



पत्रांक :

331/W-4/127

दिनांक: 1/6/2022

To,

The Project Manager,  
Kanpur River Management Pvt. Ltd.,  
Flat No. 101, First Floor,  
3/83, Vishnupuri, Kanpur.

**Project : Development of Sewerage Treatment Plants on Hybrid Annulity PPP Basis at Kanpur & Unnao, State of Uttar Pradesh.**

**Sub: Regarding joint visit at Jajmau Facilities, Kanpur.**

Sir,

Please refer to the above subject, A joint visit at CSPS, 130 MLD STP & 43 MLD STP has been conducted by UPJN and STC officials on dated 01.06.2022. Pointwise observation sheets are enclosed herewith.

Hereby you are instructed to take enclosed observations in your notice, do the needful accordingly and give pointwise compliance.

**Enclosure : As above.**

**Yours faithfully**

(G. K. Chaudhary)  
Project Manager

**Endt. No. and date as above**

**CC to:**

1. Suprintendent Engineer, Circle Office, U.P. Jal Nigam (Rural), Kanpur.
2. Project Manager (E&M), Divisional Office, U.P. Jal Nigam (Rural), Kanpur.
3. Sri Shahzeb Iqbal, Assistant Project Engineer.
4. Project Engineer, STC, NMCG, Kanpur.

**Project Manager**

**Joint visit by UPJN & STC officials on date 01-06-2022**

At 130 MLD STP Jajmau-				
Sl. No	Name of unit	Details of Assets/ Equipments	Current Status	Status since
1	2	3	4	5
1.	Collection chamber	1 No	Epoxy coating at bottom is pending.	-
2.	Mechanical screen	3 Nos.	1- Uninstalled  2- Dysfunctional  3- Working	Same status as observed during visit on dated 18-05-2022. which comments has been forwarded by letter no. 308/W-8/37 dated 21-05-2022.
3.	Grit chambers	3 Nos. Grit mechanisim  Grit Classifire  Organic Pumps	1, 2 & 3 all are working   1, 2 & 3 all are working but not properly.  All 3 are not functional.	Same status as observed during visit on dated 18-05-2022.  Same status as observed during visit on dated 18-05-2022.
4.	Parshall flume for flow recording	Flow meter	Commissioning and factory calibration pending by firm side.	Same status as observed during visit on dated 18-05-2022.
5.	Primary sedimentation tanks	3 nos	1- Under renovation, cleaning work is due from long period. 2- Mechanism is dysfunctional, heavy sludge accumulation since 03-05-2022. 3- Partially working, sludge accumulated. Renovation not started till date.	Same status as observed during visit on dated 18-05-2022.
8.	Aeration tanks	18 nos aerators	14 aerators are working. Aerators nos. 9, 10, 12, 15 are dysfunctional.	Same status as observed during visit on dated 18-05-2022.
10.	Final sedimentation tanks	3 Nos.	1- Renovation partially completed joint visit done on today in which many observation has been found regarding which letter has been	

*[Signature]*  
A.P.E. (Civil)

*[Signature]*  
A.P.E. (Civil)

			issued. 2- Renovated and working 3- Not renovated yet Sludge withdrawal is not at par.	
11.	Treated effluent pump house	Pump house 1 No. Pumpsets- 11 Nos pumps	7 ok out of 11 Pumpset no. 2- motor burnt since 31-03-2022. 7- non operational from very long time. 11- new pump installed, commissioning is pending. 6- NRV repairing work in progress.	Same status as observed during visit on dated 18-05-2022.
12.	Return sludge pump house	Pump house 1 No. Pumpsets- 4 Nos	1, 2 & 4 are working 3 Under renovation.	Same status as observed during visit on dated 18-05-2022.
13.	Blending tank	1 No.	Renovation work completed.	-
14.	Gravity sludge thickeners	2 Nos.	1- Renovation work completed with few observations. 2- Renovation work completed with few observations. Observation letter has been issued for pending works and in present both has been made functional by the firm.	-
15.	Thickened sludge pump house	Pump house 1 No. Pumpsets- 4 nos screw pumps	Building Under renovation Pumps supply and installation are pending due to which sludge may be accumulated in the thickeners.	-
16.	Primary sludge digester	2 Nos.	Under renovation. Achieved progress is not as per schedule	Same status as observed during visit on dated 18-05-2022.
17.	Secondary sludge digester	1 Nos	Under renovation. Achieved progress is not as per schedule	Same status as observed during visit on dated 18-05-2022.
18.	Digested sludge pump house	4 nos	2 Screw pumps out of 4 is ok. 1 No submersible pump is temporally running which is not adequate for withdrawal of the process sludge.	Same status as observed during visit on dated 18-05-2022.
19.	Centrifuges building		Under renovation Achieved progress is not as per schedule	Same status as observed during visit on dated 18-05-2022.
20.	Centrate/supernatant pump house	Pump house 1 No. Pumpset-4 nos	Under renovation Achieved progress is not as per schedule	Same status as observed during visit on dated 18-05-2022.
21.	Gas holders	2 Nos	Under renovation	Same status

