B</b>	<b>Rehabilitation and O&amp;M for 15 years</b>					
i	130 MLD STP - Jajmau (Phase I)	Approved except Control philosophy	GA & RCC design & drawing of CCT & TEPH is approved	-	The Concessionaire has submitted renovation plan on dated 28.05.2021. Approved by UPJN letter no. 1632/W-30/57 dated 24.06.2021 after rectification by KRMPL and STC is recommendation vide letter no. 931A dated 22.06.2021	-
ii			LT HT Panel room, GA and RCC design approved		KRMPL has submitted design and drawings vide KRMPL letter no. 2273 dated 08.03.2022, PE review recommendation for approval vide PE letter no.1550 dated 08.04.2022.	
iii.			GAD and RCC design drawing of Belt Filter press building		KRMPL has submitted revised GA and RCC design drawing submission vide KRMPL letter no. 2598 dated 23.08.2022, PE reviewed and given their observations vide PE letter STC/PE/KNP/1780/Jajmau Phase I Date:27.08.2022	

iv.			STADD drawing of 30mtr Chimney		KRMPL has submitted 30mtr exhaust chimney STADD design vide KRMPL letter no. 2481 dated 24.05.2022,PE reviewed and commented vide PE letter no. 1624 dated 25.05.2022.	
v.			<ul style="list-style-type: none"><li>Layout and foundation details drawing of engine room for 130 MLD STP Jajmau</li><li>submission of foundation drawing of Genset foundation, HT LT Pump Foundation, Gas blower foundation, Scrubber Foundation, Dehumidifier Foundation and Hot water pump foundation for 130 MLD STP Jajmau facilities Phase 1.</li></ul>		<ul style="list-style-type: none"><li>KRMPL has submitted details drawing vide KRMPL letter no.2521 dated 27.06.2022,PE reviewed and submitted.</li><li>KRMPL letter no UPJN/KRMPL/Kanpur/2022-23/2597 dated 23.08.2022 PE reviewed and submitted observations vide PE letter no. STC / PE / KNP / 1784 / Jajmau Phase I Date: 30.08.2022.KRMPL has not submitted compliance report till date.</li></ul>	
SN	STP Facility	O&M Manual		Schedule Maintenance Programme		Remarks
C	O&M for 15 years					
i	43 MLD STP - Jajmau (Phase II)	<ul style="list-style-type: none"><li>KRMPL has resubmitted the O&amp;M manual and PE compliance for 43 MLD STP vide KRMPL letter no 2411 dated 26.04.2022 received our office on 29.04.2022,PE reviewed the compliances of revised O&amp;M manual and issued a letter of O&amp;M manual of recommendation for approval vide PE letter no.1590 dated 29.04.2022</li><li>KRMPL has submitted revised Schedule Maintenance plan for first year of 43 MLD Jajmau Phase-II facilities vide KRMPL letter no.2406 dated 23.04.2022,PE reviewed and submitted comments on revised Schedule Maintenance plan vide PE letter no.1597 dated 02.05.2022.KRMPL has submitted revised Schedule Maintenance plan after incorporating comments given by PE vide KRMPL letter no. KRMPL letter no. UPJN/KRMPL/Kanpur/2022-23/2441 dated 07.05.2022,PE reviewed the schedule maintenance plan and recommended for approval vide PE letter no. 1626 dated 25.05.2022</li></ul>				Handover Done on 25.08.2021
ii	42 MLD STP -	Approved	KRMPL has taken closure of 1 stream for schedule maintenance			-

	Sajari		works of year-1 and year-2 from 22.06.2021. But no labour force has been deployed to start schedule maintenance works yet. Now, both the streams had been started by KRMPL since 18.10.2021 without doing any schedule maintenance works. Housekeeping is not proper and needs improvement.	
iii	210 MLD STP - Bingawan	Approved	<p>Schedule maintenance works as per approved O&amp;M manual were to be started from 1/08/2020, but not started yet. 2nd year Schedule maintenance submitted by KRMPL vide letter no.936 dated 19.02.2021. STC commented on Schedule maintenance vide letter no.795 dated 15.04.2021. Schedule maintenance works are to be started after the plant is fully operational.</p> <p>Again KRMPL has submitted a letter no. 1887 dated 02.11.2021 for schedule maintenance programme on which we have issued a letter no. 1249 dated 09.11.2021, for making revision and resubmission of schedule maintenance programme year 02 after excluding breakdown maintenance items. KRMPL has not submitted the revised schedule maintenance programme year 02 yet.</p>	-



