

**National Mission for Clean Ganga (NMCG)
Ministry of Jal Shakti,
River Development & Ganga Rejuvenation
Government of India**

**Development and Rehabilitation of Sewage Treatment
Plants and Associated Infrastructure Under Hybrid
Annuity Based PPP Mode at Prayagraj, Uttar Pradesh**

(LOA File Number: 50123/447/121, dated 10/11/2018)

**Monthly Progress Report
of
Project Engineer
July 2021**



Executing Agency

GPCU, Uttar Pradesh Jal
Nigam, Prayagraj, Uttar
Pradesh
211008



Funding Agency

National Mission for Clean
Ganga, Ministry of Water
Resources, New Delhi 110002



Project Engineer

AECOM India Pvt. Ltd.,
19/F, Bldg. 5-C, DLF Cyber
City, DLF Phase-III, Gurgaon,
Haryana-122002



Concessionaire

Prayagraj Water Pvt. Ltd.,
(SPV of ADANI Enterprise Ltd.
and Organica Technologiak ZRT)
Adani House, 56 Shri Mall,
Society, Navrangpura,
Ahmedabad.

Table of Contents

1.	Introduction	2
2.	Hybrid Annuity Model (HAM)	2
3.	Objectives.....	3
4.	Project at Glance.....	5
5.	Site Location	6
6.	Project Components.....	7
7.	Status of project.....	10
7.1	Package-I status	10
7.1.1.	Engineering status.....	10
7.1.2	Procurement & Supply status	10
7.1.3	Construction, Erection & Commissioning status.....	11
7.1.4	Overall Package-I Progress:	12
7.1.5	Physical Activities in July month	13
7.1.6	Physical Activities as per Construction plan:	14
7.2	Package-II status.....	24
7.2.1.	Engineering status.....	24
7.2.2	Procurement & Supply status	24
7.2.3	Construction, Erection & Commissioning status.....	25
7.2.4	Overall Package-II Progress	26
7.2.5	Rehabilitation status till July month.....	27
7.2.6	Physical Activities status as per Rehabilitation plan:	47
7.3	Package-III status	48
8.	Meetings, Discussions and Site Visits:	49
9.	Staff deployment	50
10.	Photos of Meetings / Site Visits and Activities	51
11.	Outward Register	60
12.	Inward Register.....	66
13.	EHS targets, Achievement & compliance report for the month of July' 2021	68
14.	Status of statutory permits:.....	68
15.	Plant & Machinery Status	72
16.	Operation and Maintenance report for July month –	73

1. Introduction

The GoI (Government of India), recognizing that the long-term rejuvenation of the river Ganga will have significant social and economic benefits on the lives of 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 Government of India approved the flagship Namami Gange Program for cleaning rejuvenation and protection of river Ganga and its tributaries. In January-2016, The Government of India approved a Hybrid annuity model to implement the STP project under the Namami Gange program on a PPP basis. Subsequently, the MoWR (Ministry of Water Resources) issued the river Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (Ganga 2016 Order) to constitute various authorities to assist the Government of India in achieving its aim of effective abatement of pollution in the river Ganga. The Ganga 2016 order designated NMCG as the nodal agency for implementation of the Ganga 2016 order.

Rapidly increasing population, rising standards of living and exponential growth of industrialization and urbanisation have exposed water resources, in general, and rivers 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.

In the Ganga basin approximately 12,000 million litres per day (MLD) sewage is generated, for which presently there is a treatment capacity of only around 4,000 MLD. Approximately 3000 MLD of sewage is discharged into the mainstream of the river Ganga from the Class I & II towns located along the banks, against which treatment capacity of about 1000 MLD has been created till date.

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

- Development and Rehabilitation of Sewage Treatment Plants (STPs) and Associated Infrastructure at Prayagraj under Hybrid Annuity based PPP mode in State of Uttar Pradesh.

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.

National Mission for Clean Ganga (NMCG) and Uttar Pradesh Jal Nigam (UPJN) appointed M/s. AECOM India Pvt. Ltd., as Project Engineer for this project through tendering process. Letter of Award is issued dated 4th February 2019 and agreement signed between the parties on 5th April 2019.

3. Objectives

Objectives to achieve effective Development of Sewage Treatment Plants (STPs) at Jhunsi, Naini and Phaphamau, rehabilitation of existing STPs & associated Infrastructure and operation and maintenance of all assets for 15 years in Prayagraj, Uttar Pradesh, under Hybrid Annuity based PPP mode are proposed under this project.

The objectives that NMCG and the UP Jal Nigam wish to achieve through the Project is mentioned in **Figure 1**;

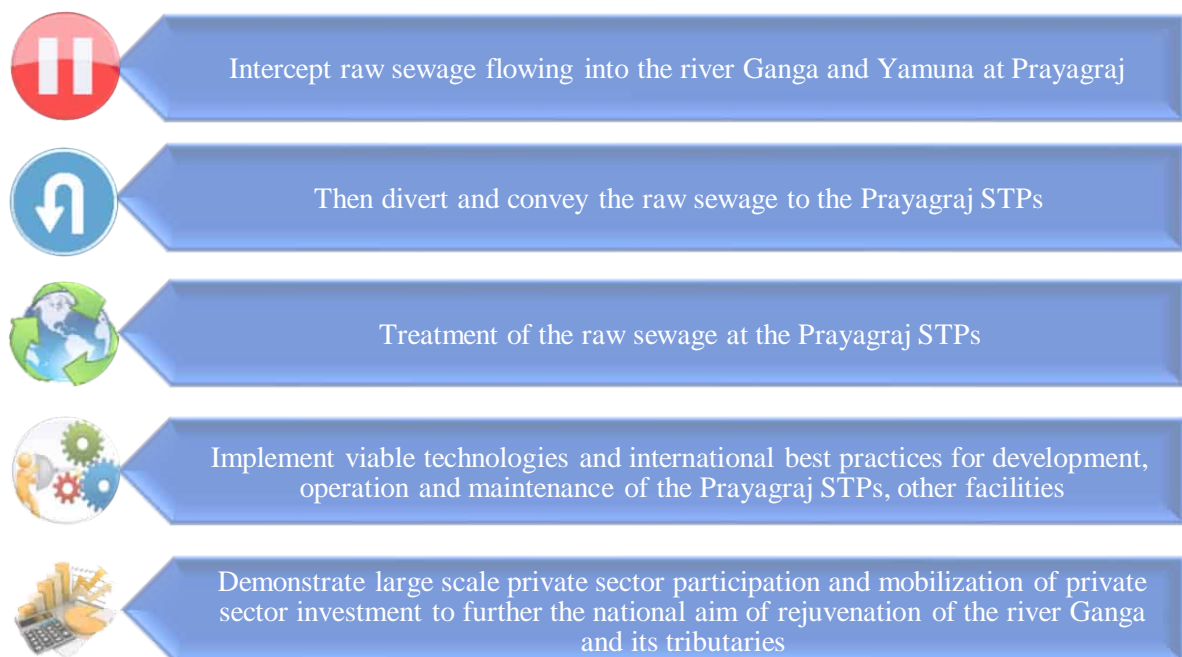


Figure 1 : Objectives of NMCG and UP JAL NIGAM

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 and Associate Infrastructure) to the Project Executing Agency/Jal Nigam/ at the end of the Concession Period (say 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.

National Mission for Clean Ganga (NMCG) appointed M/s. AECOM India Pvt. Ltd., Gurgaon as Project Engineer for this project through tendering process. Letter of Award is issued dated 4th February 2019 and agreement signed between the parties on 5th April 2019.

4. Project at Glance

The Project components details of each Facility, their grouping in each Package is presented below;

Sr. No.	Particulars	Description
1.0	Name of Project	Development and Rehabilitation of Sewage Treatment Plants and Associated Infrastructure under HAM based PPP mode at Prayagraj, Uttar Pradesh
	Client	National Mission for Clean Ganga (NMCG) and Uttar Pradesh Jal Nigam (UPJN)
2.0	Executing Agency	Uttar Pradesh Jal Nigam, Ganga Pollution Control Unit, Prayagraj, Uttar Pradesh
3.0	Project Engineer	AECOM India Pvt. Ltd.
4.0	Concessionaire	Prayagraj Water Pvt. Ltd. (SPV of ADANI Enterprise Ltd. JV Organica Technologiak ZRT)
5.0	Contract Value (Capex + Opex)	INR 908.3 Crore
6.0	Effective Date	16 th September 2019
7.0	Construction Completion Date	Package-I; 24 months from effective date Package-II; 12 months from effective date Package-III; 6 months from effective date
6.0	Operation & Maintenance	Package-I; 15 years from commercial operation date Package-II; 16 years from commercial operation date Package-III; 16.5 years from commercial operation date

5. Site Location



Entire work has been divided/ distributed in the following 3 packages.

- Package-I: Construction of 03 Nos. new STP's with Associated Infrastructure (Naini-II (42 MLD), Jhushi (16 MLD) & Phaphamau (14 MLD)). Setup rooftop Solar Power Plant of capacity 930kW (110kW at Phaphamau, 800kW at Naini-II and 20kW at Jhushi).
- Package II: Rehabilitate and Restore 02 Nos. STP's with Associated Infrastructure (Rajapur (60 MLD) & Naini-I (60+20 MLD)).
- Package III: Rehabilitate and Restore 04 Nos. STP's with Associated Infrastructure Numayadahi (50 MLD), Ponghat (10 MLD), Kodra (25 MLD) & Salori (29 MLD).

6. Project Components

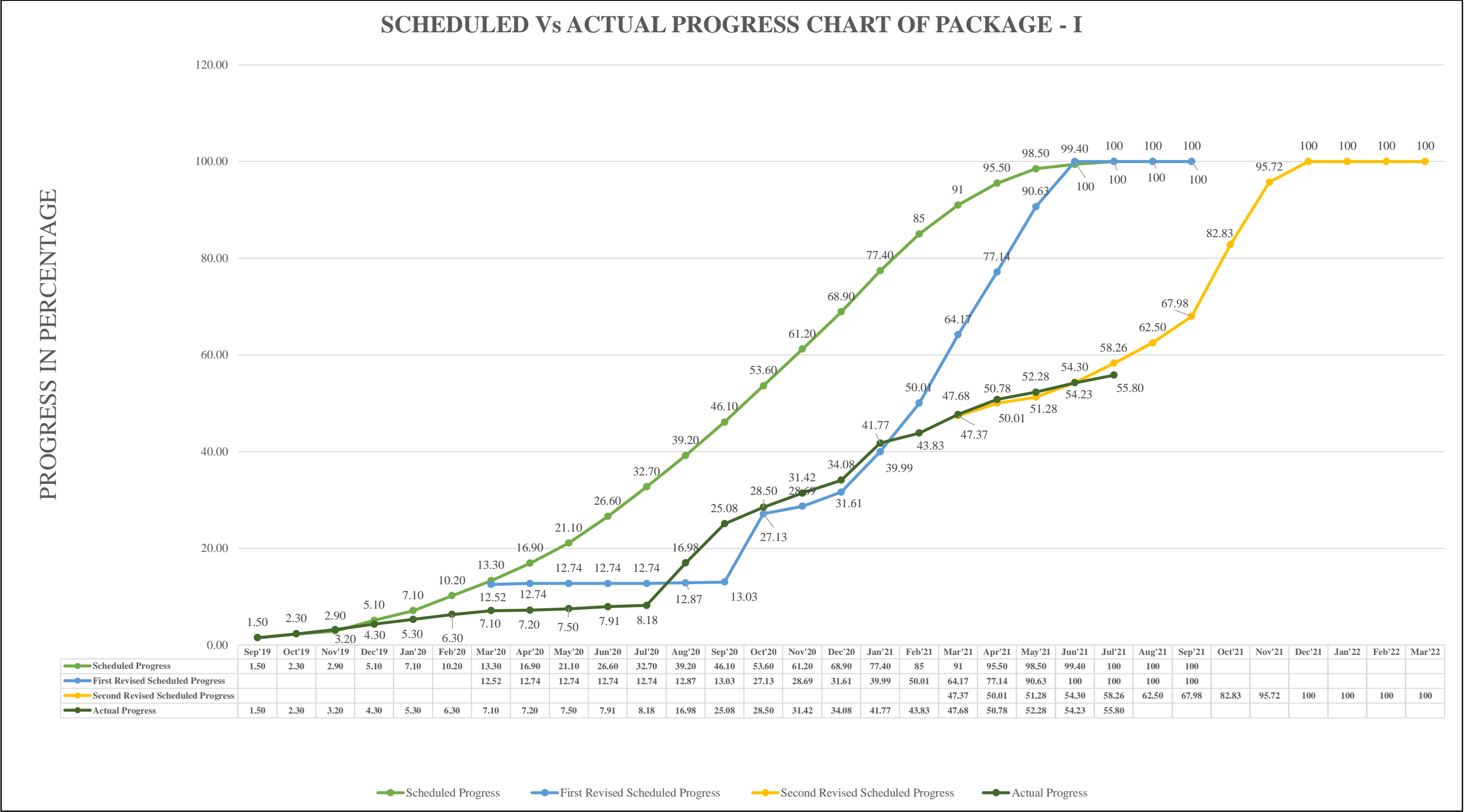
The Project components details of each Facility, their grouping in each Package is presented below

Package Number - I				
Nature of work		Facilities		
New construction		Design, develop, finance, construct, operate and maintain, and transfer the Package-I Facilities including three STP facilities with a proposed capacity of 42 MLD at Naini (District G), 14 MLD at Phaphamau (District F), and 16 MLD at Jhunsi along with their Associated Infrastructure, as per the provisions of the Concession Agreement, and in adherence to the applicable Key Performance Indicators		
Sr. No.	Facility Name	Part Of	Details	Capacity (Average)
1	Phaphamau Facilities (District -F)	Phaphamau STP Facilities	Phaphamau STP Plant	14 MLD
			Solar Power Plant	110 Kw
		Phaphamau Associated Infrastructure	Basna Nalla SPS	5.53 MLD
			Nalla Tapping and Trunk Sewer	2 Nos. Tapping
			Shantipuram Main Pumping Station	14 MLD
2	Naini Facilities (District - G)	Naini – II STP Facilities	Naini –II STP	42 MLD
			Solar Power Plant	800 Kw
		Naini -II Associated Infrastructure	Mawaiya Drain SPS	35.85 MLD
			Mawaiya Drain Tapping and Trunk Sewer	3 Nos. Tapping
			Mahewaghat Drain SPS	2.15 MLD
			Mahewaghat Drain and Trunk Sewer	3 Nos. Of Tapping
			Main Pumping Station	43.5 MLD
3	Jhunsi Facilities	Jhunsi STP Facilities	Jhunsi STP	16 MLD
			Solar Power Plant	20 Kw
		Jhunsi Associated Infrastructure	Shastri Bridge SPS	16 MLD
			Nalla Tapping and Trunk Sewer	13 Nos. Tapping
			Main Pumping Station	16 MLD

Package Number - II				
Nature of work		Facilities		
Rehabilitation		Design (wherever necessary), rehabilitate, restore, finance, operate and transfer two existing STP Facilities, one of capacity 80 MLD at Naini (District A) and other of capacity 60 MLD at Rajapur (District D) along with their Associated Infrastructure as per the provisions of the Concession Agreement, and in adherence to the applicable Key Performance Indicators.		
Sr. No.	Facility Name	Part Of	Details	Capacity (Average)
1	Naini -I Facilities (District A)	Naini-I STP Facilities	Naini -I STP (60 MLD) STP Technology: ASP	60 MLD
			Naini -I STP (20 MLD) STP Technology: ASP	20 MLD
			Naini- I Biogas Plant	600 KW
		Naini-I Associated Infrastructure	Chachar Nalla SPS	35 MLD with 2 Nos. Tapping
			Gaughat MPS	80 MLD
2	Rajapur Facilities (District D)	Rajapur STP Facilities	Rajapur STP STP Technology: UASB	60 MLD
		Rajapur Associated Infrastructure	Mumfordgunj SPS	55 MLD with 1 Nos. Tapping
			Rajapur SPS	25 MLD with 1 Nos. Tapping

Package Number - III				
Nature of work		Facilities		
Rehabilitation		Design (wherever necessary), rehabilitate, restore, finance, operate and transfer four existing STP Facilities, one of capacity 50 MLD at Numayadahi (District B), one of capacity 29 MLD at Salori (District C), one of capacity 25 MLD at Kodra (District E) and another of capacity 10 MLD at Ponghat (District E), along with their Associated Infrastructure, as per the provisions of the Concession Agreement, and in adherence to the applicable Key Performance Indicators.		
Sr. No.	Facility Name	Part Of	Details	Capacity (Average)
1	Salori Facilities (District - C)	Salori STP Facilities	Salori STP (29 MLD) STP Technology: FAB	29 MLD
		Salori Associated Infrastructure	Salori MPS	29 MLD with 1 Nos. Tapping
2	Numayadahi Facilities (District B)	Numayadahi STP Facilities	Numayadahi STP STP Technology: Bio tower + ASP	50 MLD
		Numayadahi Associated Infrastructure	Ghaggar Nalla SPS	50 MLD with 1 Nos. Tapping
			Sasur Kadheri SPS	15 MLD with 1 Nos. Tapping
			Lukarganj SPS	16.5 MLD with 1 Nos. Tapping
3	Kodra Facilities (District E)	Kodra STP Facilities	Kodra STP STP Technology: Bio tower + ASP	25 MLD
		Kodra Associated Infrastructure	Kodra MPS	25 MLD with 1 Nos. Tapping
4	Ponghat Facilities (District E)	Ponghat STP Facilities	Ponghat STP STP Technology: Bio tower + ASP	10 MLD
		Ponghat Associated Infrastructure	Ponghat MPS	10 MLD with 1 Nos. Tapping

7.1.4 Overall Package-I Progress:



- Project Engineer has provided observation on Concessionaire MPR vide letter number AIPL/NMCG/PRAYAG/1121 on dated 14.08.2021 Therefore, status may be change after observation incorporated by Concessionaire.

