



पत्रांक: 356 / व-८ / 60

दिनांक: 14/06/2022

To,

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

Sub- Development of sewage treatment plant under hybrid annuity mode PPP basis at Kanpur & Unnao state of Uttar Pradesh.
Regarding visit at Jajmau Facilities on date 14-06-2022.

Sir,

Please refer to above subject, a visit has been done by the under signee along with the team and with KRMPL representative available at site on the date mentioned above. Many discrepancies have been found in operation/maintenance/renovation of STPs, which's detailed observation report for both STP has been enclosed herewith.

During site visit of on dated 14.06.2022 along with enclosed observation some particular and general observation for 130 MLD STP are as following :-

1. On dated 09-06-2022 electrical failure was reported from 05:50 p.m. and TEPH rising main leakage also happened at 130 mld STP on the same day in the evening. Electrical fault restored on 12-06-2022 but the diversion of effluent line still has not been completed. The whole discharge was being bypassed to river since 09-06-2022. This work is already very delayed, today during visit KRMPL representative present on site Mr. Vinod Wagh has committed to complete the work up to 15-06-2022 in all respect. It is also observed that work has been started without proper planning. It was already instructed to carryout this work in such a way that it can be finished in minimum time. It was committed from your side that this interconnection activity will be completed within 2 days. It is very unfortunate that due to poor planning and execution, this work is still in progress on the 6th day. Consequently whole treated effluent is being discharged into river Ganga.
2. It is found that due to excessive uncontrolled flow, the common effluent channel slab of sludge drying bed area has been damaged in between the passage of 36 MLD CETP. This is causing inconvenience in drying bed O&M work and also damaging it further. So repair and rectify all such damages after completing the diversion work.
3. Process of sludge withdrawal was observed in very pathetic condition. It is being repeatedly observed that 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. Biomass required for decomposition of organic matters present in sewage, has been completely destroyed. All this is happening due to improper operation, insufficient manpower, lack of pumps, inadequate removal of the sludge, lack of process control and supervision. This matter should be taken care on top priority basis.
4. During renovation work there is necessity of extra pumps for alternate arrangement such as sludge withdrawal etc during pump replacement work. This seems to be missing due to which process related deficiencies occurs.
5. It is observed that firm has still not completed the rectification work against the observations sent by UPJN/STC after 1st& 2nd Milestones.
6. 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. O&M work is in pathetic condition, sewage is only flowing from inlet to outlet via various units without efficient treatment which can be clearly seen in Joint sampling visit for the dated 01-06-2022 (Copy enclosed)

7. O&M work must be taken on seriously 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 break down. This thing seems to be missing in the concerned process and plant in charge.

During all sites visit it is observed that there is not a single responsible person present on site which can take the responsibility of the work and implement it as instructed. Lack of planning and taking responsibility is clearly missing in firm's officials and most importantly there is hardly any compliance done of the repeated instructions given. It clearly reflects the lack of due diligence and irresponsible attitude of the firm towards maintenance/renovation of STP.

Hereby you are instructed to rectify the above discrepancies and give point wise compliance of the enclosed inspection reports within seven days. This schedule should be followed by firm for all issued inspection reports.

Encl.- As Above.

Yours Sincerely


(G.K. Chaudhary)
Project Manager

Copy to the following for information and necessary action (By E-mail) -

1. ED(Project), NMCG, New Delhi.
2. APD, SMCG-UP, Lucknow.
3. CE(Kanur Zone), U.P. Jal Nigam(Rural), Kanpur.
4. SE, Circle Office, U.P. Jal Nigam(Rural), Kanpur.
5. Project Manager-(E&M), Ganga Pollution Control Unit, Kanpur.
6. PE, STC, NMCG, Kanpur.


Project Manager

Inspection Report by PM, GPCU, UPJN(R), Kanpur on dated 14-06-2022

Following officials were present during inspection-

1. Mr. Ajay Kanaujiya, Chemist, UPJN(R),
2. Mr. Shahzeib Iqbal, APE(Civil), UPJN (R),
3. Mr. Ankit Singh, APE(E&M), UPJN (R),
4. Mr. Vinod Wagh, Representative, KRMPL.
5. Mr. Shrikrishna Verma, Plant Incharge, KRMPL.
6. Mr. Akshay Tripathi, Process Expert, KRMPL.