## **ANNEXURE**

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

Date	Name of Activity#	Date of Receipt	Date of Approval (Vet/ Comment)	N o. of da y ta ke n	Time as per contrac t (days)	Del ay if any (No. of days) [7=6-5]	Reaso n for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionair e	Reaso n for delay	Step taken by PE to avoid such delay s	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
01.09.2022	Regarding for variation of transformer change quantity extra claim	16.09.2022 K-2625	4	-	20	-	-	Dr.Giridhar Satish AK Seth Prasoon Priyesh Ajay Rahul Anuj	1+1+1+1+1+1+1+1	-	-	-	Under review.
02.09.2022	Regarding for variation of transformer change quantity extra claim	10.08.22 K-2583 & 16.09.2022 K-2625	02.09.2022 S-1787	16	20	-	-	Dr.Giridhar Satish AK Seth Prasoon Ajay Rahul Anuj	1+1+1+1+1+1+1	-	-	-	PE submitted their observation on variation of transformer change quantity extra claim
02.09.2022	Submission of revised P&ID , flow meter and valve installation schematic drawing for IPS & CSPA	05.08.22 U-1471 / w-21/105	02.09.2022 S-1788	20	20	-	-	Dr.Giridhar Satish AK Seth Priyesh Prasoon Ajay Rahul Anuj	1+1+1+1+1+1+1+1	-	-	-	Request UPJN to instruct KRMPL to submitted the compliance of STC letter

Date	Name of Activity#	Date of Receipt	Date of Approval (Vet/ Comment)	N o. 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)
02.09.2022	Submission of revised C&I document for 130 MLD STP	28.08.22 K-2596	02.09.2022 S-1789	04	20	-	-	Dr.Giridhar Satish Prasoon Priyesh Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	Request UPJN to direct KRMPL to compliance of STC letter
03.09.2022	Regarding GA&RCC drawing of Belt Filter Press building and electric panel room for 130 MLD STP	01.09.2022 U-553/w-8/87	-	-	20	-	-	Dr.Giridhar Satish A.K.Seth Priyesh Ajay Rahul Anuj	1+1+1+1+1+1				Under review
04.09.2022	Pending civil , E&M & Instrumentation installation for 30 MLD STP	-	04.09.2022 S-1794	-	20	-	-	Dr.Giridhar Satish Priyesh Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	Request UPJN to direct KRMPL to compliance of STC letter
04.09.2022	Pending civil , E&M & Instrumentation installation for 130 MLD STP	-	04.09.2022 S-1795	-	20	-	-	Dr.Giridhar Satish Priyesh	1+1+1+1+1+1	-	-	-	Inspection report submitting by PE.

Date	Name of Activity#	Date of Receipt	Date of Approval (Vet/ Comment)	N o. 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)
								Priyesh Ajay Rahul Anuj					
05.09.2022	Renovation and O&M of Jajmau 33 & 11 KV Sub Station	04.09.2022 K-103	-	-	20	-	-	Dr.Giridhar Satish Priyesh Ajay Rahul Anuj	1+1+1+1+1+1				Under review
06.09.2022	Bypass arrangement at 210 MLD STP at Bingawan	03.09.2022 K-101	-	-	20	-	-	Dr.Giridhar Satish Priyesh Ajay Rahul Anuj	1+1+1+1+1+1				Under review
07.09.2022	Regarding Bypass arrangement at 210 MLD STP Bhingawan	03.09.2022 K-101	07.09.2022 S-1796	-	20	-	-	Dr.Giridhar Satish Preetam Priyesh Ajay Rahul Anuj	1+1+1+1+1+1+1	-	-	-	Request UPJN to direct KRMP to compliance of STC observation
08.09.2022	Regarding DFG units at 210 MLD Bingawan STP	-	08.09.2022 S-1797	-	20	-	-	Dr.Giridhar Satish Priyesh Ajay Rahul	1+1+1+1+1+1	-	-	-	PE submitted their observation on DFG units