7.1.5 Physical Activities in July month

NEW CONSTRUCTION			
S. No.	Structure Description	Structure Qty.	Status
PACKAGE – I			
PHAPHAMAU STP			
1.	FCR tank	01 No.	<ul style="list-style-type: none"> Laundry Wall under Progress
2.	Staff Quarter	01 Nos	<ul style="list-style-type: none"> RCC of roof slab completed. Brick work under progress.
3.	MPS	01 No.	<ul style="list-style-type: none"> RCC of 4th lift of wall is completed.
4.	Tube Settler	01 No.	<ul style="list-style-type: none"> RCC of 1st lift of wall is completed above the CCT slab.
5.	Process Building	01 No	<ul style="list-style-type: none"> RCC of Raft is under progress
6.	Basna Nalla SPS	01 No.	<ul style="list-style-type: none"> No work
NAINI – II STP			
7.	FCR tank	01 No.	<ul style="list-style-type: none"> FCR Tank-A – 4 Nos wall upto 4th lift casting completed. Tank B -2 Nos of wall up to 3rd lift towards tube settler completed and 2 Nos of wall up to 2nd lift towards process building completed
8.	Tube Settler	o.	<ul style="list-style-type: none"> 1st lift wall casting completed in CCT area.
9.	Staff Quarter	01 No.	<ul style="list-style-type: none"> Brick works under progress.
10.	MPS	01 No.	<ul style="list-style-type: none"> 2nd lift wall casting is completed
11.	Process Building	01 No	<ul style="list-style-type: none"> 50% raft casting completed
12.	Mahewaghat SPS	01 No.	<ul style="list-style-type: none"> 2nd lift wall casting completed.
13.	Mawaiya Nalla SPS	01 No.	<ul style="list-style-type: none"> Steel cutting binding and shifting work under progress.
14.	Boundary Wall	01 No.	<ul style="list-style-type: none"> No work
15.	DI Pipeline from Mahewaghat to Naini-II (300mm Dia.)	700 Rmt.	<ul style="list-style-type: none"> No work
16.	DI Pipeline from Mawaiya Nalla to Naini-II (800mm Dia.)	700 Rmt.	<ul style="list-style-type: none"> No work

17.	RCC 600 dia. From Mahewaghat to Naini-II	4490 RMT	<ul style="list-style-type: none"> 2712.5 m Laying work completed, and balance work under progress.
18.	RCC 1400 dia. From Mahewaghat to Naini-II	3050 RMT	<ul style="list-style-type: none"> 2488 m Laying work completed, and balance work under progress.
19.	RCC 1600 mm Dia.	880 RMT	<ul style="list-style-type: none"> No work
JHUNSI STP			
20.	FCR tank	01 No.	<ul style="list-style-type: none"> 50 % RCC work of 5th lift wall & top beam is completed. Remaining 50 % of 5th lift wall & top beam shuttering & Reinforcement is under progress.
21.	Process Building	01 No	<ul style="list-style-type: none"> PCC work is completed. RCC work of Raft is completed. Reinforcement & Shuttering of column above Raft is under progress.
22.	Tube Settler	01 No.	<ul style="list-style-type: none"> Reinforcement & Shuttering of 3rd lift is under progress.
23.	Security Cabin	01 No.	<ul style="list-style-type: none"> No work
24.	Staff Quarter	01 No.	<ul style="list-style-type: none"> Brick work is under progress.

7.1.6 Physical Activities as per Construction plan:

Sr. No.	Work description	Scheduled Start Date	Scheduled End Date	Schedule d Completion (In %)	Completi on up to previous month (In %) (A)	This month Completi on (In%) (B)	Total Completio n (In %) (A+B)
Erection Commissioning, Trial Run and COD of Phaphamau STP (14 MLD) & Associated works							
1.	Tree cutting work	01-01-20	31-01-20	100	100	0	100
2.	Dismantling of existing structure	01-01-20	31-01-20	100	100	0	100
3.	FCR tank unit	01-12-19	15-10-21				
4.	Excavation work	01-12-19	15-03-20	100	100	0	100
5.	Boulder filling work	15-03-20	10-05-20	100	100	0	100
6.	PCC work	01-10-20	09-10-20	100	100	0	100
7.	RCC upto completion	01-10-20	30-09-21	86	85	2	87
8.	Other Misc Works	09-01-21	30-09-21	100	0	0	0
9.	Hydrotesting	01-10-21	15-10-21	100	0	0	0
10.	Tube settler, CCT & Sludge storage Tank	16-01-21	30-10-21				
11.	Earth work & Boulder filling work	16-01-21	28-02-21	100	100	0	100

Sr. No.	Work description	Scheduled Start Date	Scheduled End Date	Schedule d Completion (In %)	Completi on up to previous month (In %) (A)	This month Completi on (In%) (B)	Total Completio n (In %) (A+B)
12.	PCC work	01-02-21	28-02-21	100	100	0	100
13.	RCC upto completion	01-02-21	15-10-21	45	35	2	37
14.	Other Misc Works	01-10-21	15-10-21				
15.	Hydrotesting	15-10-21	30-10-21				
16.	Main Process Building	01-03-21	15-12-21				
17.	Excavation	01-03-21	03-07-21	95	100	0	100
18.	Rubble soling/ Stone filling work	03-07-21	10-07-21	100	0	75	75
19.	PCC	10-07-21	20-07-21	100	0	75	75
20.	Structure completion (Expect finishing works)	20--07-21	20-10-21	15	0	0	0
21.	Other Misc Works	15-10-21	15-12-21				
22.	Hydrotesting	21-10-21	31-10-21				
23.	Basana Nala SPS and I&D Works	09-01-21	15-11-21				
24.	Excavation work	09-01-21	15-10-21	100	5	0	5
25.	PCC	16-10-21	20-10-21	100	0	0	0
26.	RCC upto completion	20-10-21	09-11-21	100	0	0	0
27.	Hydrotesting	16-10-21	31-10-21	100	0	0	0
28.	Boundary wall	01-09-21	15-11-21	100	0	0	0
29.	Staff quarter	01-09-21	15-11-21	100	0	0	0
30.	Other Misc Works	01-10-21	15-11-21	100	0	0	0
31.	Shantipuram MPS and I&D Works	01-09-20	30-11-21				
32.	Excavation work	01-11-20	28-03-21	100	100	0	100
33.	PCC	28-03-21	30-03-21	100	100	0	100
34.	RCC work upto completion	01-04-21	15-10-21	25	40	2	42
35.	Other Misc Works	16-09-21	30-11-21	100	0	0	0
36.	Hydrotesting	16-11-21	30-11-21	100	0	0	0
37.	Staff quarter	01-09-20	30-09-21	60	70	15	85
38.	Pipe laying (Rising Main & Gravity Main)	16-10-21	30-11-21				
39.	Rising main	16-10-21	30-11-21				
40.	Excavation, Laying & Jointing, Backfilling/ Restoration works	16-10-21	30-11-21		0	0	0
41.	Hydrotesting	21-11-21	30-11-21		0	0	0
42.	Gravity Main	16-10-21	30-11-21				

Sr. No.	Work description	Scheduled Start Date	Scheduled End Date	Schedule d Completion (In %)	Completi on up to previous month (In %) (A)	This month Completi on (In%) (B)	Total Completio n (In %) (A+B)
43.	Excavation, Laying & Jointing, Backfilling/ Restoration works	16-10-21	20-11-21		0	0	0
44.	Hydrotesting	20-11-21	30-11-21		0	0	
45.	Other works	01-01-20	15-12-21				
46.	Site office (Temporary office)	01-01-20	31-01-20		100	0	100
47.	Other misc. works (Boundary Wall, Road, rainwater harvesting, Land scaping etc.)	16-11-21	15-12-21		0	0	0
48.	Mechanical Erection- STP unit	16-10-21	15-12-21				
49.	Pumps	01-11-21	15-12-21	0			
50.	Lamella clarifier/ Tube settler	16-10-21	15-12-21	0			
51.	Grit removal system	16-10-21	15-12-21	0			
52.	Blowers & Diffuser	16-10-21	15-12-21	0			
53.	Fire fighting System	16-11-21	15-12-21	0			
54.	Screens	01-11-21	15-12-21	0			
55.	Piping, Valves & Gates	01-11-21	15-12-21	0			
56.	Chlorination	20-10-21	15-12-21	0			
57.	Media Installation/ Bio module	01-11-21	15-12-21	0			
58.	Other misc. work	16-11-21	15-12-21	0			
59.	Mechanical Erection- SPS & MPS	01-11-21	15-12-21				
60.	Pumps	01-11-21	15-12-21	0			
61.	Screens	01-11-21	15-12-21	0			
62.	Piping, Valves & Gates	01-11-21	15-12-21	0			
63.	Other misc. work	16-11-21	15-12-21	0			
64.	Electrical and C&I- STP Unit	16-10-21	15-12-21				
65.	Transformer Installation	01-11-21	15-12-21	0			
66.	HT/LT Panel erection	01-11-21	15-12-21	0			
67.	Instrumentation works	16-10-21	15-12-21	0			
68.	CCTV	16-11-21	15-12-21	0			
69.	Cable Laying	16-10-21	15-12-21	0			
70.	PLC Panel & Online monitoring system	16-10-21	15-12-21	0			
71.	Solar Panel	01-11-21	15-12-21	0			

Sr. No.	Work description	Scheduled Start Date	Scheduled End Date	Schedule d Completion (In %)	Completi on up to previous month (In %) (A)	This month Completi on (In%) (B)	Total Completio n (In %) (A+B)
72.	DG Installation	16-11-21	15-12-21	0			
73.	Other misc. work	16-11-21	15-12-21	0			
74.	Electrical and C&I- SPS & MPS	01-10-21	15-12-21				
75.	Transformer Installation	01-11-21	15-12-21	0			
76.	HT/LT Panel Erection	01-10-21	15-12-21	0			
77.	CABLE LAYING	01-11-21	15-12-21	0			
78.	DG Installation	16-11-21	15-12-21	0			
79.	PLC Panel & Online monitoring system	16-10-21	15-12-21	0			
80.	Other misc. work	16-11-21	15-12-21	0			
81.	Commissioning of Mech., Electrical and C&I	01-12-21	15-12-21	0			
82.	Trial Run, Final Inspection and COD	16-12-21	15-03-22				
83.	Trial Run and Final Inspection	16-12-21	14-03-22	0			
84.	COD	14-03-22	15-03-22	0			
85.	Erection Commissioning, Trial Run and COD of Naini-II (42 MLD) & Associated works						
86.	Removal of shrubs	01-01-20	28-02-20	100	100	0	100
87.	FCR tank unit	01-02-20	30-10-21				
88.	Excavation work	01-02-20	15-03-20	100	100	0	100
89.	Boulder filling work	26-10-20	30-11-20	100	100	0	100
90.	PCC work	01-11-20	30-11-20	100	100	0	100
91.	RCC work upto completion	01-12-20	15-10-21	90	75	5	80
92.	Other Misc Works	01-09-21	30-09-21				
93.	Hydrotesting	15-10-21	30-10-21				
94.	Tube settler, CCT & Sludge storage Tank	16-01-21	31-10-21				
95.	Earth work & Boulder filling work	16-01-21	22-01-21	100	100	0	100
96.	PCC work	19-01-21	31-01-21	100	100	0	100
97.	RCC work upto completion	01-03-21	20-10-21	30	25	5	30
98.	Other Misc Works	16-09-21	31-10-21		0	0	0
99.	Hydrotesting	20-10-21	31-10-21		0	0	0
100.	Main Process Building	01-02-21	28-11-21				
101.	Excavation	01-02-21	31-05-21	100	100	0	100

Sr. No.	Work description	Scheduled Start Date	Scheduled End Date	Schedule d Completion (In %)	Completi on up to previous month (In %) (A)	This month Completi on (In%) (B)	Total Completio n (In %) (A+B)
102.	Rubble soling/ Stone filling work	01-07-21	31-07-21	100	100	0	100
103.	PCC	01-07-21	31-07-21	100	25	3	28
104.	Structure completion (Expect finishing works)	01-05-21	20-10-21	20	0	0	0
105.	Other Misc Works	06-10-21	28-11-21				
106.	Hydrotesting	20-10-21	31-10-21				
107.	Mawaiya SPS and I&D work	01-02-21	15-11-21				
108.	Excavation work	01-02-21	28-02-21	100	100	0	100
109.	PCC	01-05-21	15-06-21	100	100	0	100
110.	RCC WORK upto completion	15-05-21	20-10-21				
111.	Hydrotesting	20-10-21	31-10-21				
112.	Boundary wall	01-09-21	31-10-21				
113.	Staff quarter	01-09-21	31-10-21				
114.	I&D Other misc works	01-09-21	15-11-21				
115.	Mahewaghat SPS and I&D work	01-01-21	31-10-21				
116.	Excavation work	01-01-21	15-04-21	100	100	0	100
117.	PCC	01-01-21	15-04-21	100	100	0	100
118.	RCC Work upto completion	30-05-21	20-10-21	15	0	35	35
119.	Other finishing work	01-10-21	31-10-21	100	0	0	0
120.	Hydrotesting	20-10-21	31-10-21	100	0	0	0
121.	Boundary wall	01-09-21	31-10-21	100	0	0	0
122.	Staff quarter	01-09-21	31-10-21	100	0	0	0
123.	I&D Other misc works	01-09-21	31-10-21	100	0	0	0
124.	Naini-II MPS and I&D work	26-10-20	15-11-21				
125.	Excavation work	16-01-21	25-04-21	100	100	0	100
126.	PCC	16-01-21	25-04-21	100	100	0	100
127.	RCC Work upto completion	01-05-21	25-10-21	100	0	0	0
128.	Other finishing work	01-09-21	15-11-21	100	0	0	0
129.	Hydrotesting	20-10-21	31-10-21	100	0	0	0
130.	Staff quarter	26-10-20	31-10-21	100	85	5	90
131.	I&D Other misc works	16-10-21	31-10-21	100	0	0	0
132.	Pipe laying (Rising Main & Gravity Main)	16-01-21	31-10-21				

