










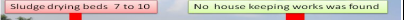



SITE INSPECTION REPORT FOR 42 MLD Sajari STP				SAJARI STP	Date:24.11.2022		INSPECTED BY: STC & UPJN Team: 1) Mr. Ajeet Singh (UPJN JE: Civil) 2) Mr. Ajay Kumar Goyal (Support Engr. Mech. STC Kanpur) 2) Ms. Divya Mittal (Support Site Supervisor, STC Kanpur) KRMPL Team: Mr. Ram Yadav (Plant Incharge)	
S. No.	Equipment	Assessment of Current Condition	Assessment of Current Condition Photo	Corrective Action Suggested by STC	Corrective Action Completed by KRMPL	Original Date of Issue	Proposed date to resolve by KRMPL	Remark
A	INLET CHAMBER							
1	Inlet Sluice Gates							
2	Mech. Coarse screen (no.1)	Operational Since 15.10.2022		1) Vibration & uneven sound issue need to be rectified at the earliest. 2) Auto system level settings needs to be done and must be automated and it should be get checked by UPJN & PE. 3) It seems that KRMPL is still not operating the screens regularly. Screens needs to be operated regularly. In the meeting dated 11/04/2022, ED (T) NMISG directed KRMPL to rectify the screen at the earliest but not rectified yet completely.		20.09.2022		Pending
3	Mech. Coarse screen (no.2)	Operational		1) Level sensor has to be installed at earliest for automation.		Since handover 11-10-2019	28.02.2022 / New date given 31.08.2022/ Again new date 31.10.2022 vide KRMPL Letter No.104 dated 07.08.2022	LONG PENDING
4	Mechanical Screen Level transmitter display	1) Auto System of Mech Coarse Screen -1 & 2 are Under Maintenance 2) Not operating the mechanical screen perfectly 3) Level sensor of 2nd mechanical screen is not available		1) The level setting system has to be corrected and the screens must be automated. Level sensor for mechanical screen no. 2 has to be installed at earliest for automation. Screens need to be automated at the earliest. 2) Closing gate must be fixed to the level transmitter casing box. 3) Painting needs to be done on the casing box.		Since handover 11-10-2019	15.09.2022	LONG PENDING
5	Belt Conveyor	Operational		Every time during visit, conveyor belt was found in still condition. Needs to be operated on regular basis.		20.09.2022		
6	Mech. Coarse Screen On-site Panel	Finally all the indicators are replaced on 17.08.2022						
7	Manual Coarse Screen.	When UPJN & STC team reached site, the bars were found choked which shows that KRMPL is not cleaning the screen regularly.		Manual Screen needs to be cleaned.		12.07.2022		
B	RAW SEWAGE PUMPING STATION							
1	Raw Sewage Pump-01	Operational						
2	Raw Sewage Pump-02	Operational						



3	Raw Sewage Pump-03	Non Operational Since 19.09.2022		Need to be rectified.		19.09.2022		Pending
4	Raw Sewage Pump-04	Operational						
5	Raw Sewage Pump-05	Operational						
6	Collection Sump Level sensor	No level transmitter was found inside collection sump		Install the level transmitter at the earliest and maintain the levels of the collection sump on regular basis.		18.11.2021	Pending from KRMPL end.	As per Article 8.8 (a), this has to be provided by the concessionaire
7	Raw Sewage Pumps operation	Operational		1) A CCTV camera needs to be installed at the MPS so that the collection sump, inlet chamber, MPS equipments operations etc can be monitored.		08.06.2022		
8	EOT	Operational						
9	Electro-Magnetic flow meter	Operational Canopy needs to be provided at the earliest.		Flow meter's flow record must be provided in the log book & MPR		10.05.2022		Pending
10	Panel Room	When UPJN & PE visited site, it was found that some of the phase indicators were not working.		Digital meters need to be replaced.		21.09.2021	Pending from KRMPL end.	
C PRIMARY UNIT								
1	Fine screen (No. 1 Mech)	Operational The bar spacing at some places in the screen has increased.		Need to be rectified at earliest.		27.10.2021	15-01-2022/New date 15.10.2022	LONG PENDING
2	Fine screen (No. 2 Mech)	Operational The bar spacing at some places in the screen has increased.		1) Screen needs to be rectified. 2) Screen bars spacing need to be rectified at earliest.		16.08.2022 - 27-10-2021	15-01-2022/ new date 15.10.2022	LONG PENDING
3	Fine Mechanical Screen auto system	No level sensor were present around fine mechanical screen		1) Level sensor must be installed at earliest. 2) Fine screen must be automated at earliest.		Since handover 11-10-2019	28.02.2021 / New date 30.10.2022	LONG PENDING
4	Belt Conveyor	When UPJN & PE team reached site, we found conveyor belt in still condition and by seeing the belt condition, it has been observed that KRMPL is not running the belt regularly as per requirement. Upon asking by PE team, KRMPL started running the belt. Also no operator manpower was present on PTU during visit.		1) Belt conveyor needs to be operated regularly. 2) Required Operator manpower must be present on PTU for regular operation.		07.03.2022		
5	PTU On site Panel	1) Some of the indicators not working.		1) Non working indicators should be replaced.		27.10.2021		LONG PENDING
6	Manual screen	Operational						
7	Grit chamber-1 1) ORP 2) Scraper/detritor mechanism 3) Back Classifier Mechanism	Operational It has been observed that torque meter is not available on detritor mechanism which is essential for knowing the equipment performance. Indicator and push button not working		1) Canopy must be provide on every motors. 2) Torque meter needs to be provided on detritor mechanism. 3) Non working indicators and push button need to be replaced.		31.07.2021 2) 08.06.2022 3) 12.07.2022	30.09.2022	Long Pending
8	Grit chamber-2 1) ORP 2) Scraper/detritor mechanism 3) Back Classifier Mechanism	Operational It has been observed that torque meter is not available on detritor mechanism which is essential for knowing the equipment performance. Indicator and push button not working		1) Classifier alignment need to be rectified. 2) Canopy must be provide on every motors. 3) Torque meter needs to be provided on detritor mechanism. 4) Non working indicators and push button need to be replaced.		31.07.2021 3) 08.06.2022 4) 12.07.2022	30.09.2022	Long Pending