Date	Name of Activity#	Date of Receipt	Date of Approval (Vet/ Comment)	N o. of da y ta ke n	Time as per contrac t (days)	Del a y if any (No. of days) [7=6-5]	Reaso n for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionair e	Reaso n for delay	Step taken by PE to avoid such delay s	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
								Anuj					
08.09.2022	Structure drawing of trust block and typical details of air valve arrangement at 30 MLD STP Pankha	06.09.22 K-2609	08.09.2022	2	20	-	-	Dr.Giridhar Satish Priyesh Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	Request UPJN to direct KRMPL to submit the compliance
08.09.2022	Disposal of Screening ,residual grit and sludge at 130 MLD stp		08.09.2022 S-1799					Dr.Giridhar Satish Priyesh Ajay Rahul Anuj	1+1+1+1+1+1				Request UPJN to direct KRMPL to arrange the sludge disposal at singawan site
09.09.2022	Regarding disposal of sludge from PST 02 and Aeration tank 02 into effluent channel of FST 02 of 130 MLD STP Jajmau	-	09.09.2022 S-1794	-	20	-	-	Dr.Giridhar Satish Priyesh Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	PE submitted the critical observation on sludge removal at 130 MLD STP Jajmau
10.09.2022	Second Saturday												
11.09.2022	Sunday												
12.09.2022	Pending compliance reports from the KRMPL report	-	12.09.2022 S-1801	-	20	-	-	Dr. Giridhar Satish Priyesh Ajay Rahul Anuj	1+1+1+1+1	-	-	-	Kindly instruct the KRMPL to submit the compliance reports of pending letter

Date	Name of Activity#	Date of Receipt	Date of Approval (Vet/ Comment)	N o. of da y ta ke n	Time as per contrac t (days)	Del ay if any (No. of days) [7=6-5]	Reaso n for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionair e	Reaso n for delay	Step taken by PE to avoid such delay s	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
12.09.2022	Submission of foundation drawing of Genset , HT LT Pump . gas blower ,scrubber foundation	09.09.2022 K-2623	12.09.2022 S-1802	3	20	-	-	Dr. Giridhar Satish Preetam Priyesh Ajay Rahul Anuj	1+1+1+1+1	-	-	-	Recommended for approval
13.09.2022	Regarding hard copy of the Sajari MPR for the month of July & August 2022.	08.09.2022 & K-112	13.09.2022 S-1803	5	20	-	-	Dr. Giridhar Satish Priyesh Ajay Rahul Anuj	1+1+1+1+1	-	-	-	Request UPJN to instruct KRMPL to submit the hard copy of MPR
13.09.2022	Regarding hard copy of the Bhingawan MPR for the month of July & August 2022..	08.09.2022 & K-112	13.09.2022 S-1804	5	20	-	-	Dr. Giridhar Satish Prasoon Priyesh Ajay Rahul Anuj	1+1+1+1+1	-	-	-	Request UPJN to instruct KRMPL to submit the hard copy of MPR
14.09.2022	Regarding ABB report For Open Channel Ultra sonic flow meter at 130 MLD Jajmau	10.09.22 K-Email	14.09.2022 S-1805	4	20	-	-	Dr. Giridhar Satish Prasoon Ajay Rahul Anuj	1+1+1+1+1	-	-	-	Kindly Instruct the KRMPL to submit the compliance report.
14.09.2022	Reminder: Regarding compliance of control and operational philosophy	-	14.09.2022 S-1806	-	20	-	-	Dr. Giridhar Satish Prasoon Ajay Rahul Anuj	1+1+1+1+1	-	-	-	It is requested to direct the KRMPL to comply over observation.