ME (ERM)

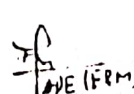

ME (Civil)



			Achieved progress is not as per schedule	as observed during visit on dated 18-05-2022.
22.	Gas flaring units			
23.	Gas scrubbers		-	-
24.	Bio gas compressors		-	-
25.	Dual fuel generators	5	3 & 4 During power cut it is observed that DG is not capable of full pumping discharge and DG status is not certain. So it is necessary to maintain all DG as spare to overcome effluent bypass situation.	-
26.	Filtrate pumps	Pump house 1 No. Pumps 2 nos.	Both pumps are not working. Neither pump has been repaired nor alternate arrangement done.	Same status as observed during visit on dated 18-05-2022.
<b>At CSPS Jalmau-</b>				
1	Pump house	Pump house 1 No. Pumps 7nos.	4 pumps are OK. 2, 6 & 4 not ok 4 No Starter panel is not Ok	-
2	Inlet chamber	1 No Manual Screen- 2 Nos Mechanical Screen- 2 Nos	Not renovated properly. It is not regularly cleared by the deputed staff. Mech. Screen has not been replaced till now. It is commonly observed that only one screen used to be functional and at many times both screen get dysfunctional and due to the negligence of firm it takes a lot of time to get repaired which results huge headup of discharge in incoming trunk seweline.	-
3	Common Sump well.	1 No	Renovated with few observations	-
4	Transformer	4 Nos	3 Nos. are OK	-
5	DG Set	1 no - 1010 Kva	OK	-

Alongwith the above status following are the major concerns which has to be taken carefully by the firm:-

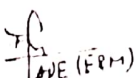

1. Firm has laid 1500 mm dia MS pipe for treated effluent pipe line diversion without any information and also without compliance of letter no. 260/W-0/36 dated 30-04-2022. This is very serious issue which is also repetitive, that clearly shows the unprofessional working tactics of the firm.
2. Process of sludge withdrawal was observed in very pathetic condition. Due to insufficient withdrawal of sludge, it is being recirculated in the various units of STP. This is resulting almost septic condition in all units including PST, aeration Zone and PST. MLSS and biomass required for decomposition of organic matters present in sewage, has been completely destroyed. All this is happening due to insufficient manpower, lack of pumps, inadequate removal of the sludge, non usage of sludge drying beds, lack of planning and supervision. This matter should be taken care on top priority basis.

 (Firm)
 (CSPS)

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23.	Gas scrubbers			
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26.	Filtrate pumps	Pump house 1 No. Pumps 2 nos.	Both pumps are not working. Neither pump has been repaired nor alternate arrangement done.	Same status as observed during visit on dated 18-05-2022.
<b>At CSPS Jajmau-</b>				
1	Pump house	Pump house 1 No. Pumps 7nos.	4 pumps are OK. 2, 6 & 4 not ok 4 No Starter panel is not Ok	
2	Inlet chamber	1 No Manual Screen- 2 Nos  Mechanical Screen- 2 Nos	Not renovated properly. It is not regularly cleared by the deputed staff. Mech. Screen has not been replaced till now. It is commonly observed that only one screen used to be functional and at many times both screen get dysfunctional and due to the negligence of firm it takes a lot of time to get repaired which results huge headup of discharge in incoming trunk seweline.	
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4	Transformer	4 Nos	3 Nos. are OK	
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2. Process of sludge withdrawal was observed in very pathetic condition. Due to insufficient withdrawal of sludge, it is being recirculated in the various units of STP. This is resulting almost septic condition in all units including PST, aeration Zone and FST. MLSS and biomass required for decomposition of organic matters present in sewage, has been completely destroyed. All this is happening due to insufficient manpower, lack of pumps, inadequate removal of the sludge, non usage of sludge drying beds, lack of planning and supervision. This matter should be taken care on top priority basis.

 APE (Firm)
  APE (City)



3. Firm has not provided shiftwise deputed staff list.
4. Various letter has been issued to KRMPL for improvement in O&M works during renovation. But firm is neither sincerely taking any decision for betterment of O&M work nor improving planning for making balance between O&M and renovation work. They are randomly taking a unit for renovation without proper plan or any alternate diversion arrangement. They also do not give prior information to UPJN or STC for shutdown of any unit. O&M work is in pathetic condition which can be clearly seen in joint sampling visit for the dated 27-05-2022 (Copy enclosed) i.e. noncompliance of KPI standards.
5. On dated 29-05-2022 due to the negligence in excavation work for utility shifting, 1500 MM dia PSC treated effluent pipeline had been damaged by firm, they got it repaired same day but effluent bypass gate was closed fully on 31-05-2022 at 3:00 PM. Resulting three day treated effluent was overflowed to ganga.
6. O&M work should be taken on a serious note for upgrading the performance of STP. for this all the deployed staff should be skilled and proactive for maintenance work as well as for any unscheduled break down. This thing seems to be missing in the concerned Incharge.