Sr. No.	Work description	Scheduled Start Date	Scheduled End Date	Schedule d Completion (In %)	Completi on up to previous month (In %) (A)	This month Completi on (In%) (B)	Total Completio n (In %) (A+B)
133.	Rising main	16-01-21	30-10-21				
134.	Excavation, Laying & Jointing, Backfilling/ Restoration works	16-01-21	20-09-21	85	90	0	90
135.	Hydrotesting	01-10-21	30-10-21	100	0	0	0
136.	Gravity Main	01-03-21	31-10-21				
137.	Excavation, Laying & Jointing, Backfilling/ Restoration works	01-03-21	21-10-21	45	60	15	75
138.	Hydrotesting	21-10-21	31-10-21				
139.	Other works	01-01-20	15-10-21				
140.	Site office (Temporary office)	01-01-20	31-01-21				
141.	Other misc works (Boundary Wall, Road, rain water harvesting, Land scaping etc)	01-03-20	15-10-21	70	65	10	75
142.	Mechanical Erection- STP unit	16-10-21	10-12-21				
143.	Pumps	16-10-21	25-11-21	0			
144.	Lamella clarifier/ Tube settler	16-10-21	29-11-21	0			
145.	Grit removal system	16-10-21	29-11-21	0			
146.	Piping, Valves & Gates	16-10-21	29-11-21	0			
147.	Firefighting System	16-11-21	30-11-21	0			
148.	Chlorination	16-10-21	29-11-21	0			
149.	Blowers & Diffuser	16-10-21	29-11-21	0			
150.	screens	16-10-21	29-11-21	0			
151.	Media Installation/ Bio module	16-10-21	30-11-21	0			
152.	Other misc. work	16-11-21	10-12-21	0			
153.	Mechanical Erection- SPS & MPS	16-10-21	15-12-21				
154.	Pumps	16-10-21	15-12-21	0			
155.	Screens	16-10-21	15-12-21	0			
156.	Piping, Valves & Gates	16-10-21	15-12-21	0			
157.	Other misc. work	16-11-21	15-12-21	0			
158.	Electrical and C&I- STP Unit	16-10-21	15-12-21				

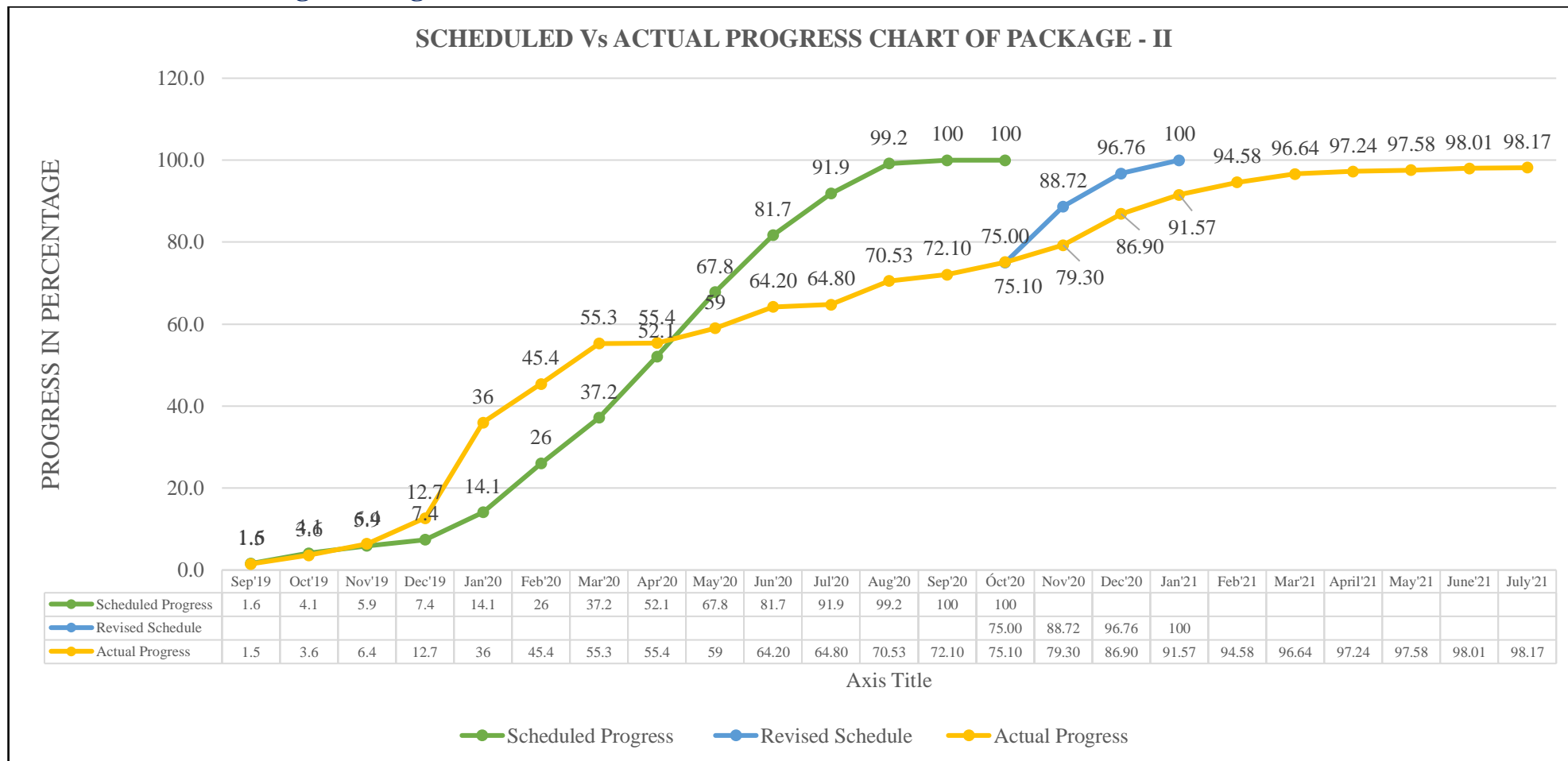
Sr. No.	Work description	Scheduled Start Date	Scheduled End Date	Schedule d Completion (In %)	Completi on up to previous month (In %) (A)	This month Completi on (In%) (B)	Total Completio n (In %) (A+B)
159.	Transformer Installation	16-11-21	15-12-21	0			
160.	HT/LT panel erection	01-11-21	15-12-21	0			
161.	PLC Panel & Online monitoring system	16-10-21	15-12-21	0			
162.	Instrumentation works	16-10-21	15-12-21	0			
163.	CCTV	16-11-21	15-12-21	0			
164.	CABLE LAYING	16-10-21	15-12-21	0			
165.	Solar Panel	01-11-21	15-12-21	0			
166.	Other misc. work	01-12-21	15-12-21	0			
167.	Electrical and C&I- SPS & MPS	16-10-21	15-12-21				
168.	Transformer Installation	01-11-21	15-12-21	0			
169.	HT/LT panel erection	16-10-21	15-12-21	0			
170.	CABLE LAYING	16-10-21	15-12-21	0			
171.	DG Installation	16-11-21	15-12-21	0			
172.	PLC Panel & Online monitoring system	16-10-21	15-12-21	0			
173.	Other misc. work	16-11-21	15-12-21	0			
174.	Commissioning of Mech., Electrical and C&I	01-12-21	15-12-21	0			
175.	Trial Run, Final Inspection and COD	16-12-21	15-03-22				
176.	Trial Run and Final Inspection	16-12-21	14-03-22	0			
177.	COD	14-03-22	15-03-22	0			
178.	Erection Commissioning, Trial Run and COD of Jhunsu STP (16 MLD) & Associated works						
179.	FCR tank unit	01-10-2020	15-11-21				
180.	Excavation work	01-10-20	25-10-20	100	100	0	100
181.	Boulder filling work	26-10-20	29-10-20	100	100	0	100
182.	PCC work	30-10-20	30-10-20	100	100	0	100
183.	RCC upto completion	31-10-20	15-10-21	80	90	5	95
184.	Other finishing work	16-09-21	15-11-21				
185.	Hydrotesting	01-10-21	15-10-21				
186.	Tube settler, CCT & Sludge storage Tank	01-01-21	15-12-21				
187.	Earth work & Boulder filling work	01-01-21	15-02-21	100	100	0	100
188.	PCC work	16-02-21	28-02-21	100	100	0	100
189.	RCC upto completion	01-03-21	15-11-21	50	35	5	40

Sr. No.	Work description	Scheduled Start Date	Scheduled End Date	Schedule d Completion (In %)	Completi on up to previous month (In %) (A)	This month Completi on (In%) (B)	Total Completio n (In %) (A+B)
190.	Other finishing work	16-10-21	15-12-21				
191.	Hydrotesting	21-10-21	31-10-21				
192.	Main Process Building	01-06-21	15-12-21				
193.	Excavation & Column	01-06-21	16-06-21	100	95	5	100
194.	Rubble soling/ Stone filling work	16-06-21	26-06-21	100	50	50	100
195.	PCC	26-06-21	30-06-21	100	0	100	100
196.	Structure completion (Expect finishing works)	01-06-21	24-10-21	15	0	28	28
197.	Other finishing work	01-09-21	15-12-21				
198.	Hydrotesting	24-10-21	31-10-21				
199.	Shastri bridge SPS and I&D work	01-09-21	15-12-21				
200.	Excavation work	01-09-21	30-09-21				
201.	PCC	01-09-21	30-09-21				
202.	RCC upto completion	01-09-21	20-10-21				
203.	Other finishing work	30-10-21	15-12-21				
204.	Hydrotesting	16-10-21	29-10-21				
205.	Boundary wall	01-09-21	15-12-21				
206.	Staff quarter	01-09-21	21-11-21				
207.	Other Misc works	10-12-21	15-12-21	100	0	0	0
208.	Jhansi MPS and I&D work	01-09-20	30-11-21				
209.	Excavation work	01-08-21	30-06-21				
210.	PCC	01-09-21	07-09-21				
211.	RCC upto completion	07-09-21	20-10-21				
212.	Other finishing work	01-10-21	31-10-21				
213.	Hydrotesting	21-10-21	31-10-21				
214.	Staff quarter	01-09-20	30-09-21	70	60	10	70
215.	Other Misc works	16-11-21	30-11-21				
216.	Pipe laying (Rising Main & Gravity Main)	16-09-21	15-11-21				
217.	Rising main	01-09-21	31-10-21				
218.	Excavation, Laying & Jointing, Backfilling/ Restoration works	01-09-21	15-10-21	100	10	0	10
219.	Hydrotesting	16-10-21	31-10-21	100	0	0	0
220.	Gravity Main	01-09-21	15-11-21				

Sr. No.	Work description	Scheduled Start Date	Scheduled End Date	Schedule d Completion (In %)	Completi on up to previous month (In %) (A)	This month Completi on (In%) (B)	Total Completio n (In %) (A+B)
221.	Excavation, Laying & Jointing, Backfilling/ Restoration works	16-09-21	31-10-21	100	0	0	0
222.	Hydrotesting	01-11-21	15-11-21	100	0	0	0
223.	Other works	01-02-20	15-12-21				
224.	Site office (Temporary office)	01-02-20	30-04-20	100	100	0	100
225.	Other misc works (Boundary Wall, Road, rain water harvesting, Land scaping etc)	16-10-21	15-12-21	100	0	0	0
226.	Mechanical Erection-STP unit	01-11-21	15-12-21				
227.	Pumps	01-11-21	15-12-21	0			
228.	Lamella clarifier/ Tube settler	01-11-21	15-12-21	0			
229.	Fire fighting System	16-11-21	15-12-21	0			
230.	Chlorination	01-11-21	15-12-21	0			
231.	Grit removal system	01-11-21	15-12-21	0			
232.	Blowers & Diffuser	01-11-21	15-12-21	0			
233.	Screens	01-11-21	15-12-21	0			
234.	Piping, Valves & Gates	01-11-21	15-12-21	0			
235.	Media Installation/ Bio module	01-11-21	15-12-21	0			
236.	Other misc. work	16-11-21	15-12-21	0			
237.	Mechanical Erection-SPS & MPS	16-10-21	15-12-21				
238.	Pumps	16-10-21	15-12-21	0			
239.	Screens	01-11-21	11-12-21	0			
240.	Piping, Valves & Gates	01-11-21	15-12-21	0			
241.	Other misc. work	16-11-21	15-12-21	0			
242.	Electrical and C&I- STP Unit	01-11-21	15-12-21				
243.	Transformer Installation	16-11-21	13-12-21	0			
244.	HT/LT panel erection	01-11-21	15-12-21	0			
245.	PLC Panel & Online monitoring system	01-11-21	15-12-21	0			
246.	Instrumentation works	01-11-21	15-12-21	0			
247.	CCTV	01-11-21	10-12-21	0			
248.	Cable laying	01-11-21	15-12-21	0			

Sr. No.	Work description	Scheduled Start Date	Scheduled End Date	Schedule d Completion (In %)	Completi on up to previous month (In %) (A)	This month Completi on (In%) (B)	Total Completio n (In %) (A+B)
249.	DG Installation	01-11-21	10-12-21	0			
250.	Solar Panel	01-11-21	15-12-21	0			
251.	Other misc. work	16-11-21	15-12-21	0			
252.	Electrical and C&I- SPS & MPS	16-10-21	15-12-21				
253.	Transformer Installation	01-11-21	13-12-21	0			
254.	HT/LT Panel erection	01-11-21	15-12-21	0			
255.	Cable laying	01-11-21	15-12-21	0			
256.	DG Installation	01-11-21	10-12-21	0			
257.	PLC Panel & Online monitoring system	16-10-21	15-12-21	0			
258.	Other misc. work	16-11-21	15-12-21	0			
259.	Commissioning of Mech., Electrical and C&I	16-10-21	15-12-21	0			
260.	Trial Run, Final Inspection and COD	15-12-21	15-03-22				
261.	Trial Run and Final Inspection	15-12-21	14-03-22	0			
262.	COD	14-03-22	15-03-22	0			

7.2.4 Overall Package-II Progress



Note: As per approved Guaranteed Interim Availability, Rehabilitation works for Naini-I facility must have been completed by 31.01.2021 and COD was to be announced on 01.02.2021 but Rehabilitation works for the facility are not completed yet. So, Concessionaire is suggested to complete remaining Rehabilitation works for Naini-I facility at the earliest for the announcement of COD or otherwise liquidated damages as per clauses given in Concession Agreement will be applicable.