Date	Name of Activity#	Date of Receipt	Date of Approval (Vet/ Comment)	N o. of da y ta ke n	Time as per contrac t (days)	Del a y if any (No. of days) [7=6-5]	Reaso n for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionair e	Reaso n for delay	Step taken by PE to avoid such delay s	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
14.09.2022	Reminder: Regarding compliance of Hook up drawing	-	14.09.2022 S-1807	00	20	-	-	Dr. Giridhar Satish Prasoon Ajay Rahul Anuj	1+1+1+1+1	-	-	-	It is requested to direct the KRMPPL to comply over observation.
14.09.2022	Reminder: Rearding oending drawing of Instrumentation for 130 MLD STP Jajmau	-	14.09.2022 S-1808	00	20	-	-	Dr. Giridhar Satish Prasoon Priyesh Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	It is requested to direct the KRMPPL to comply over observation.
15.09.2022	Submission of RTOLMS documents for 30 mld stp at Pankha.	15.09.2022 K-2616	-	-	20	-	-	Dr. Giridhar Satish Prasoon Priyesh Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	Under review
16.09.2022	variation order against extra claim under Article 20 of CA for 15 MLD STP Unnao and 05 MLD STP Shuklaganj	16.09.2022 K-2626	-	-	20	-	-	Dr. Giridhar Satish Prasoon Priyesh Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	Under review
17.09.2022	Inspection Report of 210 MLD Bingawan facilities, inspection done on 25.08.2022 for NMCG	-	17.09.2022 S-1809	-	20	-	-	Dr. Giridhar Satish Prasoon	1+1+1+1+1+1	-	-	-	Inspection report submitted by

Date	Name of Activity#	Date of Receipt	Date of Approval (Vet/ Comment)	N o. of da y ta ke n	Time as per contrac t (days)	Del a y if any (No. of days) [7=6-5]	Reaso n for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionair e	Reaso n for delay	Step taken by PE to avoid such delay s	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Project.							Priyesh Ajay Rahul Anuj					PE.
17.09.2022	Regarding construction of boundary wall north side of Jajmau STP,ETP plant to prevent theft and unwanted of strangers and animals.	10.09.2022 K-2613	17.09.2022 S-1811	7	20	-	-	Dr. Giridhar Satish Prasoon Priyesh Ajay Rahul Anuj	1+1+1+1+1+1+1	-	-	-	UPJN is requested to instruct the KRMPL to arrange adequate safety and security.
17.09.2022	Request letter for Time Extension for 130 MLD STP Jajmau facilities	08.9.2022 J-437/012-0028/2022	17.09.2022 S-1812	9	20			Dr. Giridhar Satish Prasoon Priyesh Ajay Rahul Anuj	1+1+1+1+1+1+1				Hence, the Concessionaire' s request to grant EOT for 130 MLD Jajmau STP is recommended for approval for five months, i.e. until 9  th January 2023. It is advised that the Concessionaire should submit revised construction



Date	Name of Activity#	Date of Receipt	Date of Approval (Vet/ Comment)	N o. of da y ta ke n	Time as per contrac t (days)	Del ay if any (No. of days) [7=6-5]	Reaso n for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionair e	Reaso n 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)
													plan with detail of activities for all four payment milestones for further approval once EOT is granted by the competent authority.
17.09.2022	Regarding price variation of new belt filter press building at Jajmau facilities Phase 1	1.09.2022 J-553/W-8/87	17.09.2022 S- 1813	16				Dr. Giridhar Satish L.K.Rao Pankaj Rohit					Kindly instruct KRMPPL to comply the PE observations on RCC drawing.
18.09.2022	Sunday												
19.09.2022	Guaranteed power consumption of 130 MLD STP and 43 MLD STP at Jajmau	19.09.2022 J-1714/W-3/247	-	-	20	-	-	Dr. Giridhar Satish Prasoon Priyesh Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	Under review
20.09.2022	Recommendation for approval of P&ID ,flow meter and valave drawing forIPSS,CSPSS and 130 MLD STP Jajmau facilities.	07.09.2022, K-2611	20.09.2022 S-1814	13				Dr. Giridhar Priyesh Ajay Rahul Anuj	1+1+1+1+1	-	-	-	Recommended for approval.