9	Grit Disposal	No spare trolley was found at site because of which some grts are found on the floor below chutes.		Spare trolley must be provided in case of shifting/ removing grit.		11.01.2022		Pending
10	Parshall Flume	Scale has been fixed finally on 24.11.2022. No ultrasonic level sensor was found at site.				1) Since handover 11-10-2019 2) 11.01.2022	15.09.2022	LONG PENDING As per Article 8.8 (a), this has to be provided by the concessionaire False information was provided in KRMPIL letter no. 036 dated 05.07.2022 regarding compliance to PE inspection.
11	PST 1	Non operational It has been observed that torque meter is not available on the mechanism which is essential for knowing the equipment performance. Uniform flow was not observed through Weir notch		1) Vibration check on regular basis through vibration meter and lubrication to be done on regular basis for PST-1. 2) Torque meter needs to be provided. 3) Weir plate needs to be levelled.		1) 27-10-2021 2) 08.06.2022	1) 31.01.2022 / 31.05.2022 New Date 31.07.2022/Again 30.09.2022	
12	PST 2	Operational Local push buttons was found not working. It has been observed that torque meter is not available on the mechanism which is essential for knowing the equipment performance. Uniform flow was not observed through Weir notch		1) Need to be rectified at the earliest. 2) Local push buttons must be rectified at the earliest. 3) Vibration check on regular basis through vibration meter and lubrication to be done on regular basis for PST-2. 4) Torque meter needs to be provided. 5) Weir plate needs to be levelled.	17.08.2022 - 27-10-2021 3) 08.06.2022		1) 31.01.2022 2) 15.01.2022 / 31.05.2022 New Date 31.07.2022/Again New date 30.09.2022	LONG PENDING
13	Primary sludge pump no. 1	Operational						
14	Primary sludge pump no. 2	Operational		Need to be rectified at earliest.		20.09.2022		Pending
D AERATION TANK								
1	Aerator no 1	Operational		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regular basis for each aerator.	21.09.2021	31.05.2022 New Date 30.07.2022/Again new date 30.09.2022		LONG PENDING
2	Aerator no 2	Operational		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regular basis for each aerator.	21.09.2021	31.05.2022 New Date 30.07.2022/Again new date 30.09.2022		LONG PENDING
3	Aerator no 3	Operational After 1 month of non operational from 06.03.2022, it was made operational on 13.04.2022		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regular basis for each aerator.	31.07.2021	31.05.2022 New Date 30.07.2022/Again new date 30.09.2022		LONG PENDING
4	Aerator no 4	Operational		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regular basis for each aerator.	31.07.2021	31.05.2022 New Date 30.07.2022/Again new date 30.09.2022		LONG PENDING
5	Aerator no 5	Operational Made operational on 13.01.2022		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regular basis for each aerator.	1) 08.02.2021 2) 31.07.2021	31.05.2022 New Date 30.07.2022/Again new date 30.09.2022		LONG PENDING
6	Aerator no 6	Operational		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regular basis for each aerator.	31.07.2021	31.05.2022 New Date 30.07.2022/Again new date 30.09.2022		LONG PENDING
7	Aerator no 7	Operational After operating 2nd stream from 18.10.2021 for around 1.5 months, KRMPIL again shut down 2nd stream from 06.12.2021.		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regular basis for each aerator.	31.07.2021	31.05.2022 New Date 30.07.2022/Again new date 30.09.2022		KRMPIL is operating only one stream but no labour force has been deployed for Schedule maintenance works.
8	Aerator no 8	Operational After operating 2nd stream from 18.10.2021 for around 1.5 months, KRMPIL again shut down 2nd stream from 06.12.2021.		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regular basis for each aerator.	31.07.2021	31.05.2022 New Date 30.07.2022/Again new date 30.09.2022		
9	Aerator no 9	Operational After operating 2nd stream from 18.10.2021 for around 1.5 months, KRMPIL again shut down 2nd stream from 06.12.2021.		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regular basis for each aerator.	31.07.2021	31.05.2022 New Date 30.07.2022/Again new date 30.09.2022		
10	Aerator no 10	Operational Made operational on 19.02.2022		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regular basis for each aerator.	31.07.2021	31.05.2022 New Date 30.07.2022/Again new date 30.09.2022		
11	Aerator no 11	Operational After operating 2nd stream from 18.10.2021 for around 1.5 months, KRMPIL again shut down 2nd stream from 06.12.2021.		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regular basis for each aerator.	18.11.2021	31.05.2022 New Date 30.07.2022/Again new date 30.09.2022		
12	Aerator no 12	Operational After operating 2nd stream from 18.10.2021 for around 1.5 months, KRMPIL again shut down 2nd stream from 06.12.2021.		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regular basis for each aerator.	31.07.2021	31.05.2022 New Date 30.07.2022/Again new date 30.09.2022		
13	Aerators on-site push button and indicator	Some of aerator's onsite indicators were not found working		Aerators indicators needs to be rectified/ replaced.	07.03.2022	15.05.2022 New Date 31.08.2022		LONG PENDING
E Secondary Sedimentation Tank System								
1	SST 1	Operational		Weir plate needs to be cleaned and levelled.		12.07.2022	Pending	LONG PENDING
2	SST 2	Operational		Weir plate needs to be cleaned and levelled.		12.07.2022	Pending	LONG PENDING