7.2.5 Rehabilitation status till July month

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
	Naini-I STP	
1.	Installation of flowmeter – 1 No. in New Inlet line of Naini - I STP from Gaughat MPS	1) Verification of calibration for flowmeters at Naini I STP by service Engineer from Forbes Marshall is completed but Verification of calibration for flowmeters at Gaughat MPS by service Engineer is not completed. Also, during visit when the flow from flowmeters of Naini-I STP was verified in accordance with Parshall flume after Grit chambers it was found that there was considerable difference in flow measurement from both. Hence, Concessionaire is required to resolve above issues for verification of the amount of Raw sewage received at Naini-I STP. 2) Sluice valve adjacent to the flowmeter is to be shifted and replaced with knife gate valve Required Knife Edge Gate Valve is not available. 3) Earthing wires must be connected.
2.	Installation of flowmeter – 1 No. in Old Inlet line of Naini - I STP from Gaughat MPS	1) Verification of calibration for flowmeters at Naini I STP by service Engineer from Forbes Marshall is completed but Verification of calibration for flowmeters at Gaughat MPS by service Engineer is not completed. Also, during visit when the flow from flowmeters of Naini-I STP was verified in accordance with Parshall flume after Grit chambers it was found that there was considerable difference in flow measurement from both. Hence, Concessionaire is required to resolve above issues for verification of the amount of Raw sewage received at Naini-I STP. 2) Earthing wires must be connected.
3.	Installation of flowmeter in Bypass line of Naini - I STP	Work is not started yet.
4.	Replacement of Sluice gates - 4 Nos at Inlet of TEPH sump of Naini – I STP	1) Erection work is completed. 2) Equipment are taken into operation on 02.01.2021.
5.	Replacement of PMCC panel in Naini-I STP	1) Erection of new electrical panel is completed. 2) Testing of panel is completed & it is charged. 3) Connection of cables for field equipment is completed. 4) All open spaces must be closed.
6.	Cleaning of Chlorine Contact Tank in Naini-I STP	1) Tiles fitted in the outlet launder are coming out, Concessionaire to please rectify the problem. 2) Cleaning of CCT is required again as sludge due to malfunctioning of FST no. 3 is deposited in the CCT and hence the quality of effluent is getting deteriorated.

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
7.	Installation of flowmeter in Effluent Bypass of Naini - I STP	1) Calibration of flowmeter is pending. 2) Earthing wires must be connected. 3) Construction of RCC chamber for the flowmeter is not started yet.
8.	Replacement of Manual Screen with Mechanical Fine Screen - 1	1) Erection & commissioning of equipment is completed. 2) Equipment is taken into operation on 03.02.2021.
9.	Replacement of Manual Screen with Mechanical Fine Screen - 2	1) Erection & commissioning of equipment is completed. 2) Equipment is taken into operation on 09.01.2021.
10.	Replacement of Manual Screen with Mechanical Fine Screen - 3	1) Erection & commissioning of equipment is completed. 2) A chute type arrangement is required at the end of compactor for properly transferring waste material. 3) Equipment is taken into operation on 02.01.2021.
11.	Overhauling of Mechanical Screens of 20 MLD stream along with conveyor	It has been observed that considerable amount of solid waste is passing the screens which is getting deposited in subsequent units of 20 MLD stream. Concessionaire to please check & rectify the problem.
12.	Rehabilitation works for Grit Removal Unit - 1	1) Erection & commissioning of equipment is completed. 2) Equipment is taken into operation on 03.02.2021. 3) Torque switch arrangement for scrapper mechanism as per approved FEED is not provided.
13.	Rehabilitation works for Grit Removal Unit - 2	1) Erection & commissioning of equipment is completed. 2) Equipment is taken into operation on 09.01.2021. 3) Torque switch arrangement for scrapper mechanism as per approved FEED is not provided. 4) Grit removal from the unit is not very efficient, Concessionaire to please check & resolve the issue.
14.	Rehabilitation works for Grit Removal Unit - 3	1) Erection & commissioning of equipment is completed. 2) Equipment is taken into operation on 02.01.2021. 3) Torque switch arrangement for scrapper mechanism as per approved FEED is not provided.
15.	Rehabilitation works for Grit Removal Unit - 4 (20 MLD)	1) Overhauling work is completed. 2) Equipment is taken into operation on 10.01.2021. 3) Abnormal noise is coming from the gear box of rake classifier, this must be rectified. 4) Torque switch arrangement for scrapper mechanism as per approved FEED is not provided.
16.	Replacement of Electrical Panel for Grit cum PST	1) Erection of new electrical panel is completed. 2) Testing of panel is completed & it is charged. 3) Connection of cables for field equipment is completed. 4) All open spaces must be closed.

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
17.	Rehabilitation works for PST - 1	1) Erection & commissioning of equipment is completed.2) Unit is taken into operation on 09.01.2021.3) Maintenance of Telescopic valve is pending.4) Scum removal system is not working efficiently as large amount of scum can be seen floating on the surface. Scum is fully filled in the box & it is not going properly to collection chamber. Rectification of problem is required.5) Torque switch arrangement for scrapper mechanism as per approved FEEP is not provided.
18.	Rehabilitation works for PST - 2	1) Erection & commissioning of equipment is completed. 2) Unit is taken into operation on 02.01.2021. 3) Maintenance of Telescopic valve is pending. 4) Scum removal system is not working efficiently as large amount of scum can be seen floating on the surface. Scum is fully filled in the box & it is not going properly to collection chamber. Rectification of problem is required. 5) Torque switch arrangement for scrapper mechanism as per approved FEEP is not provided.
19.	Rehabilitation works for PST - 3	1) Erection & commissioning of equipment is completed. 2) Unit is taken into operation on 24.02.2021. 3) Maintenance of Telescopic valve is pending. 4) Scum removal system is not working efficiently as large amount of scum can be seen floating on the surface. Scum is fully filled in the box & it is not going properly to collection chamber. Rectification of problem is required. 5) Torque switch arrangement for scrapper mechanism as per approved FEEP is not provided.
20.	Rehabilitation works for PST - 4 (20 MLD)	1) Overhauling work is completed. 2) Equipment is taken into operation on 10.01.2021. 3) Torque switch arrangement for scrapper mechanism as per approved FEEP is not provided. 4) Scum removal system is not working efficiently as large amount of scum can be seen floating on the surface. Scum is fully filled in the box & it is not going properly to collection chamber. Rectification of problem is required.
21.	Replacement of Valves for Drain line of PST - 4 Nos	1) Installation of actuators is pending. Instrument cable is not available. 2) Cleaning required for all valves chambers so that scum/sludge can flow freely without any choking problem. 3) Installation of flushing arrangement for the drain valves is pending. 4) Replacement of Telescopic valve is pending. Material is not available.

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
22.	Rehabilitation works for Aeration Tank no. 1	1) Erection & commissioning of equipment is completed. 2) Unit is taken into operation on 02.01.2021. 3) Proper cable glands must be provided in terminal boxes. 4) Installation of DO analyzer as per approved FEEP is pending.
23.	Rehabilitation works for Aeration Tank no. 2	1) Erection & commissioning of equipment is completed. 2) Unit is taken into operation on 04.03.2021. 3) Proper cable glands must be provided in terminal boxes. 4) Installation of DO analyzer as per approved FEEP is pending.
24.	Rehabilitation works for Aeration Tank no. 3	1) Erection & commissioning of equipment is completed. 2) Unit is taken into operation on 13.02.2021. 3) Proper cable glands must be provided in terminal boxes. 4) Installation of DO analyzer as per approved FEEP is pending.
25.	Replacement of Diffusers along with Air grid pipeline for Aeration Tank - 4 (20 MLD)	1) During visit, operations of purge piping is checked and it was found that no air is coming out of the pipe. Concessionaire is required to check the issue or it can create problem during operations of unit in future. 2) Interlink of DO analyzer with Aeration blowers is not done yet for running blower in auto mode. 3) Commissioning of pressure transmitter, temp transmitter & DO analyzer is pending.
26.	Replacement of Aeration Blowers for Aeration Tank of 20 MLD	1) As per initial plan, two old blowers were to be replaced by new blowers but new Air Blowers are not available at site. 2) Currently, installation of third old blower is completed but it is not taken into operation yet. Hence, 2 out of 3 blowers are available for operation.
27.	Rehabilitation works for FST - 1	1) Erection & commissioning of equipment is completed. 2) Unit is taken into operation on 02.01.2021. 3) Torque switch arrangement for scrapper mechanism as per approved FEEP is not provided.
28.	Rehabilitation works for FST - 2	1) Erection & commissioning of equipment is completed. 2) Unit is taken into operation on 09.01.2021. 3) Torque switch arrangement for scrapper mechanism as per approved FEEP is not provided.
29.	Rehabilitation works for FST - 3	1) Erection & commissioning of scrapper is completed. 2) Unit is taken into operation on 01.02.2021. Final Inspection of unit was not completed as unit was taken into operation for resolving the issues of FST 1&2 (one by one) and for improving the quality of effluent. 3) Sheets for current density baffle are also not installed completely. 4) Since the issues of FST 1 & FST 2 are resolved hence it is suggested to complete remaining works of this FST and inspection call must be raised for the same. 5) Torque switch arrangement for scrapper mechanism as per approved FEEP is not provided.

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
30.	Rehabilitation works for FST - 4 (20 MLD)	1) Overhauling work is completed. 2) Equipment is taken into operation on 10.01.2021. 3) Torque switch arrangement for scrapper mechanism as per approved FEED is not provided.
31.	Replacement of Valves for Drain line of FST - 4 Nos	1) Installation of actuators is pending. Instrument cables is not available at site. 2) Installation of flushing arrangement for the drain valves must be completed.
32.	Replacement of Electrical Panel for Return Sludge cum FST	1) Erection of new electrical panel is completed. 2) Testing of panel is completed & it is charged. 3) Connection of cables for field equipment is completed. 4) All open spaces must be closed.
33.	Rehabilitation works for Return Sludge Pumps (60 MLD)	1) Replacement of 4 nos NRVs & 2 nos discharge vales is pending in the pump house. Material is not available at site. 2) Currently, 2 out of 4 pumps are under maintenance and hence no pump is in stand-by.
34.	Rehabilitation works for Return Sludge Pumps (20 MLD)	Currently, 1 out of 2 pumps in under maintenance and hence no pump is in stand-by.
35.	Rehabilitation works for Thickener - 1	1) Erection & commissioning of equipment is completed. 2) Unit is taken into operation on 15.02.2021. 3) Torque switch arrangement for scrapper mechanism as per approved FEED & datasheet must be provided. 4) It has been observed that thick layer of scum is formed on top of the water surface. To rectify the same, Concessionaire to please ensure that sludge and supenatant are withdrawn periodically from Thickener.
36.	Rehabilitation works for Thickener - 2	1) Erection & commissioning of equipment is completed. 2) Unit is taken into operation on 16.03.2021. 3) Torque switch arrangement for scrapper mechanism as per approved FEED & datasheet must be provided. 4) It has been observed that thick layer of scum is formed on top of the water surface. To rectify the same, Concessionaire to please ensure that sludge and supenatant are withdrawn periodically from Thickener.
37.	Rehabilitation Works for Sludge Pumps of Thickener	1) Civil modification work for the unit is completed. 2) Erection of pumps is completed and unit is taken into operation on 15.02.2021. 3) Currently, commissioning of two small pumps is completed and they are taken into operation. Commissioning of two big pumps is pending. 4) Installation of exhaust fans is pending.

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
38.	Erection & Commissioning of Valves in Inlet line of Thickener	Valve installation work is completed.
39.	Replacement of Valves for Drain line of Thickener -2 Nos	1) Valves are available at site, valve for thickener no. 1 is replaced but valve for thickener no. 2 is not completed as removal of old valve is not possible. Arrangements must be made to remove second valve also or otherwise installation of actuator will not be possible. 2) Installation of actuators is pending. Instrument cable is not available at site. 3) Installation of flushing arrangement for valves is pending.
40.	Replacement of Electrical Panel for Digester cum Thickener	1) Erection of new electrical panel is completed. 2) Testing of panel is completed & it is charged. 3) Connection of cables for field equipment is completed. 4) All open spaces must be closed.
41.	Rehabilitation works for HNC pumps of Naini Area in TEPH	1) Proper cable glands must be provided in terminal boxes. 2) Cable laying must be done properly in the cable trench. 3) Replacement of NRV in header line of Naini pumps is pending.
42.	Rehabilitation works for HNC pumps of Dandi Area in TEPH	1) Proper cable glands must be provided in terminal boxes. 2) Cable laying must be done properly in the cable trench.
43.	Replacement of Electrical Panel for TEPH	1) Old panel is removed. 2) Erection of new panel is completed on old trench but since new panel is of double front type, modification is required in existing room and trench for maintaining proper gap around the electrical panel. Concessionaire to please do the needful. 3) All open spaces remains to be closed by chequered plates 4) Rubber mats must be kept around LT panel.
44.	Replacement of Electrical Panel for DGs	1) New panel is commissioned & it is shifted to new position in Gas engine room. 2) Commissioning work is completed. 3) Rubber mats must be kept around LT panel.
45.	Replacement of HT Panel	1) Erection of new panel is completed. 2) Testing of panel is completed & it is charged. 3) All open spaces remains to be closed by chequered plates. 4) Rubber mats must be kept around HT panel. 5) Erection of Battery bank & battery charger is completed but commissioning work is pending.

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
46.	Erection & Commissioning of New Transformers	1) Erection work is completed. 2) All testing works are completed. 3) Cable connection work is completed. 4) Load transfer to new Transformers is completed and it is charged.. 5) Fencing work and finishing work around transformer is completed. 6) Filling & levelling work of gravels must be completed around transformers.
47.	Erection & Commissioning of New DGs	1) Erection work is completed. 2) Erection work for chimney is pending. 3) Fuel tank installation is completed but its connection to DGs is not done. 4) Concessionaire is required to complete levelling, commissioning, testing & raise inspection call. 5) Proper excess to the DG sets must be provided.
48.	Rehabilitation Works for Chlorination System	1) Erection & commissioning of equipment is completed. 2) Unit is taken into operation on 02.01.2021. 3) It must also be ensured that chlorine dosing is done to effluent that is bypassing the chlorine contact tank.
49.	Erection & Commissioning of Leak Absorption System	1) Civil work is not completed yet. 2) Erection of new equipment is completed. 3) Commissioning work is pending.
50.	Erection & Commissioning of Sludge Dewatering System	1) Civil work is not completed yet. 2) E&M work is not started yet.
51.	Rehabilitation Works for Filtrate Pumps	1) Erection & commissioning of 4 nos new pumps is completed. 2) Unit is taken inot operation. 3) Pipeline from thickener to filtrate pump house is currently choked. Concessionaire is please rectify the problem, also it is suggested to give one extra manhole so that choking rectification can be done easily in future.
52.	Installation of flowmeter in Header line of HNC pumps for Dandi Area in TEPH	Testing, commissioning work is completed, flowmeter is in operation.
53.	Installation of flowmeter in Header line of HNC pumps for Naini Area in TEPH	Testing, commissioning work is completed, flowmeter is in operation.

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
54.	Installation of flowmeter in Inlet line of Thickener from Blending Tank	1) Installation of flowmeter for one out of two thickeners is pending. Equipment is not available at site. 2) Calibration of flowmeter for one thickener is completed by site team, Concessionaire is required to get the calibration of flowmeter verified by Project Engineer/UPJN in presence of representative from OEM. 3) Construction of RCC chamber is not started yet.
55.	Installation of flowmeter in Header line of Submersible pumps from Thickener to Digester	1) Installation of flowmeter is completed.2) Calibration of flowmeter for one thickener is completed by site team, Concessionaire is required to get the calibration of flowmeter verified by Project Engineer/UPJN in presence of representative from OEM.3) Construction of RCC chamber is completed but covers are not installed yet.
56.	Installation of flowmeter in Return Sludge Line from RSPH of 60 MLD	1) Installation of new flowmeter is completed but flowmeter of size 350mm is fitted in line of 300mm by giving enlargers at both ends. This must be checked as both enlargers are fitted within 2D & 5D dimensions in downstream & upstream respectively. This must be checked & rectified as flowmeter can give wrong values. 2) Calibration of flowmeter is completed by site team, Concessionaire is required to get the calibration of flowmeter verified by Project Engineer/UPJN in presence of representative from OEM.. 3) Connection of earthing wires is pending.
57.	Installation of flowmeter in Return Sludge Line from RSPH of 20 MLD	1) Installation of flowmeter is completed. 2) Installation of local indicator, commissioning work is pending. 3) Construction of RCC chamber is completed, installation of covers is pending.