At 130 MLD STP :-

Sl. No	Name of unit	Details of Assets/ Equipments	Scheduled Renovation Completion Date (for 100%)	Renovation Status	Current Status		
					Functional/ Not functional/ Shut down	Observations in functionality	Duration of Current Status
1	2	3	4	5	6	7	8
1.	Collection chamber	1 Unit	15.10.2021	Renovated on date 15.10.2021	-	-	-
2.	Mechanical screen	3 Nos.	15.06.2022				
		Mech. Screen-1		Replaced on Oct, 2021	• Functional	• -	• -
		Mech. Screen -2		Replaced on Oct, 2021	• Functional	• -	• -
		Mech. Screen -3		Replaced on Oct, 2021	• Functional	• -	• -
3.	Grit chambers	Grit mechanism (3 Nos) Grit Mechanism 1 Grit Mechanism 2	15.06.2022				
				Replaced on Oct, 2021	• Functional	• -	• -
				Replaced on Oct, 2021			

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		Grit Mechanism 3		Replaced on Oct, 2021	<ul style="list-style-type: none"> Functional 	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> -
		Grit Classifire (3 Nos.)		Replaced on Oct, 2021	<ul style="list-style-type: none"> Functional 	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> -
		1 No classifire		Replaced on Oct, 2021	<ul style="list-style-type: none"> Functional 	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> Since installation
		2 No classifire		Replaced on Mar, 2022	<ul style="list-style-type: none"> Functional 	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> Since installation
		3 No classifire		Replaced on Mar, 2022	<ul style="list-style-type: none"> Functional 	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> Since installation
		Organic Pumps (3 Nos.)					
		1 No pump		Replaced on Mar, 2022	<ul style="list-style-type: none"> Functional 	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> -
		2 No pump		Replaced on Mar, 2022	<ul style="list-style-type: none"> Dysfunctional 	<ul style="list-style-type: none"> Installation of all 3 Pumps has been completed, electric connection is due for 1 pump. 	<ul style="list-style-type: none"> Since Installation
		3 No pump		Replaced on Mar, 2022	<ul style="list-style-type: none"> functional 	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> -
4.	Parshall flume for flow recording	Flow meter (1 No)	15.10.2021	Replaced on Oct, 2021	<ul style="list-style-type: none"> Functional 	<ul style="list-style-type: none"> Commissioning and factory calibration pending by firm side. 	<ul style="list-style-type: none"> Since installation
5.	Primary sedimentation tanks	3 Units	15.06.2022	Under renovation from dated 26-02-2022.	<ul style="list-style-type: none"> Shut Down 	<ul style="list-style-type: none"> Renovation started from four month but the progress is not considerable. 	<ul style="list-style-type: none"> -
		Unit 1		Renovated observations on 29.01.2022	<ul style="list-style-type: none"> Dysfunctional 	<ul style="list-style-type: none"> Mechanism is dysfunctional, heavy sludge accumulation 	<ul style="list-style-type: none"> From 03-05-2022 till date
		Unit 2					





		Unit 3		Not Renovated.		<ul style="list-style-type: none"> Partially functional 	and sludge washout to AT.	<ul style="list-style-type: none"> Partially working, sludge accumulated, heavy sludge washout to further units. Since Handover 	
6.	Aeration tanks	3 Units	15.06.2022	Structure not renovated.				• -	
		18 nos aerators							
		Aerator 1		Replaced on dated 04-12-2021		• Functional	• 14 nos aerators are functional.	• From Jan, 2022 till date.	
		Aerator 2		Replaced on dated 04-12-2021		• Dysfunctional		• From Jan, 2022 till date.	
		Aerator 3		Replaced on dated 04-12-2021		• Functional	• Raw sludge is reaching to aeration zone from previous units, no biomass available, dissolved oxygen is nil, whole aeration zone is in septic condition due to which treated effluent parameters are adversely affected.	• From Jan, 2022 till date.	
		Aerator 4		Replaced on dated 04-12-2021		• Functional		• From Jan, 2022 till date.	
		Aerator 5		Replaced on dated 04-12-2021		• Functional		• From Jan, 2022 till date.	
		Aerator 6		Replaced on dated 04-12-2021		• Functional		• From Jan, 2022 till date.	
		Aerator 7		Not Replaced.		• Functional		• From Jan, 2022 till date.	
		Aerator 8		Not Replaced.		• Functional		• From Jan, 2022 till date.	
		Aerator 9		Not Replaced.		• Dysfunctional		• From Jan, 2022 till date.	
		Aerator 10		Not Replaced.		• Dysfunctional		• From Jan, 2022 till date.	