STC

1. Name - Ajay K. Goyal - Signature
2. Name - Anuraj Kushwaha - Signature

Signature  
Signature  
 APE(E&M) / APE(Civil)  
 UPJN

**GRAB SAMPLE COLLECTION & ANALYSIS**  
**130 MLD STP JAJMAU KANPUR**

**DATE - 27-05-2022**

INFLUENT (INLET)	RESULTS	EFFLUENT (OUTLET)	RESULTS
pH	7.3	pH	7.6
COD	528	COD	240
BOD	200	BOD	98
TSS	420	TSS	76

  
**Ravindar Kumar**

(Lab Chemist)  
 (KRMPL)

**Satyam Bharti**

(Process Expert)  
 (KRMPL)

  
**Ajay Kannujia**

(Chemist)  
 (G.P.C.U, U.P Jal Nigam Kanpur)

Joint visit by UPJN & STC officials on date 01-06-2022

At 43 MLD STP JAJMAU

S.N.	Name of unit	Details of civil Assots	Comments/Observations
1	2	3	4
1.	Collection chamber	1 no	
2.	screen channel	Mechanical Bar Screen - 2 Nos Manual Bar Screen - 1 No	Functional Functional
3.	Grit chamber	Grit Classifier Grit Scraper Sluice Gates	Vibration in running, alignment issue. Functional Functional
4.	Parshall flume for flow recording fitted with ultrasonic flow recorder	Ultrasonic flow meter	Totalizer reading not ok, calibration and power backup needed.
5.	Distribution chamber For Primary sedimentation tanks	1 No	
6.	Primary sedimentation tanks	1 nos Mechanism with Rail	Functional but scum removal mechanism is not working properly, protection coating in hand rail is required, allow with this cleaning of launders and regular cleaning of scum chamber is required.
7.	Aeration tanks	Civil Structure - 1 Nos Air Blower - 3 Nos  Membrane type diffuser - 440 Set  Blower Pipeline	All are functional but there is certain tripping & vibration in Blower No. 2  4 Sets are damaged.  Cleaning of surface & Protection coating is required. Due to insufficient sludge withdrawal from PST there is high MLSS and no biomass in Aeration Zone.
8.	Final sedimentation tanks	1 No	Functional, Grouting and Painting of rail is required.
9.	Treated effluent pump house	Pump house - 1 No Pumpset - 5 nos	All working.
10.	Return sludge pump house	Pump house - 1 Nos Pumpset for return sludge - 2 Nos Pumpset for excess sludge - 2 Nos	Both working. Only 1 No working.
11.	Gravity sludge thickeners	1 nos	Not in working condition since very long period due to non withdrawal of adequate quantity of sludge.
12.	Thickened sludge pump house	Pump house - 1 Nos Pumpset - 2 Nos	Presently 1 pump is working but in common observation it has been found many times that both pumps are dysfunctional and sludge withdrawal

*Pratik*  
A.P.E. (ESM)



			from thickened sludge sump is usually being done by a alternate submersible pump.
13.	Primary sludge digester	RCC dome - 1 No Digester Motor (20 HP) with mixing screw - 4 nos	Digester is not in working condition.
14.	Centrifuges	RCC framed structure and pump house - 1Nos  Centrifuge sludge sump  Clear Water Pump Set - 1 Nos.  Sludge Feed Pump Set for Centrifuge - 2 Nos  Centrifuge - 2 Nos	Functional  Functional  Functional Extracted semi wet sludge should be stacked following proper safety measures of pollution board.
15.	Centrate/supernatant pump house	Shaded structure - 1 Nos Pumpset - 2 Nos	Functional
16.	Screw Pump Chamber	Shaded structure - 1 Nos Pumpset - 2 Nos	Functional
17.	MCC Room	1 No	Ok
18.	11/0.4 KV Sub-station	1600 KVA, 11/0.4 KV Transformer  800 Amp., 11 KV OCB (Oil Circuit Breaker)  2000 Amp., 4 pole, 440 V, ACB (Air Circuit Breaker)	Functional  Functional  Functional

Along with the above status following are the major concerns which have to be taken carefully by the firm:-

1. Firm has not provided shift wise deputed staff list.
2. Due to Insufficient sludge withdrawal & in proper running of blower, performance of STP is affected which can be seen by joint sampling result of dated 21.05.2022 (copy enclosed).
3. Report of any unscheduled activity or break down should be provided hv firm on immediate basis.

*Prkith* *11/06/22*  
APE(E&M) APE(Civil)  
UPJN


STC  
1. *Ajay K. Goyal - APE*  
2. *Ashish*


# TEST REPORT

Grab sample collection & Analysis  
43MLD STP Jajmau, Kanpur

Sampling and Analysis Date: 21/05/2022

Sr. No.	Test Parameters	INLET Sample	OUTLET Sample
1	PH	7.5	8.1
2	COD (ppm)	624	168
3	BOD(ppm)	198	53
4	TSS (ppm)	395	72

  
(Pabnam Nalawade )  
Lab Chemist  
KRMPL

  
( Ajay Kanaujia )  
Chemist  
G.P.C.U, UP Jal Nigam Kanpur(Rural)

( Shriram Saste )  
Plant Incharge  
KRMPL