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
58.	Erection & Commissioning of Online Instruments	<p>1) Process Analyzers: Calibration work for inlet & outlet analyzers is completed. For better results, it is suggested to keep sampling time less than 15 min. Process Analyzer at both inlet & outlet is not giving correct readings as the sampling pump is not working properly, Concessionaire to please rectify the problem.</p> <p>2) Chlorine Analyzer: Calibration of analyzer is completed by site team, Concessionaire is required to get the calibration of analyzer verified by Project Engineer/UPJN. Also, the analyzer is not giving correct values.</p> <p>3) DO Analyzers: Erection & commissioning of DO analyzers for Surface Aerators is not started yet. Installation of DO analyzer for 20 MLD is completed, calibration of DO analyzer is pending. Interlink of DO analyzer for 20 MLD with Aeration blowers is not done yet for running blowers in auto mode.</p> <p>4) Differential level sensors: Erection work is completed but commissioning is pending.</p> <p>5) Level sensors: Testing of all level sensors must be checked as they are not giving correct readings.</p> <p>6) Installation of pressure transmitter for header line of air blowers is completed, commissioning work is pending.</p> <p>7) Installation of pressure transmitter for header line of treated effluent pumps is pending.</p> <p>8) Work for installation of online monitoring system for gas generation/sludge handling area is in progress.</p>
59.	Erection & Commissioning of PLC panels	<p>1) Commissioning work is completed except for gas generation/sludge handling area.</p> <p>2) Connection of equipment, field instruments is completed except for gas generation/sludge handling area.</p>
60.	Erection & Commissioning of SCADA System	<p>1) Commissioning works for SCADA system is completed except for gas generation/sludge handling area.</p> <p>2) KPI & Flow Report generation from SCADA is started. Running hour report for equipment is not started yet.</p> <p>3) Communication from associated infrastructure is not received in Naini-I STP.</p> <p>4) Provision for transmission of data from SCADA servers to CPCB/SPCB as per conditions given in CA is not provided yet.</p>
61.	Replacement of Sluice gate in Effluent Bypass of Naini – I STP	No work is in progress
62.	Replacement of Sluice Gates in Inlet of Grit Removal Units	No work is in progress
63.	Replacement of Sluice Gates in Inlet of Primary Settling Tanks	No work is in progress

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
64.	Replacement of Sluice Gates in Inlet of Aeration Tanks	No work is in progress
65.	Replacement of Sluice Gates in Inlet of Final Settling Tanks	No work is in progress
66.	Replacement of Valve in old header line from Guahan MPS	No work is in progress
67.	Replacement of other miscellaneous gates/valves for 60 MLD streams	No work is in progress
68.	Overhauling & Testing of Electrical panels for 20 MLD stream	No work is in progress
69.	Erection & Commissioning of APFC Panels	1) Construction work for trenches is completed. 2) Erection work for panels is completed. 3) Testing & Commissioning work is not completed yet.
70.	Erection & commissioning of Service Water Pumps - 2 Nos	No work is in progress
71.	Erection & commissioning of Dilution Water Pumps - 2 Nos	Pumps which were originally procured for dilution line are not used for thickened sludge pumping and dilution water will be taken from service water pumps.
72.	Rehabilitation works for Storm Water Pump House	No work is in progress
73.	Rehabilitation works for Tube well Pump House	No work is in progress
74.	Rehabilitation works for Digester no. 1	1) Leakage rectification work for digester is completed and testing was completed by Concessionaire's own team. 2) Unit is taken into operation on 17.07.2021. 3) Installation of instruments is in progress.
75.	Rehabilitation works for Digester no. 2	1) Cleaning work for the Digester is completed. 2) Erection of Gas mixing system is in progress. 3) Commissioning of the unit is pending.
76.	Rehabilitation works for Digester no. 3	1) Cleaning work for the Digester is completed. 2) Erection of Gas mixing system is in progress. 3) Commissioning of the unit is pending.
77.	Erection & Commissioning of Compressors for Gas mixing system of Digesters	1) Finishing work for compressor room is pending. 2) Erection of all three skids of compressor is completed. 3) Piping work is completed. 4) Commissioning of electrical panels & compressors is pending.

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
78.	Erection & Commissioning of Heat Exchangers - 3 nos / sludge recirculation pumps - 6 Nos	1) Erection of heat exchanger - 1 no., sludge recirculation pumps - 2 nos of Digester no. 1 & 2 are completed.2) Construction of foundation for heat exchanger & sludge recirculation pumps of Digester no. 3 is not started due to accumulation of sludge in that area. E&M works are not started yet.3) Piping work for heat exchanger and sludge recirculation pumps of Digester no. 1 & 2 is completed and for Digester no. 3 is pending.4) Electrical, C&I work for the unit is pending.5) Commissioning of heat exchanger, sludge recirculation pumps of Digester 1 & 2 is in progress.
79.	Erection & Commissioning work of Gas Holder no. 1 & 2	1) Commissioning work for the unit is completed. 2) Installation of instruments is in progress.
80.	Erection & Commissioning of Dewatering Feed pumps	1) Piping work for the unit is completed. 2) Construction of shed for dewatering feed pumps is in progress. 3) Electrical connection of pumps, commissioning of unit is in progress.
81.	Erection & Commissioning of Gas Engine	1) Electrical, C&I works are in progress. 2) Construction of working platform around gas engine is in progress. 3) Commissioning wor of the unit is in progress.
82.	Erection & Commissioning of Control Panel Room for Gas Engine	1) Cable connection work is in progress. 2) Commissioning of the unit is in progress. 3) Civil modification work for the unit is in progress.
83.	Erection & Commissioning of H ₂ S Scrubber, Blowers - 2 Nos & Dehumidifier	1) Cable connection work is in progress. 2) Commissioning of the unit is in progress.
84.	Erection & Commissioning of HT, LT & Hot Water System	1) Electrical, C&I work is completed. 2) Commissioning work is in progress.
85.	Erection & Commissioning of Radiator	1) Electrical, C&I work is in progress. 2) Commissioning work is in progress.
86.	Erection & Commissioning of Ventilation System	1) Electrical, C&I work is in progress. 2) Commissioning work is in progress.
87.	Erection & Commissioning of Gas Flare	1) Erection of equipment is completed. 2) Piping work is completed. 3) Commissioning work is pending. 4) Construction of chamber for moisture trap is completed. Installation of covers is pending.
88.	Erection & Commissioning of Gas Piping for complete Gas Generation Area	1) Excavation work is completed. 2) Pipe laying Work is in progress

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
89.	Erection & Commissioning of Sludge Piping for complete Gas Generation Area	1) Excavation work is completed. 2) Pipe laying Work is in progress
90.	Cleaning of Sludge Drying Beds	1) Cleaning work is in progress but Concessionaire is requested to expedite the work. 2) Currently, only one sludge drying bed is empty hence sludge withdrawal from the STP is not proper which in turn is severely affecting the quality of effluent.
91.	Set-up of Laboratory	1) Civil work, finishing work for the unit are completed. 2) Set-up of laboratory is completed.
92.	Overhauling of ultrasonic flowmeters in separate channels for 60 MLD & 20 MLD streams	No work is started yet.
93.	Overhauling/Replacement of HOT/EOT for complete STP	No work is started yet.
94.	Gaughat MPS	
95.	Installation of flowmeter in old header line of Gaughat MPS	1) Installation of new flowmeter is completed. 2) Commissioning work is completed. 3) Calibration of flowmeter is completed by site team, Concessionaire is required to get the calibration of flowmeter verified by Project Engineer/UPJN. 4) Earthing connections remains to be connected. 5) Installation of slab covers for RCC chamber is pending.
96.	Installation of flowmeter in new header line of Gaughat MPS	1) Installation of new flowmeter is completed. 2) Commissioning work is completed. 3) Calibration of flowmeter is completed by site team, Concessionaire is required to get the calibration of flowmeter verified by Project Engineer/UPJN. 4) Earthing connections remains to be connected. 5) Construction of RCC chamber is completed. Installation of slab covers is pending.
97.	Replacement of HNC pumps - 5 Nos	1) Commissioning work for one HNC pump is completed, commissioning work for three pumps is pending. 2) It was also decided that one new pump must be installed in vacant space for 5th pump. No work for the same is started yet. 3) Replacement of NRV in header line of HNC pumps is pending. Excavation work is completed but no work is in progress currently.
98.	Replacement of Submersible pumps - 3 Nos	1) Currently, Erection & commissioning of one pump is completed. 2) Erection & commissioning of two pumps is still pending

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
99.	Replacement of Mechanical Screen - 2 Nos	1) Repairing of one screen is completed and installation, commissioning of screen is completed. 2) Other screen is taken out for maintenance purpose. Currently, maintenance work for the screen is not in progress due to non-availability of spares.
100.	Replacement of Electrical Panel for DGs	Panel is charged & taken into operation.
101.	Cleaning of Receiving Chamber for HNC pumps	Cleaning of sump is completed.
102.	Cleaning of Receiving Chamber for Submersible pumps	Cleaning of sump is completed.
103.	Erection & Commissioning of PLC panels	1) Work for operation of HNC pumps from PLC and in auto mode (based on level of sump) is pending. 2) Work for operation of submersible pumps from PLC and in auto mode (based on level of sump) is pending. 3) Work for operation of mechanical screens (both old 7 new) from PLC and in auto mode (based on level of sump) is pending. 4) Report generation from SCADA is not started yet. 5) Connection of actuator operated valve with PLC system is pending. 6) Transmission of data from MPS to Naini I STP is not started yet.
104.	Erection & Commissioning of Online Instruments	1) Differential level sensors: Erection work is completed but commissioning is pending. 2) Installation of pressure transmitter on header line of HNC pumps is pending. 3) Installation of pressure transmitter on header line of submersible pumps is pending.
105.	Overhauling of Mechanical Screens	1) Repairing of one screen is completed and installation, commissioning of screen is completed. 2) Other screen is taken out for maintenance purpose. Currently, maintenance work for the screen is not in progress due to non-availability of spares.
106.	Overhauling of DG sets	1) No work is in progress. 2) Repairing work of 11 KV DG synchronization panel is pending. 3) Repairing work of 500 KVA/11KV DG set is pending. 4) Repairing of NGR panel is pending.
107.	Replacement of emergency gate	1) No work is in progress 2) Repairing of other sluice gates inside pumping station is pending.
108.	Overhauling & Testing of Old Electrical panels for HNC pump house & submersible pump house	No work is in progress

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
109.	Installation of Manual Screen in Receiving Chamber of Gaughat Pumping station	1) No work is in progress 2) As informed by the Concessionaire, order for new material is given.
110.	Chacharnalla SPS	
111.	Installation of flowmeter - 600mm in header line of VNC pumps in Chacharnalla SPS	1) Calibration of flowmeter is completed by site team but it is not working. Concessionaire is required to rectify the problem. 2) During visit, it was found that flow calculation was done on the basis of running hours of pumps which is not correct. Hence, both flowmeters must be made ready as part of online monitoring system or otherwise it will not be deemed as completed.
112.	Overhauling/Calibration of flowmeter - 400mm in header line of VNC pumps in Chacharnalla SPS	1) Overhauling/calibration of old flowmeter is not started yet. 2) Currently, flowmeter is not working. 3) During visit, it was found that flow calculation was done on the basis of running hours of pumps which is not correct. Hence, both flowmeters must be made ready as part of online monitoring system or otherwise it will not be deemed as completed.
113.	Erection of Manual Screens at tapping points in Chacharnalla SPS	Minor civil work is pending.
114.	Replacement of Big VNC pumps in Chacharnalla SPS	1) Dismantling of two pumps is completed. 2) Erection & commissioning of two new pumps is completed 3) Currently, two pumps are ready for operations & one old pump is under maintenance. Hence no pump is in stand-by.
115.	Overhauling of Small VNC pumps	1) Overhauling work is not started yet. 2) Currently, both pumps are in working condition.
116.	Replacement of MCC panel at Chacharnalla SPS	1) Panel is taken into operation on 10.01.2021.
117.	Cleaning of Receiving Chamber at Chacharnalla SPS	Cleaning of sump is completed.
118.	Erection & Commissioning of PLC panels	1) Work for operation of VNC pumps (both 125 HP & 75 HP) in auto mode (based on level of sump) is pending. 2) Work for operation of mechanical screens from PLC and in auto mode (based on level of sump) is pending. 3) Report generation from SCADA is not started yet. 4) Transmission of data from SPS to Naini I STP is not started yet.
119.	Erection & Commissioning of Online Instruments	1) Differential level sensors: Erection work is completed but commissioning is pending. 2) Installation of pressure transmitter on header line of VNC pumps is pending.
120.	Overhauling of Mechanical Screens	1) Overhauling work is not started yet. 2) Currently, both screens are in working condition.

NAINI-I STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS (Mechanical)		
Sr. No.	Structure / Equipment details	Status
121.	Overhauling & Testing of Old Electrical panels	1) Repairing of PT & Relay in 11KV HT panel is pending. 2) No work is in progress
122.	Overhauling of all Sluice Gates inside pumping station	No work is in progress
123.	Overhauling of DG sets	1) Overhauling work is not started yet. 2) During earlier visit, facility was checked by giving load on DGs and it was found that during the changeover, the lever inside incomer panel of DG was not working properly. Hence, servicing of old panels is required & it must be done from authorized vendors so that proper pumping during power cuts can also be ensured. Work for the same is still pending. 3) Repairing of DG set for 75 HP pumps is pending.

RAJAPUR STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS		
Sr. No.	Structure / Equipment details	Status
1.	Rajapur STP	
2.	Repairing of Parshall flume after PTU & installation of Ultrasonic flowmeter.	Testing & commissioning of flowmeter is completed, flowmeter is in operation.
3.	Installation of flowmeter – 1 No. in Inlet line of Rajapur STP from Mumfordganj SPS	Testing & commissioning of flowmeter is completed, flowmeter is in operation.
4.	Installation of flowmeter in Outlet of Rajapur STP	1) Installation of flowmeter is completed. 2) Commissioning work is in progress. 3) Calibration of flowmeter was checked in the presence representative from OEM along with UPJN officials but it was showing incorrect readings as per the level of water in Parshall flume and as per flow chart. Concessionaire to please resolve the issue at the earliest.
5.	Cleaning of Chlorine Contact Tank in Rajapur STP	Cleaning work is completed.
6.	Overhauling of Mechanical Screens at PTU	1) Overhauling work is completed. 2) Both screens are in working condition.
7.	Rehabilitation works for Grit Removal Unit - 1 & 2	1) Overhauling work is completed. 2) Chain guard for all drives must be installed. 3) Abnormal vibration found in both organic pumps; this must be rectified.
8.	Rehabilitation work for Sluice Gates at PTU	Rehabilitation works is completed.
9.	Rehabilitation works for UASB - 1	1) Leakage rectification required from HDP pipes. 2) Cleaning work was completed for one compartment only out of as unit was taken into operation due to start of Magh Mela. 3) No cleaning work is in progress currently. 4) It is observed that problem of leakage from HDP inlet pipes is very frequent. For minimizing this problem, it was suggested to give proper supports under the pipes. Concessionaire to please do the needful.
10.	Rehabilitation works for UASB - 2	1) Dewatering of structure is not started yet. 2) No cleaning work is in progress currently. 3) It is observed that problem of leakage from HDP inlet pipes is very frequent. For minimizing this problem, it was suggested to give proper supports under the pipes. Concessionaire to please do the needful.