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											2022 till date.	
7.	Final sedimentation tanks	3 Units	Aerator 11	Not Replaced.							• -	
			Aerator 12	Not Replaced.							• Jan, 2022	
			Aerator 13	Not Replaced.							• -	
			Aerator 14	Not Replaced.							• -	
			Aerator 15	Not Replaced.							• -	
			Aerator 16	Not Replaced.							• -	
			Aerator 17	Not Replaced.							• -	
			Aerator 18	Not Replaced.							• -	
			Unit 1	Under renovation from dt 15.01.2022(Bridge collapsed after that taken in renovation)							• -	
			Unit 2	Renovated on dated 05.02.2022							• Since renovation	
8.	Treated effluent pump house	Proposed pump house and CCT building Pump house 1 No.	Unit 3	Not renovated							• Since handover.	
					09.08.2022						• 7 Pumps are ok out of 11	

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		Pump No 1 Pump No.2 Pump No 3 Pump No 4		Replaced on dated 03.12.21 Replaced Replaced on May,2022 Not replaced	<ul style="list-style-type: none"> • Functional • Functional • Dysfunctional. • Functional 	<ul style="list-style-type: none"> • - • - • Commissioning pending. • - 	<ul style="list-style-type: none"> • - • - • Since installation • -
10.	Blending tank	1 Unit	15.10.2021	Renovated on dated 31.05.2022	<ul style="list-style-type: none"> • Renovation work completed. 	<ul style="list-style-type: none"> • - 	<ul style="list-style-type: none"> • -
11.	Gravity sludge thickeners	2 Units Unit 1 Unit 2	15.06.2022	Renovated on date 04-06-2022 Renovated on date 31.05.2022	<ul style="list-style-type: none"> • Dysfunctional • Dysfunctional 	<ul style="list-style-type: none"> • After renovation both thickener got started but due to problem in mechanical arrangement both are not running. 	<ul style="list-style-type: none"> • 13-06-2022 • 08-06-2022
12.	Thickened sludge pump house	Pump house 1 No. Pumpsets- 4 nos screw pumps Pump No 1 Pump No 2 Pump No 3 Pump No 4	15.06.2022	Under renovation since Feb,22 Not Renovated Not Renovated Not Renovated Not Renovated	<ul style="list-style-type: none"> • Dysfunctional • Dysfunctional • Functional • Functional 	<ul style="list-style-type: none"> • Renovation work under progress. 	<ul style="list-style-type: none"> • - • since last year • since last year • - • -
						<ul style="list-style-type: none"> • Only 2 pumps are running which are not capable for proper sludge withdrawal from thickener..A 	

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							submersible pump was hanged temporarily as an alternate arrangement but that is too damaged since last month. This pump house's inefficient performance is the major reason of inadequate sludge withdrawal from PST's and heavy sludge washout to later units.	
13.	Primary digester	sludge	2 Units Digester 1 Digester 2	15.06.2022	Renovation started since Oct/21 Renovation started since Oct/21 Achieved progress is not as per schedule	<ul style="list-style-type: none">Shut DownShut Down	<ul style="list-style-type: none">All major works is pending in both digesters due to discontinuous work since starting.	<ul style="list-style-type: none">Oct, 2021Oct, 2021.
14.	Secondary digester	sludge	1 Unit	15.03.2022	Renovation started since Nov/21 Achieved progress is not as per schedule	<ul style="list-style-type: none">Shut Down	<ul style="list-style-type: none">All major works is pending in both digesters due to discontinuous work since starting.	<ul style="list-style-type: none">Nov, 2021.
15.	Digested pump house	sludge	1 No Pump House 4 nos Pumpset Pump No 1 Pump No 2 Pump No 3 Pump No 4	15.06.2022	Renovation not started yet. Not Replaced Not Replaced Not Replaced Not Replaced	<ul style="list-style-type: none">DysfunctionalDysfunctionalDysfunctionalDysfunctional	<ul style="list-style-type: none">All pumps are dysfunctional.A submersible pump is being hanged at DSPH sump as an alternate arrangement for pumping of sludge which is also in	<ul style="list-style-type: none">After HandoverAfter HandoverAfter HandoverAfter Handover

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							operative as of now.	Handover
16.	Centrifuges building	1 Unit	15.06.2022	Renovation started on Dec, 2021.	Under renovation	<ul style="list-style-type: none">Most of the works are pending. Achieved progress is not as per schedule	<ul style="list-style-type: none">Dec, 2021	
17.	Centrate/supernatant pump house	Pump house 1 No. Pumpset-4 nos Pump No 1 Pump No 2 Pump No 3 Pump No 4	15.06.2022	Renovation started on Apr, 2022 Not replaced. Not replaced. Not replaced. Not replaced.	<ul style="list-style-type: none">Under renovationDysfunctionalDysfunctionalDysfunctionalDysfunctionalUnder renovation	<ul style="list-style-type: none">All major works of civil and E&M are pending. Achieved progress is not as per schedule.Pumps are neither replaced nor repaired for maintaining healthy O&M.	<ul style="list-style-type: none">Apr, 2022After HandoverAfter HandoverAfter HandoverAfter HandoverOct, 2021	
18.	Gas holders	2 Units Gas Holder 1 Gas Holder 2	15.06.2022	Renovation Started on Oct, 21 Renovation Started on Oct, 21	Under renovation	<ul style="list-style-type: none">All major works is pending due to discontinuous work since starting. Achieved progress is not as per schedule	<ul style="list-style-type: none">Dec, 2021	
19.	Gas flaring units	-	09.08.2022	Renovation Started on Dec, 21	-	<ul style="list-style-type: none">All major works is pending due to discontinuous work since starting.	<ul style="list-style-type: none">Dec, 2021	
20.	Gas scrubbers	-	09.08.2022	Renovation not started	Shut Down		<ul style="list-style-type: none">-	
21.	Bio gas compressors	-	09.08.2022	Renovation not started	Shut Down		<ul style="list-style-type: none">-	
22.	Dual generators	5 Nos. DFG. 2 DFG. 3	15.06.2022	-	<ul style="list-style-type: none">--	<ul style="list-style-type: none">During power cut it is observed that DG is not capable of full	<ul style="list-style-type: none">-	