Date	Name of Activity#	Date of Receipt	Date of Approval (Vet/ Comment)	N o. of da y ta ke n	Time as per contrac t (days)	Del a y if any (No. of days) [7=6-5]	Reaso n for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionair e	Reaso n for delay	Step taken by PE to avoid such delay s	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
21.09.2022	Reminder-Regarding setting up new Lab at Jajmau facilities.	-	21.09.2022 S-1815					Dr. Giridhar Priyesh Ajay Rahul Anuj	1+1+1+1+1				Requested to UPJN to direct KRMPL to submit the compliance.
21.09.2022	Inspection Report of 42 MLD Sajari facilities, inspection done on 20.09.2022	-	21.09.2022 S-1816	-	20	-	-	Dr. Giridhar Priyesh Ajay Rahul Anuj	1+1+1+1+1	-	-	-	Inspection report submitted by PE.
22.09.2022	Submission of RTOLMS documents for 30 MLD Pankha	15.09.2022 K-2616	22.09.2022 S-1817	7	20	-	-	Dr. Giridhar Priyesh Ajay Rahul Anuj	1+1+1+1+1	-	-	-	Request UPJN to instruct KRMPL to submit the compliance report.
22.09.2022	Submission of RTOLMS documents for 5 and 15MLD STP	15.09.2022 K-2624	22.09.2022 S-1819	-	20	-	-	Dr. Giridhar Priyesh Ajay Rahul Anuj	1+1+1+1+1	-	-	-	Request UPJN to instruct KRMPL to submit the compliance report
23.09.2022	PE observation on MPR of July month 2022 for 42 MLD Sajari facilities.	08.08.22 K-076 (Received our office at 21.09.2022)	23.09.2022 S-1820	2	20	-	-	Dr. Giridhar Prasoon Priyesh Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	Request UPJN to instruct KRMPL to submit the compliance report
23.09.2022	PE observation on MPR of August month 2022 for 130 MLD Jajmau	08.09.22 K-076	23.09.2022 S-1821	2	20	-	-	Dr. Giridhar Prasoon	1+1+1+1+1+1	-	-	-	Request UPJN to instruct

Date	Name of Activity#	Date of Receipt	Date of Approval (Vet/ Comment)	N o. of day ta ke n	Time as per contrac t (days)	Del ay if any (No. of days) [7=6-5]	Reaso n for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionair e	Reaso n for delay	Step taken by PE to avoid such delay s	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	facilities.	(Received our office at 21.09.2022)						Priyesh Ajay Rahul Anuj					KRMPL to submit the compliance report
23.09.2022	PE observation on MPR of August month 2022 for 42 MLD Sajari facilities.	21.09.2022 K-106 (Received our office at 21.09.2022)	23.09.2022 S-1822	2	20	-	-	Dr. Giridhar Prasoon Priyesh Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	Request UPJN to instruct KRMPL to submit the compliance report
23.09.2022	PE observation on MPR of August month 2022 for 43 MLD Jajmau facilities.	08.09.22 K-108 (Received our office at 21.09.2022)	23.09.2022 S-1823	2	20	-	-	Dr. Giridhar Prasoon Priyesh Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	Request UPJN to instruct KRMPL to submit the compliance report
24.09.2022	Submission of RTOLMS documents for 5 and 15MLD STP	22.09.2022 K-Email	24.09.2022 S-1825	2	20	-	-	Dr. Giridhar Priyesh Ajay Rahul Anuj	1+1+1+1+1	-	-	-	Recommended for approval.
24.09.2022	Reminder: Regarding compliance of Hook up drawing	22.09.2022 K-2629	24.09.2022 S-1826A	2	20	-	-	Dr. Giridhar Ajay Priyesh Rahul Anuj	1+1+1+1+1	-	-	-	It is requested to direct the KRMPL to comply over observation.
24.09.2022	Observation on GA and RCC drawing submission for belt filter press building at 130 MLD STP	22.09.22 K-2632	24.09.2022 S-1827	02	20	-	-	Dr. Giridhar Priyesh Ajay	1+1+1+1+1	-	-	-	It is requested to UPJN to direct the