RAJAPUR STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS		
Sr. No.	Structure / Equipment details	Status
11.	Rehabilitation works for Aeration Tank	1) Erection work for three new Surface Aerators is completed but it is taking high ampere during operation. 2) Cleaning of Aeration tank is not started yet. 3) Rectification work for one surface aeration is completed & now it is taking normal amperes but it is observed that splashing of sewage has become half of the amount at earlier stage. This problem must be rectified or otherwise it will be difficult to maintain DO level in the aeration tank.4) Currently, 12 old & 1 new aerator are ready for operation and 2 aerators are in maintenance, hence only 1 surface aerator is in stand-by.
12.	Rehabilitation works for Quiescent Zone	1) Unit is taken into operation on 01.01.2021 without doing the cleaning work. 2) As informed, current plan is to avoid cleaning of Quiescent Zone do it at some afterwards due to time constraints. In current situation also we can see that the dead sludge which is deposited in Quiescent Zone over the years is coming out along with the treated water resulting in higher TSS & low DO hence It is strongly suggested to complete the cleaning of Quiescent Zone to increase the treatment efficiency of the plant.
13.	Rehabilitation works in MEP Room	1) Civil modification work regarding safe approach to the electrical panels is completed. 2) Slope of ramp is very steep, proper slope must be maintained so that heavy equipment can be moved easily during maintenance works.
14.	Rehabilitation works in Metering Room	1) Floor restoration work is completed. 2) Increase in height of Electrical Panels is completed. 3) No permanent arrangement is being made for safe approach to the electrical panel at increased height which is very dangerous and violates all safety norms. Concessionaire is required to look into the matter & do the needful at the earliest.
15.	Cleaning of Sludge Drying Beds	1) Cleaning work is not in progress. 2) Currently, 8 sludge drying beds are empty, Concessionaire is suggested to empty remaining sludge drying beds also for preparation of monsoon season.
16.	Increase in height of foundation for DGs	1) Repairing of shed is pending. 2) Operating plate form is required around DG set for operation. 3) It is suggested to increase the height of chimney as per CPCB norms. 4) No work regarding overhauling of DGs is in progress

RAJAPUR STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS		
Sr. No.	Structure / Equipment details	Status
17.	Rehabilitation works for Gas Handling System	No work is started for the system. Concessionaire to please expedite the work as this system is part of the process must be made functional before the end of Rehabilitation period.
18.	Rehabilitation works for Sludge Handling System	1) Two sludge sumps are available in one sump but in second sump only one pump is present. Installation of remaining pump in second sump is pending. 2) Overhauling of two pumps for the system is pending.
19.	Rehabilitation works for Filtrate pump house	Overhauling of one pump out of two is pending.
20.	Rehabilitation works of Chlorination system.	1) Proper Pipe Supports for the pipeline are required. 2) During visit it was found that booster pumps were losing pressure very frequently due to which chlorine dosing was stopped. Concessionaire to please rectify the problem. 3) It was also found that booster pumps were getting water from potable water system of plant which is completely against CPCB norms. Concessionaire to please look into the matter and make arrangement for using treated water in booster line.
21.	Rehabilitation works of Leak Absorption System	1) The system must be checked in Auto mode. 2) Proper caustic solution must be filled in Caustic pit for absorbing the chlorine leakage.
22.	Erection & Commissioning of Sludge Dewatering System	1) Civil work for the unit is in progress. 2) E&M work for the unit is in progress.
23.	Erection & Commissioning of Online Instruments	1) Process Analyzers: Erection of process analyzers at inlet and outlet is completed, commissioning work is completed. Calibration work is completed. For better results, it is suggested to keep sampling time less than 15 min. Process Analyzer at both inlet & outlet are not giving correct readings, Concessionaire to please rectify the problem. 2) Chlorine Analyzer: Erection & commissioning of Chlorine Analyzer is completed. Calibration of analyzer is completed by site team, Concessionaire is required to get the calibration of analyzer verified by Project Engineer/UPJN. Also, the analyzer is not giving correct values. 3) DO Analyzers: Erection & commissioning of DO analyzers for Surface Aerators is not started yet. 4) Differential level sensors: Erection work is completed but commissioning is pending for mechanical screens at both Rajapur STP & Rajapur SPS. 5) Installation of pressure transmitter on header line of submersible pumps for Rajapur SPS is pending.


RAJAPUR STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS		
Sr. No.	Structure / Equipment details	Status
24.	Erection & Commissioning of PLC panels	1) Commissioning work is completed except for sludge dewatering unit. 2) Connection of equipment, field instruments is completed except for sludge dewatering unit. 3) Commissioning of differential level sensors for mechanical screen of Rajapur SPS is pending. 4) Commissioning of differential level sensors for mechanical screen of STP is pending.
25.	Erection & Commissioning of SCADA System	1) Commissioning works for SCADA system is completed except for sludge dewatering unit. 2) KPI Report generation from SCADA is started. Running hour report & flow report for equipment is not started yet. 3) Communication from associated infrastructure is not received in Rajapur STP. 4) Provision for transmission of data from SCADA servers to Government offices as per conditions given in CA is not provided yet. 5) 3 PCs in SCADA system are not working.
26.	Installation of flowmeter in Bypass line of STP	Flowmeter is not available at site
27.	Overhauling of All Electrical Panels of STP	No work started yet.
28.	Overhauling of Old flowmeters of STP	No work started yet.
29.	Set-up of Laboratory	Set-up of laboratory is completed
30.	Rehabilitation works for Treated water pump house	Overhauling of two pumps out of five is pending.
31.	Rajapur SPS	
32.	Overhauling/Calibration of existing flowmeter in header line of pumps	Calibration of flowmeter is completed
33.	Replacement of Submersible pumps - 6 nos	Replacement of 5 no. submersible pumps is completed out of 6.
34.	Overhauling of Mechanical Screen	Overhauling work is completed and equipment is taken into operation.
35.	Cleaning of Receiving Chamber	Cleaning of sump is completed.
36.	Overhauling of sluice gates	Overhauling work for two gates is pending for which check nuts are required, order for the same is given.
37.	Replacement of inlet gate	No work is started yet.
38.	Rehabilitation Works for tapping point of Rajapur SPS	Retaining wall is broken due to which sewage is going directly into the river, Concessionaire to please rectify the problem.
39.	Mumfordganj SPS	
40.	Overhauling/Calibration of existing flowmeter in header line of pumps	1) Testing & commissioning of flowmeter is completed flowmeter is in operation. 2) Dismantling joint must be provided along with

RAJAPUR STP & ASSOCIATE INFRASTRUCTURE		
REHABILITATION UNITS		
Sr. No.	Structure / Equipment details	Status
		flowmeter for ease in maintenance. Dismantling joint is not available at site.
41.	Overhauling of Mechanical Screen	1) Both screens are in operation. 2) Provision for running of mechanical screens in auto mode is pending.
42.	Replacement of HNC pumps along with cables.	1) Erection of all new pumps is completed. 2) Commissioning, testing of all pumps pumps is completed.
43.	Replacement of suction valves, discharge valves & NRVs	1) NRV in main header line must be provided for reducing back hammering on the pumps. NRV is not available at site2) Painting of header line is not started yet.3) Construction of RCC supports for the pipe are not started yet.
44.	Rehabilitation works of Main MCC panel	Rehabilitation work is completed.
45.	Erection & Commissioning of PLC panels	1) Work for operation of HNC pumps in auto mode (based on level of sump) is pending. 2) Work for operation of mechanical screens from PLC and in auto mode (based on level of sump) is pending. 3) Report generation from SCADA is not started yet.
46.	Erection & Commissioning of Online monitoring system	1) Differential level sensors: Erection work is completed but commissioning is pending. 2) Installation of pressure transmitter on header line of HNC pumps is pending.
47.	Cleaning of Receiving Chamber	Cleaning of sump is completed.
48.	Overhauling & Testing of Old Electrical panels	1) Repairing of PT & Relay in 11KV HT panel is pending. 2) No work for overhauling of panels is in progress.
49.	Overhauling of all Sluice Gates inside pumping station	No work is in progress
50.	Overhauling of DG sets	When the working of DG sets was checked, it was found that during synchronization, DG no. 1 gor tripped. Concessionaire to please rectify the problem.
51.	Overhauling/testing of Transformer	1) Overhauling of Transformer no. 2 is completed. 2) Overhauling work for Transformer no. 1 is pending.

7.2.6 Physical Activities status as per Rehabilitation plan:

Work Description	Scheduled Start Date	Scheduled End Date	Scheduled completion (In %)	Completion upto Previous Month (In %) (A)	This month Completion (In %) (B)	Total Completion (In %) (A+B)
Naini-I STP & Associated Infrastructure & Rajapur STP & Associated Infrastructure						
Civil Work						
Civil Work in Plant, MPS, SPS	1-sept-20	24-Jan-21	100	98	0.5	98.5
Building Work	1-sept-20	24-Jan-21	100	98	1	99
Office Work	1-sept-20	24-Jan-21	100	100	0	100
Mechanical Work						
Pumps, Blowers, Diffusers	1-Nov-20	24-Jan-21	100	98	1	99
Pipes, Valves, Gates, Screens	1-Nov-20	24-Jan-21	100	98	0	98
Sludge Dewatering System	1-Nov-20	24-Jan-21	100	0	0	0
Grit Removal System	20-Oct-20	24-Jan-21	100	100	0	100
Biogas Engine with Scrubber and Gas Mixing System	1-Nov-20	24-Jan-21	100	97	1	98
Chlorination System	1-Nov-20	24-Jan-21	100	100	0	100
Electrical & C&I Work						
PLC	1-Nov-20	24-Jan-21	100	99	0	99
Field Instruments (Gauges)	1-Nov-20	24-Jan-21	100	99	0	99
Level Transmitters	1-Nov-20	24-Jan-21	100	100	0	100
Analyzers	1-Nov-20	24-Jan-21	100	99	0	99
Cable Traying laying	1-Nov-20	24-Jan-21	100	99	0	99
Cable Laying, Termination and Glanding	1-Nov-20	24-Jan-21	100	99	0	99
Commissioning / Trial Run	25-Jan-21	31-Jan-21	100	0	0	0
Final Inspection by Client	25-Jan-21	30-Jan-21	100	0	0	0
COD	31-Jan-21	31-Jan-21	100	0	0	0

7.3 Package-III status



OFFICE OF THE GENERAL MANAGER,
कार्यालय महाप्रबन्धक,
GANGA POLLUTION CONTROL UNIT,
गंगा प्रदूषण नियंत्रण इकाई,
U.P. JAL NIGAM, PRAYAGRAJ
उ० प्र० जल निगम प्रयागराज,
दूरभाष : 0532-2604329, 2684891, फैक्स 0532-2604800

Letter No. 2336/PWPL(Adani)/423 Dated: 02/11/2020

To,
M/s. Prayagraj Water Private Limited,
"Adani House", 56, Shrimati Society,
Near Mithakhali Six Road,
Navrangpura, Ahmedabad-380006
Gujrat, India.

Name of Work: Development and Rehabilitation of Sewage Treatment Plants and Associated Infrastructure under Hybrid Annuity Based PPP Mode at Prayagraj, Uttar Pradesh.

Subject: **Concession Agreement no. 31/GM/2018-19: Issuance of Commercial Operations Date of Package-III.**


Sir,

With reference to the above mentioned subject, it is to be noted that we have issued the 2nd Milestone completion certificate vide Letter No. 2328/PWPL(Adani)/415 dated 31.10.2020 & Rehabilitation Completion Certificate vide Letter No. 2330/PWPL(Adani)/417 dated 31.10.2020 and LD Waiver Letter No. 2331/PWPL(Adani)/418 dated 31.10.2020 after the detailed assessment of the documents provided by the concessionaire.

In view of the same, we are hereby issuing the COD certificate to the concessionaire. Details of the same is mentioned below-

Sl. No.	Description	COD Commencement Date
1	Rehabilitation works under Pkg-III	01.11.2020

Yours faithfully


 General Manager

Encl No. & and date as above:

Copy to following:

- 1- E.D.(Projects), NMCG, New Delhi.
- 2- MD, UPIN Lucknow.
- 3- Chief Engineer (Ganga), U.P. Jal Nigam Lucknow.
- 4- Chief Engineer (Prayagraj Zone), U.P. Jal Nigam Prayagraj.
- 5- Shri. Madav Kumar, Sr. Economics and Financial Expert, NMCG, New Delhi.
- 6- Project Manager (I/EBM), GPCU, U.P. Jal Nigam Prayagraj.
- 7- AECOM India Pvt. Ltd. (Project Engineer), Gurgaon.

Commercial Operations Date was announced on 02.11.2020 vide letter no. 2336/PWPL (Adani)/423

8. Meetings, Discussions and Site Visits:

Regular progress review meetings are being held at UPJN office & sites. Following meetings were held during the month of July' 2021.

Sr. No.	Site Visit & Meeting with UPJN / NMCG / PWPL	Date	Attendees	Description
1.	Site inspection of Rajapur STP	7-Jul-21	Mr. Sudhir Tomar	Inspection, supervision and monitoring of ongoing E&M activities and operation and maintenance of plant
2.	Site inspection of Naini-I STP	9-Jul-21	Mr. Gaurav Gupta	Inspection, supervision and monitoring of ongoing E&M activities and operation and maintenance of plant
3.	Site inspection of Naini-I STP	16-Jul-21	Mr. Gaurav Gupta	Inspection, supervision and monitoring of ongoing E&M activities and operation and maintenance of plant
4.	Site inspection of Rajapur STP	19-Jul-21	Mr. Sudhir Tomar	Inspection, supervision and monitoring of ongoing E&M activities and operation and maintenance of plant
5.	Site inspection of Naini-I STP	19-Jul-21	Mr. Gaurav Gupta	Inspection, supervision and monitoring of ongoing E&M activities and operation and maintenance of plant
6.	Site inspection of Naini-II STP	27-Jul-21	Mr. Amit Ranjan	Inspection, supervision and monitoring of ongoing Civil activities
7.	Site inspection of Naini-II STP	28-Jul-21	Mr. Amit Ranjan	Inspection, supervision and monitoring of ongoing Civil activities
8.	Site inspection of Naini-I STP	27-Jul-21	Mr. Gaurav Gupta	Inspection, supervision and monitoring of ongoing E&M activities and operation and maintenance of plant
9.	Site inspection of Jhansi STP	27-Jul-21	Mr. Abhishek Singh	Inspection, supervision and monitoring of ongoing Civil activities
10.	Site inspection of Phaphamau STP	29-Jul-21	Mr. Wahab Alam	Inspection, supervision and monitoring of ongoing Civil activities
11.	Site inspection of Rajapur STP	29-Jul-21	Mr. Sudhir Tomar	Inspection, supervision and monitoring of ongoing E&M activities and operation and maintenance of plant
12.	Site inspection of Phaphamau STP	30-Jul-21	Mr. Wahab Alam	Inspection, supervision and monitoring of ongoing Civil activities

11. Outward Register

List of key design & documents were reviewed by Project Engineer during this period as below.