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		DFG DFG.5	4				<ul style="list-style-type: none">• Functional• Functional• -	<p>pumping discharge and DG status is not certain. So it is necessary to maintain all DG as spare to overcome bypass situation and running of plant with full efficiency.</p>	
23.	Filtrate pumps	Pump house 1 No. Pump house 2 nos. Pump No 1 Pump.No 2	09.08.2022	Work not started.			<ul style="list-style-type: none">• Dysfunctional• Dysfunctional.	<ul style="list-style-type: none">• Both pumps are not working.• Neither pump has been repaired nor alternate arrangement done.	<ul style="list-style-type: none">• Apr, 2021.• Apr. 2021
24	Sludge Drying Beds	35 Units	15.06.2022	Renovation started since feb,2022			<ul style="list-style-type: none">• Partially renovated or non renovated SDB's can be used.	<ul style="list-style-type: none">• Firm is not efficiently using the SDB's for with drawl of process sludge even when there is inadequacy in sludge with drawl for O & M work. 8 nos SDB's are empty, 5 to 6 SDB's are dry in which sludge cakes can be lifted ,the frequency of clearing/Filling of SDB is almost 2 SDB/week which is too low. No log book has been maintained for SDB.	<ul style="list-style-type: none">• Since handover

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At CSPS-						
1	Pump house	Pump house 1 No. Pumps 7nos.	15.06.2022	Renovated with few observation	<ul style="list-style-type: none"> 5 pumps are OK. 3 & 6 not ok 	
2	Inlet chamber	1 No Manual Screen- 2 Nos Mechanical Screen- 2 Nos	15.10.2021	Renovated with few observation	<ul style="list-style-type: none"> Both Mechanical Screens are ok 	<ul style="list-style-type: none"> -
3	Common Sump well.	1 No	15.03.2022	Renovated with observations	<ul style="list-style-type: none"> - 	<ul style="list-style-type: none"> -
4	Sump cum Pump house	1 Nos	15.03.2022	Renovated with observations	<ul style="list-style-type: none"> Renovated with few observations. 	<ul style="list-style-type: none"> -
5	Transformer	4 nos	09.08.2022	Not replaced.	<ul style="list-style-type: none"> 3 Nos. are OK 	<ul style="list-style-type: none"> -
6	DG	1 no – 1010 Kva	09.08.2022	Not replaced.	<ul style="list-style-type: none"> OK 	<ul style="list-style-type: none"> -

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At 43 MLD STP JAJMAU

S.N.	Name of unit	Details of civil Assets	Comments/Observations
1	2	3	4
1.	Collection chamber	1 no	-
2.	screen channel	Mechanical Bar Screen- 2 Nos	Functional
		Manual Bar Screen – 1No	Functional
3.	Grit chamber	Grit Classifier	Vibration in running, alignment issue.
		Grit Scraper	Functional
		Sluice Gates	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, along 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 - 4 nos	4 pumps are working, connection issue in one pump
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, connection issue in one pump
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

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			dysfunctional and sludge withdrawal 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	Both Functional
16.	Screw Pump Chamber	Shaded structure – 1 Nos Pumpset – 2 Nos	Functional- 1 No.
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. Due to insufficient sludge withdrawal & in proper running of blower, performance of STP is affected.
2. Report of any unscheduled activity or break down should be provided by firm on immediate basis.

S. L. APE.

Y. P. M.

GRAB SAMPLE COLLECTION & ANALYSIS
130 MLD STP JAJMAU KANPUR

DATE:- 01/06/2022

INFLUENT	RESULTS (mg/L)	EFFLUENT	RESULTS (mg/L)
PH	7.2	PH	7.5
COD	608	COD	256
BOD	225	BOD	96
TSS	453	TSS	72

R Kumar

Ravindar Kumar
Lab Chemist
KRMPL

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(AJAY KANAUJIA)
Chemist
G.P.C.U, U.P. JN Kanp