Date	Name of Activity#	Date of Receipt	Date of Approval (Vet/ Comment)	N o. 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)
	Jajmau facilities.							Rahul Anuj					KRMPL to comply over observation.
25.09.2022	Sunday												
26.09.2022	RCC drawing for DG set and transformer foundation of 5 MLD shuklaganj	22.09.2022	-	-	20			Dr. Giridhar Preetam Priyesh Ajay Rahul Anuj	1+1+1+1+1+1				Under Review
27.09.2022	RCC drawing for DG set and transformer foundation of 5 MLD shuklaganj	22.09.2022 K-2634	27.09.2022 S-1662	-	20	-	-	Dr. Giridhar Priyesh Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	UPJN is requested to kindly instruct KRMPL to make rectification at earliest.
28.09.2022	Inspection Report of 210 MLD Binagawan facilities, inspection done on 27.09.2022	-	28.09.2022 S-1829	1	20	-	-	Dr. Giridhar AK Seth Priyesh Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	Inspection report submitted by PE.
29.09.2022	Regarding damaged channel of CETP at JAJMAU	19.09.2022 J-667/W-8/109	-	-	20	-	-	Dr. Giridhar AK Seth Priyesh Ajay Rahul Anuj	1+1+1+1+1+1				Under Review
30.09.2022	Inspection Report of 42 MLD	-	30.09.2022	-	20	-	-	Dr. Giridhar	1+1+1+1+1+1	-	-	-	Inspection

Date	Name of Activity#	Date of Receipt	Date of Approval (Vet/ Comment)	N o. of da y ta ke n	Time as per contrac t (days)	Del a y if any (No. of days) [7=6-5]	Reaso n for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionair e	Reaso n for delay	Step taken by PE to avoid such delay s	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
2	Sajari facilities, inspection done on 30.09.2022		2 S-1830					Prasoon AK Seth Ajay Rahul Anuj					report submitted by PE.
30.09.2022	Inspection Report of 30 MLD Pankha facilities, inspection done on 13.09.2022	-	30.09.2022 S-1831	-	20	-	-	Dr. Giridhar Prasoon AK Seth Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	Inspection report submitted by PE.
30.09.2022	Inspection Report of 130 MLD and 43mld Jajmau facilities, inspection done on 05.09.2022,15.09.2022,20.09.2022 and 23.09.2022	-	30.09.2022 S-1833A	-	20	-	-	Dr. Giridhar Prasoon AK Seth Ajay Rahul Anuj	1+1+1+1+1+1	-	-	-	Inspection report submitted by PE.

**Note:** Man-days and respective inputs of experts for the month of Sep 2022 are:

SN	Name	Designation	Total Man-days	Input
1.	Dr. Giri Prabhu Kumar	Team Leader cum waste water expert	30	Timesheet attached
2.	Mr. Preetam Walunjkar	Senior Structure Engineer	03	Timesheet attached
3.	Mr. Anil Kumar Seth	Senior Electrical Engineer	06	Timesheet attached
4.	Mr. Satish Kamaraju	Senior Process Engineer	17	Timesheet attached
5.	Mr. Sunil Basutkar	Senior Mechanical Engineer	00	Timesheet attached
6.	Mr. Prasoon Bhardwaj	Instrumentation Engineer	11	Timesheet attached

---

## **Annexure 2: Timesheets of Experts**

(Attached Separately)

---

**Annexure 3.1: KPI 130 MLD Jajmau STP (Sep 2022)**

(Attached Separately)



---

**Annexure 3.2 & 3.3: Inspection Report of Jajmau 130 MLD & 43 MLD**

(Attached Separately)

---

**Annexure 3.4: KPI for 43 MLD STP Jajmau (Sep 2022)**

(Attached Separately)

---

**Annexure 4.1 & 4.2: IIT Report for Bingawan & Sajari (Aug 2022)**

(Attached Separately)

---

**Annexure 4.3: Monthly Activity Report for Bingawan (Sep 2022)**

(Attached Separately)

---

#### **Annexure 4.4: Bingawan STP Inspection Report (Sep 2022)**

(Attached Separately)

---

**Annexure 4.5: Inspection Report Bingawan IPS (Sep 2022)**

(Attached Separately)

---

## **Annexure 5.1: Monthly Activity Report for Sajari (Sep 2022)**

(Attached Separately)

---

## **Annexure 5.2: Sajari STP Inspection Report (Sep 2022)**

(Attached Separately)



---

### **Annexure 5.3: Sajari IPS Inspection Report (Sep 2022)**

(Attached Separately)