Sr. No.	PE Transmittal/ Ref No	Description	Outward Date	To (Organization)	Copies To
1.	AIPL/NMCG/P RAYAG/1049	Observation on Manhole Drawing- Vehicular Load/ Traffic	2-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
2.	AIPL/NMCG/P RAYAG/1050	Observation on Miscellaneous crane & Hoist drawing/documents for various STP location at Prayagraj STP (Package-I)	2-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
3.	AIPL/NMCG/P RAYAG/1051	Observation on Miscellaneous crane & Hoist drawing/documents for various STP location at Prayagraj STP (Package-I)	2-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
4.	AIPL/NMCG/P RAYAG/1052	Observation on Miscellaneous crane & Hoist drawing/documents for various STP location at Prayagraj STP (Package-I)	3-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
5.	AIPL/NMCG/P RAYAG/1053	Observation on Field Instruments Data sheets & Specifications for Naini-II STP	3-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
6.	AIPL/NMCG/P RAYAG/1054	Observation on PLC datasheet including GA, IA & Internal wiring of PLC Panels of C&I of SPS of Package – I	4-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
7.	AIPL/NMCG/P RAYAG/1055	Observation on Control System Configuration Diagram of Pumping Stations of SPS of Package – I	4-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
8.	AIPL/NMCG/P RAYAG/1056	Observation on Non clog submersible	4-Jul-21	The General Manager, Ganga	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj

Sr. No.	PE Transmittal/ Ref No	Description	Outward Date	To (Organization)	Copies To
		pumps - Documents - Package-I		Pollution Control Unit	3. PM-E&M - UPJN, Prayagraj
9.	AIPL/NMCG/P RAYAG/1057	Observation on Documents of Grit Removal Mechanism for STPs	4-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
10.	AIPL/NMCG/P RAYAG/1058	Observation on Mechanical Datasheets & GAD of Submersible Mixers of Pkg-I STP	4-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
11.	AIPL/NMCG/P RAYAG/1059	Observation on details of the quantities & cost implication due to the change in the STP location of Jhunsi STP facility	6-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
12.	AIPL/NMCG/P RAYAG/1060	Observation on Field Instruments Data sheets & Specifications for Jhunsi STP	6-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
13.	AIPL/NMCG/P RAYAG/1061	Observation on Process Analyzer Data sheets & Specifications for Phaphamau STP	6-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
14.	AIPL/NMCG/P RAYAG/1062	Observation on PLC FAT & SAT PROCEDURE of Pumping Stations of Package – I	7-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
15.	AIPL/NMCG/P RAYAG/1063	Observation on Functional Design Specification of Pumping Stations of SPS of Package – I	7-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
16.	AIPL/NMCG/P RAYAG/1064	Observation on Process Analyzer Data sheets & Specifications for Jhunsi STP	8-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
17.	AIPL/NMCG/P RAYAG/1065	Observation on PLC I/O Schedule of JHUNSI & PHAPHAMAU STP	8-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj

Sr. No.	PE Transmittal/ Ref No	Description	Outward Date	To (Organization)	Copies To
		of C&I for Package - I			
18.	AIPL/NMCG/P RAYAG/1066	Observation on PLC I/O Schedule Naini-II STP	8-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
19.	AIPL/NMCG/P RAYAG/1067	Observation on Functional Design Specification of C&I of STP for Package – I of Prayagraj STP Project	8-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
20.	AIPL/NMCG/P RAYAG/1068	Regarding KPI data submitted through SCADA reports of Quarter-1 for O&M period of Package III facilities.	9-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
21.	AIPL/NMCG/P RAYAG/1069	Regarding KPI data submitted through SCADA reports of Quarter-2 for O&M period of Package III facilities	9-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
22.	AIPL/NMCG/P RAYAG/1070	Observation on revised Schedule maintenance program (R1) for Naini STP	10-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
23.	AIPL/NMCG/P RAYAG/1071	Observation on Schedule Maintenance program of 60 MLD STP at Rajapur	10-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
24.	AIPL/NMCG/P RAYAG/1072	Observation on O & M Manual of 60 MLD STP at Rajapur	10-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
25.	AIPL/NMCG/P RAYAG/1073	Observation on O & M Manual for Naini STP	10-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
26.	AIPL/NMCG/P RAYAG/1074	Regarding operational issues of Numayadahi Facility	17-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj

Sr. No.	PE Transmittal/ Ref No	Description	Outward Date	To (Organization)	Copies To
					3. PM-E&M - UPJN, Prayagraj
27.	AIPL/NMCG/P RAYAG/1075	Observation of Invoice & MPR for the Month of March- 2021	17-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
28.	AIPL/NMCG/P RAYAG/1077	Observation on approval of QAP of aerated grit mechanism under Package-I.	20-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
29.	AIPL/NMCG/P RAYAG/1078	Observation on approval of QAP of sludge dewatering unit under Package-I	20-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
30.	AIPL/NMCG/P RAYAG/1079	Observation on Regarding Rehabilitation work of Sludge Treatment Plant at Naini I STP	20-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
31.	AIPL/NMCG/P RAYAG/1076	Observation on Electrical Design docs for Shastri Bridge SPS : Prayagraj STP	20-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
32.	AIPL/NMCG/P RAYAG/1080	Observation on Regarding approval of QAP of Submersible Non Clog Pump under Package-I	21-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
33.	AIPL/NMCG/P RAYAG/1082	Observation on Monthly progress report for the month of May , 2021	21-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
34.	AIPL/NMCG/P RAYAG/1081	Observation on Mechanical Datasheets & GAD of Submersible Mixers of Pkg-I STP	21-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
35.	AIPL/NMCG/P RAYAG/1084	Observation on Regarding approval of QAP of Submersible Non Clog Pump under Package-I.	22-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj

Sr. No.	PE Transmittal/ Ref No	Description	Outward Date	To (Organization)	Copies To
36.	AIPL/NMCG/P RAYAG/1083	Observation on revised drawings for Inlet Chamber Coarse Screen & Wet Well Naini-II MPS	22-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
37.	AIPL/NMCG/P RAYAG/1085	Regarding the Observation of MPR of Jun'21	23-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
38.	AIPL/NMCG/P RAYAG/1086	Observation of Invoice & MPR for the Month of April-2021	23-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
39.	AIPL/NMCG/P RAYAG/1087	Observation of Invoice & MPR for the Month of May-2021	23-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
40.	AIPL/NMCG/P RAYAG/1088	Observation of Invoice & MPR for the Month of June-2021	23-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
41.	AIPL/NMCG/P RAYAG/1089	Inspection reports of Package III facilities	23-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
42.	AIPL/NMCG/P RAYAG/1091	Observation on Control System Configuration Diagram of Pumping Stations of SPS of Package – I	25-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
43.	AIPL/NMCG/P RAYAG/1092	Observation on DATA SHEET, GA, WIRING AND MANUAL OF PA SYSTEM of C&I of STP for Package – I	25-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
44.	AIPL/NMCG/P RAYAG/1093	Observation on Request for considering 1X100% DG Set at Mahewaghat SPS, Basna Nalla SPS and Shastri Bridge SPS of Pkg-I STP's	25-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj

Sr. No.	PE Transmittal/ Ref No	Description	Outward Date	To (Organization)	Copies To
45.	AIPL/NMCG/P RAYAG/1094	Observation on PLC LOGIC WRITE UP INCLUDING HARDWARE DETAILS OF STP FOR PACKAGE-I OF PRAYAGRAJ STP	25-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
46.	AIPL/NMCG/P RAYAG/1095	Observation on DG Set documents for Pkg- I	25-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
47.	AIPL/NMCG/P RAYAG/1096	Observation on Sluice Gate Datasheet_ Shantipuram_Basna_ PKG I	28-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
48.	AIPL/NMCG/P RAYAG/1098	Observation on LCP & JB Drawing for Aerated Grit Mechanism - Package-I	29-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
49.	AIPL/NMCG/P RAYAG/1100	Observation on revised Documents of Grit Removal Mechanism for STPs	29-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
50.	AIPL/NMCG/P RAYAG/1101	Observation on Mahewaghat nala I & D GAD and calculation__Trash screen	29-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
51.	AIPL/NMCG/P RAYAG/1102	Observation on weir arrangement and I&D works mechanical GAD for Saccha Baba Nala	29-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj
52.	AIPL/NMCG/P RAYAG/1103	Observation on I & D and weir arrangement mechanical G.A drawing of Kharkuni nala for Naini II STP package I	29-Jul-21	The General Manager, Ganga Pollution Control Unit	1. NMCG, New Delhi 2. M/s PWPL, Prayagraj 3. PM-E&M - UPJN, Prayagraj

12. Inward Register

List of key design & documents were received by Project Engineer during this period as below;

Sr. No.	PWPL Transmittal reference number	Description	Date	From
1.	PWPL/UPJN/PMCG/303/21	Submission of Mech GAD for Basana Nala SPS Under Pkg-1	2-Jul-21	Prayagraj water private limited
2.	PWPL/UPJN/PMCG/304/21	Submission of revised drawings for Inlet Chamber Coarse Screen & Wet Well Naini-II MPS	3-Jul-21	Prayagraj water private limited
3.	PWPL/UPJN/PMCG/305/21	Submission of Sluice Gate Datasheet_ Shantipuram_Basna_PKG I	6-Jul-21	Prayagraj water private limited
4.	PWPL/UPJN/PMCG/306/21	Submission of G. A drawing of shastri bridge SPS	6-Jul-21	Prayagraj water private limited
5.	PWPL/UPJN/PMCG/307/21	Submission of DATA SHEET, GA, WIRING AND MANUAL OF PA SYSTEM of C&I of STP for Package – I	9-Jul-21	Prayagraj water private limited
6.	PWPL/UPJN/PMCG/308/21	Submission of Approved copy of Technical Document of lime Handling System of all STPs under Pkg-I	9-Jul-21	Prayagraj water private limited
7.	PWPL/UPJN/PMCG/309/21	Submission of Documents of Grit Removal Mechanism for STPs - Package-I	13-Jul-21	Prayagraj water private limited
8.	PWPL/UPJN/PMCG/310/21	Submission of documents for considering 1X100% DG Set at Mahewaghat SPS, Basna Nalla SPS and Shastri Bridge SPS of Pkg-I STP's.	13-Jul-21	Prayagraj water private limited
9.	PWPL/UPJN/PMCG/311/21	Submission of Mechanical Datasheets & GAD of Submersible Mixers of Pkg-I STP	13-Jul-21	Prayagraj water private limited
10.	PWPL/UPJN/PMCG/312/21	Submission of Mahewaghat nala I & D GAD and calculation Trash screen__R2	13-Jul-21	Prayagraj water private limited
11.	PWPL/UPJN/PMCG/313/21	Submission of DG Set documents for Pkg- I	14-Jul-21	Prayagraj water private limited
12.	PWPL/UPJN/PMCG/314/21	Submission of Control System Configuration Diagram of Pumping Stations of SPS of Package – I	14-Jul-21	Prayagraj water private limited
13.	PWPL/UPJN/PMCG/315/21	Submission of PLC LOGIC WRITE UP INCLUDING HARDWARE DETAILS OF	16-Jul-21	Prayagraj water private limited

Sr. No.	PWPL Transmittal reference number	Description	Date	From
		STP FOR PACKAGE-I OF PRAYAGRAJ STP		
14.	PWPL/UPJN/PMCG/316/21	Submission of FIRE ALARM DATA SHEET FOR STPS & PUMPING STATIONS OF PACKAGE-I	20-Jul-21	Prayagraj water private limited
15.	PWPL/UPJN/PMCG/317/21	Submission of Jhunsi STP_Old location Structural GA drawing of FCR tank	21-Jul-21	Prayagraj water private limited
16.	PWPL/UPJN/PMCG/318/21	Submission of Functional Design Specification of Pumping Stations of SPS of Package – I	22-Jul-21	Prayagraj water private limited
17.	PWPL/UPJN/PMCG/319/21	Submission of Field Instruments Data sheet (FRC Analyser of Prayagraj STP Project)	23-Jul-21	Prayagraj water private limited
18.	PWPL/UPJN/PMCG/320/21	Submission of Functional Design Specification of C&I of STP for Package – I of Prayagraj STP Project	23-Jul-21	Prayagraj water private limited
19.	PWPL/UPJN/PMCG/321/21	Submission of Basna Nalla SPS - Rev 1 _Civil Design Docs & Dwgs	25-Jul-21	Prayagraj water private limited
20.	PWPL/UPJN/PMCG/322/21	Submission of Miscellaneous crane & Hoist drawing/documents for various STP location at Prayagraj STP (Package-I)	26-Jul-21	Prayagraj water private limited
21.	PWPL/UPJN/PMCG/323/21	Submission of Valve Schedule (package-I Associated Infrastructure) - Jhunsi	26-Jul-21	Prayagraj water private limited

13. EHS targets, Achievement & compliance report for the month of July' 2021

Sr. No.	Goals	Target of the month	Achievement of this Month	Previous Month achievement	Remark
1	Zero total recordable injuries	100%	100%	100%	
2	All personnel Health and Safety inducted	100%	100%	100%	
3	100% incident reporting and investigation	100%	100%	100%	
4	100% adherence of usage of appropriate PPE's at work	100%	100%	100%	

14. Status of statutory permits:

Sr. No.	Applicable Permit	Authority	Quantity	Remarks
Phaphamau Facility (Package - I)				
1	Power connection (During commissioning Period)	Electricity Board	2 No.	Under process towards filing the application. Will be applied before commissioning stage. Location: - 1. At Phaphmau STP 2. At Basna Nalla SPS
2	Consent to Establish	State Pollution Control Board (SPCB)	1 No.	Received
3	Tree cutting	Forest Department	88 No.	Received NOC From Forest Dept for Cutting 88 Nos. of trees.
4	Road cutting & crossing	Public Works Department	NA	Not Required
5	Railway Crossing	Commissioner Railway Safety	NA	Not Required
6	National Highway cutting & crossing	National Highway Authority of India	1 No.	Estimate charges and Road restoration maintenance charges of Rs 36.97 Cr received by UPJN from NH vide letter No 802/NH-96 DATED 30th June 2021. Final approval is awaited. License Fee and BG Amount of 6.67 Cr & 3.26 lacs respectively submitted by UPJN to NH on 9 th July 2021.

Sr. No.	Applicable Permit	Authority	Quantity	Remarks
7	Revenue Road cutting & crossing	Panchayat/Local Authority	NA	Not Required
8	Obtaining No Objection Certificate for various sewerage facilities under the ULB for handing them over to JN	ULB/District Administration	NA	Not Required
9	Construction of Weirs/pipeline crossings	Irrigation department/ULB	2 No.	Under process towards filing the application, Construction of 2 no. of Weir at; 1. Basna Nalla Drain Tapping 2. Shantipuram Nalla Tapping
10	Approach Road to new Facilities	Forest Department/Panchayat/Local Authority/Irrigation Department	NA	Not Required
11	Consent to operate for Existing Facilities	ULB and SPCB	1 No.	Will be processed during commissioning stage.
Naini-II Facility (Package - I)				
1	Power connection (During commissioning Period)	Electricity Board	3 No.	Under process towards filing the application. Will be applied before commissioning stage. Location: - 1. At Naini-II STP 2. At Mahewaghat SPS 3. At Mawaiya SPS
2	Consent to Establish	State Pollution Control Board (SPCB)	1 No.	Received
3	Tree cutting	Forest Department	-	Under process towards filing the application. Finalized for laying of trunk sewer line route alignment is under progress.
4	Road cutting & crossing	Public Works Department	1 No.	Already applied on dated 19.10.2020 for STP main line. NOC received from Mahewaghat SPS to Naini-II MPS on 08th Dec'2020.
5	Railway Crossing	Commissioner Railway Safety	1 No.	Permission received from railway vide letter No 86-W/KM/821/L-PRYJ-NYN DATED 16 th July 2021'

Sr. No.	Applicable Permit	Authority	Quantity	Remarks
6	National Highway cutting & crossing	National Highway Authority of India	NA	NA
7	Revenue Road cutting & crossing	Panchayat/Local Authority	1 No.	Under process towards filing the application to concern authority.
8	Obtaining No Objection Certificate for various sewerage facilities under the ULB for handing them over to JN	ULB/District Administration	NA	Not Required
9	Construction of Weirs/pipeline crossings	Irrigation department/ULB	6 No.	Under process towards filing the application, Construction of Weir at 6 nos. Drains. Location: - 1. Mawaiya Drain 2. Sachcha Baba Aashram Drain 3. Kharkhauni Drain 4. Mahewaghat Nalla-1 5. Mahewaghat Nalla-2 6. Mahewaghat Nalla-3
10	Approach Road to new Facilities	Forest Department/Panchayat/Local Authority/Irrigation Department	NA	Not Required
11	Consent to operate for Existing Facilities	ULB and SPCB	1 No.	Will be processed during commissioning stage
Jhansi Facility (Package - I)				
1	Power connection (During commissioning Period)	Electricity Board	2 No.	Under process towards filing the application. Will be applied before commissioning stage. Location: - 1. Jhansi STP 2. Shastri Bridge SPS
2	Consent to Establish	State Pollution Control Board (SPCB)	1 No.	Received
3	Tree cutting	Forest Department	NA	Not Required
4	Road cutting & crossing	Public Works Department	1 No.	Under process towards filing the application to concern authority. Location: - Trivenipuram ADA Colony colony to Shashtri Bridge SPS
5	Railway Crossing	Commissioner Railway Safety	1 No.	Received Estimate detail by UPJN from railway department vide letter-W/98-13/2020/71/W-2 19 TH July 2021

Sr. No.	Applicable Permit	Authority	Quantity	Remarks
6	National Highway cutting & crossing	National Highway	1 No.	Under process towards filing the application to concern authority. Location: - Underpass Shashtri Bridge
7	Revenue Road cutting & crossing	Panchayat/Local Authority	1 No.	Under process towards filing the application to concern authority. Location: - Shastri Bridge SPS to Jhunsi MPS
8	Obtaining No Objection Certificate for various sewerage facilities under the ULB for handing them over to UPJN	ULB/District Administration	NA	Not Required
9	Construction of Weirs/pipeline crossings	Irrigation department/ULB	13 No	Under process towards filing the application, Construction of Weir at 13 nos. Drains. Locations: - 1. Augharwa Nalla 2. Bhola Mandir Nalla 3. Gangoli Shivala Nalla I 4. Gangoli Shivala Nalla II 5. Savitri Nagar Nalla 6. Dham Nalla 7. Sashtri bridge Nalla 8. Triveni Marg Nalla I 9. Triveni Marg Nalla II 10. Ulta Quila Nalla I 11. Ulta Quila Nalla II 12. Havelia Nalla 13. Lakkar Nalla
10	Approach Road to new Facilities	Forest Department/Panchayat/ Local Authority/Irrigation Department	NA	Not Required
11	consent to operate for Existing Facilities	ULB and SPCB	1 No	Will be processed during commissioning stage

16. Operation and Maintenance report for July month –

Naini-I STP, 80 MLD STP at Prayagraj																adani
INLET FLOW & QUALITY REPORT																
Date	Daily Feed Quantity MLD (Design- 80 MLD)		pH		BOD (mg/l)		COD (mg/l)		TSS (mg/l)		FECAL COLIFORM		FRC	DEWATERED SLUDGE		
	MD	MLD	Inlet pH (Design- <9)	Final BOD (Design- 6.5 to 9.0)	Inlet BOD (Design- <250 mg/l)	Final BOD (Design - <30 mg/l)	Inlet COD (Design <500 mg/l)	Final COD (Design - <50 mg/l)	Inlet TSS (Design- <500 mg/l)	Final TSS (Design - <50 mg/l)	Inlet (Design - NA)	Final (Design - <1000 MPN/100 ml)	Final (Design - 0.2 mg/l)	Outlet Concentrati on (>20%)	Fecal Coliform (20,00,000 MPN/gTS)	
1-Jul-21	81460	81.46	7.51	7.40	138.00	18.00	312.00	32.00	298.00	28.00	NA	600	0.3	24.50	1400000.00	1) Plant Availability is 100%. 2) Rehabilitation works for Gas Area of STP is in progress. 3) Rehabilitation works for Gaughat MPS & Chachamalia SPS is in progress. 4) Sample for sludge testing is taken from sludge drying beds hence the value of sludge consistency cannot be deemed as accurate. 5) Checking of Calibration of flowmeter from OEM is required for both outlet of Gaughat MPS & inlet of Naini I STP as flow has rapidly increased from 65 - 75 MLD to 85 - 105 MLD from 07.05.2021.
2-Jul-21	92900	92.90	7.46	7.63	147.00	20.00	324.00	36.00	306.00	26.00	NA	700	0.2	23.90	1300000.00	
3-Jul-21	84250	84.25	7.59	7.56	144.00	18.00	336.00	40.00	315.00	24.00	NA	500	0.2	23.40	1400000.00	
4-Jul-21	74260	74.26	7.45	7.59	132.00	22.00	284.00	40.00	320.00	28.00	NA	600	0.3	23.80	1200000.00	
5-Jul-21	90260	90.26	7.48	7.55	141.00	20.00	296.00	28.00	299.00	26.00	NA	700	0.4	23.70	1400000.00	
6-Jul-21	81310	81.31	7.51	7.47	138.00	18.00	280.00	44.00	316.00	28.00	NA	600	0.3	24.20	1300000.00	
7-Jul-21	74280	74.28	7.53	7.66	144.00	19.00	300.00	48.00	302.00	26.00	NA	500	0.3	24.50	1200000.00	
8-Jul-21	82700	82.70	7.55	7.63	150.00	25.00	288.00	32.00	312.00	28.00	NA	700	0.4	23.40	1400000.00	
9-Jul-21	82700	82.70	7.52	7.65	147.00	24.00	312.00	36.00	307.00	27.00	NA	600	0.3	20.76	1300000.00	
10-Jul-21	92240	92.24	7.48	7.59	153.00	26.00	268.00	40.00	314.00	26.00	NA	500	0.3	23.20	1200000.00	
11-Jul-21	114680	114.68	7.54	7.62	144.00	24.00	284.00	44.00	309.00	28.00	NA	600	0.3	23.10	1300000.00	
12-Jul-21	85910	85.91	7.52	7.63	147.00	26.00	276.00	48.00	313.00	30.00	NA	700	0.4	23.30	1400000.00	
13-Jul-21	89130	89.13	7.49	7.59	150.00	25.00	272.00	44.00	312.00	28.00	NA	600	0.3	23.60	1200000.00	
14-Jul-21	88090	88.09	7.51	7.64	144.00	24.00	264.00	44.00	320.00	27.00	NA	500	0.3	23.70	1300000.00	
15-Jul-21	87960	87.96	7.47	7.54	132.00	22.00	288.00	40.00	316.00	30.00	NA	700	0.2	23.50	1400000.00	
16-Jul-21	85660	85.66	7.67	7.52	138.00	21.00	320.00	44.00	296.00	32.00	NA	600	0.3	23.20	1300000.00	
17-Jul-21	95530	95.53	7.59	7.55	126.00	24.00	312.00	36.00	309.00	30.00	NA	700	0.3	23.60	1400000.00	
18-Jul-21	96900	96.90	7.63	7.59	129.00	23.00	316.00	44.00	314.00	28.00	NA	600	0.2	23.30	1200000.00	
19-Jul-21	85450	85.45	7.35	7.46	126.00	22.00	292.00	48.00	289.00	30.00	NA	500	0.4	23.50	1300000.00	
20-Jul-21	104610	104.61	7.54	7.63	132.00	24.00	304.00	44.00	295.00	28.00	NA	600	0.3	23.40	1400000.00	
21-Jul-21	100590	100.59	7.49	7.54	129.00	23.00	288.00	36.00	281.00	23.00	NA	700	0.2	23.90	1300000.00	
22-Jul-21	94340	94.34	7.52	7.59	135.00	26.00	320.00	40.00	279.00	32.00	NA	600	0.3	21.52	1300000.00	
23-Jul-21	90580	90.58	7.55	7.61	132.00	24.00	316.00	44.00	285.00	30.00	NA	700	0.2	23.10	1400000.00	
24-Jul-21	89400	89.40	7.47	7.54	126.00	25.00	304.00	36.00	270.00	28.00	NA	600	0.3	22.90	1200000.00	
25-Jul-21	96560	96.56	7.51	7.62	135.00	24.00	312.00	40.00	287.00	32.00	NA	700	0.2	22.60	1400000.00	
26-Jul-21	91410	91.41	7.49	7.58	126.00	22.00	300.00	44.00	280.00	30.00	NA	600	0.4	23.00	1300000.00	
27-Jul-21	94490	94.49	7.34	7.46	141.00	25.00	292.00	36.00	265.00	28.00	NA	700	0.2	22.90	1400000.00	
28-Jul-21	116480	116.48	7.42	7.51	147.00	26.00	312.00	40.00	285.00	30.00	NA	600	0.2	23.90	1200000.00	
29-Jul-21	105960	105.96	7.29	7.42	135.00	21.00	316.00	44.00	292.00	32.00	NA	500	0.3	23.40	1200000.00	
30-Jul-21	97390	97.39	7.34	7.52	138.00	24.00	304.00	36.00	288.00	28.00	NA	700	0.2	23.00	1400000.00	
31-Jul-21	106820	106.82	7.41	7.55	141.00	25.00	296.00	40.00	279.00	26.00	NA	600	0.2	23.20	1300000.00	
Average	92074.19	92.07	7.49	7.56	138.29	22.90	299.61	40.26	298.48	28.29	NA	616.13	0.28	23.32	1312903.23	

Source: Logbook of Laboratory at Sewage Treatment Plant



Rajapur STP, 60 MLD STP at Prayagraj																adani	
INLET FLOW & QUALITY REPORT																	
Date	Daily Feed Quantity MLD (Design- 60 MLD)		pH		BOD (mg/l)		COD (mg/l)		TSS (mg/l)		FECAL COLIFORM		FRC	DEWATERED SLUDGE		REMARKS	
	M3	MLD	Inlet pH (Design- <9)	Final pH (Design- 6.5 to 9.0)	Inlet BOD (Design- <250 mg/l)	Final BOD (Design - <20 mg/l)	Inlet COD (Design- <500 mg/l)	Final COD (Design - <30 mg/l)	Inlet TSS (Design- <500 mg/l)	Final TSS (Design - <30 mg/l)	Inlet (Design - NA)	Final (Design - <1000 MPN/100 ml)	Final (Design - 0.2 mg/l)	Outlet Concentration (>20%)	Fecal Coliform (20,00,000 MPN/gTS)		
1-Jul-21	79190	79.19	7.45	7.69	130.00	18.00	308.00	36.00	288.00	24.00	NA	600	0.3	22.31	1100000.00	1) Rehabilitation works for STP, Mumfordganj SPS are in progress. 2) Plant Availability is 100%. 3) Sample for sludge testing is taken from sludge drying bed hence the value of sludge consistency cannot be deemed as accurate. 4) Retaining wall for nalla at tapping point for Rajapur SPS is broken hence raw sewage is going directly into the river.	
2-Jul-21	86990	86.99	7.41	7.65	125.00	17.00	320.00	44.00	295.00	28.00	NA	700	0.2	21.74	1700000.00		
3-Jul-21	79840	79.84	7.40	7.72	135.00	16.00	312.00	40.00	286.00	25.00	NA	400	0.2	22.40	1300000.00		
4-Jul-21	79100	79.10	7.35	7.67	140.00	18.00	308.00	44.00	265.00	24.00	NA	500	0.3	23.58	1400000.00		
5-Jul-21	77530	77.53	7.34	7.65	130.00	16.00	316.00	36.00	275.00	26.00	NA	400	0.2	24.32	1700000.00		
6-Jul-21	76040	76.04	7.32	7.66	135.00	19.00	336.00	48.00	295.00	27.00	NA	700	0.4	25.42	1400000.00		
7-Jul-21	79890	79.89	7.35	7.70	125.00	15.00	340.00	44.00	310.00	25.00	NA	600	0.3	22.95	1700000.00		
8-Jul-21	81560	81.56	7.32	7.65	120.00	17.00	332.00	48.00	302.00	29.00	NA	700	0.2	23.52	1300000.00		
9-Jul-21	81860	81.86	7.36	7.68	130.00	18.00	328.00	44.00	292.00	28.00	NA	400	0.3	22.54	1300000.00		
10-Jul-21	85010	85.01	7.30	7.71	115.00	18.00	320.00	48.00	270.00	29.00	NA	500	0.2	23.48	1100000.00		
11-Jul-21	82790	82.79	7.34	7.65	125.00	19.00	312.00	44.00	265.00	27.00	NA	700	0.2	22.54	1300000.00		
12-Jul-21	79250	79.25	7.32	7.68	130.00	16.00	328.00	40.00	286.00	26.00	NA	600	0.2	28.20	1400000.00		
13-Jul-21	79170	79.17	7.36	7.65	120.00	17.00	320.00	40.00	280.00	25.00	NA	500	0.3	24.32	1300000.00		
14-Jul-21	75480	75.48	7.34	7.64	130.00	19.00	328.00	48.00	320.00	28.00	NA	400	0.2	26.42	1700000.00		
15-Jul-21	71940	71.94	7.35	7.70	115.00	17.00	316.00	36.00	305.00	24.00	NA	400	0.2	22.52	1400000.00		
16-Jul-21	73690	73.69	7.32	7.67	120.00	18.00	308.00	40.00	282.00	26.00	NA	600	0.3	23.35	1300000.00		
17-Jul-21	79630	79.63	7.30	7.69	125.00	18.00	300.00	40.00	268.00	25.00	NA	500	0.2	21.32	1400000.00		
18-Jul-21	82750	82.75	7.34	7.62	130.00	19.00	304.00	44.00	245.00	26.00	NA	500	0.2	21.48	1300000.00		
19-Jul-21	86080	86.08	7.35	7.68	135.00	19.00	324.00	48.00	275.00	28.00	NA	700	0.3	22.54	1700000.00		
20-Jul-21	77230	77.23	7.30	7.62	120.00	18.00	280.00	48.00	240.00	27.00	NA	400	0.2	22.40	1400000.00		
21-Jul-21	79820	79.82	7.41	7.70	125.00	17.00	292.00	44.00	258.00	26.00	NA	600	0.3	21.53	1700000.00		
22-Jul-21	74560	74.56	7.40	7.68	115.00	16.00	304.00	48.00	262.00	24.00	NA	400	0.2	22.31	1700000.00		
23-Jul-21	80920	80.92	7.42	7.69	130.00	15.00	312.00	40.00	286.00	28.00	NA	500	0.2	23.48	1300000.00		
24-Jul-21	72410	72.41	7.38	7.70	135.00	16.00	320.00	44.00	272.00	25.00	NA	700	0.2	21.40	1400000.00		
25-Jul-21	70700	70.70	7.35	7.68	125.00	14.00	316.00	40.00	265.00	24.00	NA	400	0.2	22.92	1100000.00		
26-Jul-21	84570	84.57	7.42	7.65	120.00	17.00	304.00	48.00	273.00	26.00	NA	700	0.3	21.56	1700000.00		
27-Jul-21	84180	84.18	7.38	7.67	130.00	18.00	312.00	44.00	255.00	28.00	NA	600	0.2	22.74	1300000.00		
28-Jul-21	100830	100.83	7.45	7.68	125.00	19.00	288.00	48.00	242.00	25.00	NA	500	0.2	23.32	1300000.00		
29-Jul-21	101210	101.21	7.42	7.65	115.00	19.00	280.00	44.00	247.00	26.00	NA	400	0.3	23.01	1400000.00		
30-Jul-21	93660	93.66	7.40	7.71	125.00	17.00	284.00	40.00	252.00	24.00	NA	700	0.2	22.50	1700000.00		
31-Jul-21	105600	105.60	7.48	7.69	120.00	18.00	280.00	48.00	245.00	29.00	NA	500	0.2	21.44	1700000.00		
Average	82047.74	82.05	7.37	7.67	125.81	17.35	310.71	43.48	274.23	26.19	NA	541.94	0.24	23.02	1435483.87		

Source: Logbook of Laboratory at Sewage Treatment Plant