3	Return sludge pump 1	Operational		Needs to be repaired at the earliest.		13.10.2022	Pending	Pending
4	Return sludge pump 2	Operational		Some of the non working indicators needs to be replaced.		10.05.2022		
5	Return sludge pump 3	Non Operational since 09.11.2022				19.09.2022	Pending	Pending
F CHLORINATION AREA								
1	Chlorine Tonners (Total Qty=06 Nos)	Operational (During inspection only 02 tonners were filled & actual Weight is 1724 Kg)	 Chlorine Weight = 818 Kg Chlorine Weight = 906 Kg	1) KRMPIL must check and replace defective tonners and needs to make the documents available at Chlorination room. 2) Pressure gauge in tonner room must be replaced at earliest. 3) Non-working indoor lights must be replaced. 4) Experienced and permanent operator must be deployed for chlorination unit. 5) KRMPIL must ensure no chlorine leakage from the tonner and chlorination system. 6) Tonners found in corroded condition at site. KRMPIL need to be done painting work ASAP.		20.09.2022	30.09.2022 & 15.10.2022	Pending
1A	Chlorinator	Chlorinator No. 1 is non operational. Chlorinator No. 2 is operational		Vacuum gauge for both the Chlorinators are not working.		21.09.2021		
2	Booster Pump no. 1 & 2	Operational				21.09.2021		LONG PENDING
3	Chlorination Leak detection device	During test, cylinder was changed and there was leakage of chlorine but leak detecting device sensor doesn't sensed chlorine. It shows that leak detecting device is not working. Non-Operational		Leakage detection device should be rectified and get it checked by UPJN PE		31.07.2021	15.09.2022/ New date 15.10.2022	LONG PENDING
4	Safety shower	Operational						
G Sludge system								
1	Sludge thickeners 1	Operational 1) When UPJN & PE team reached site, it was found that only dilution pumps is being operated and no sludge from PST or SST was found being pumped. 2) Non-Uniform flow was observed from weir plate. 3) Also, at various points weir plate was found damaged & chocked. 4) No record of dilution water intake to thickeners was found at site.		1) Sludge thickener must be operated regularly, processing needs to be optimised. Also experienced operator must be deployed. 2) Weir plate must be properly levelled and cleaned. 3) Damaged & chocked weir plates must be cleaned and rectified. 4) Dilution water intake & supernatant overflow record need to be maintained. 5) TSS test of supernatant overflowing thickener needs to be conducted and recorded.		03.03.2021		Pending
2	Sludge thickeners 2	Operational 1) When UPJN & PE team reached site, it was found that only dilution pumps is being operated and no sludge from PST or SST was found being pumped. 2) Non-Uniform flow was observed from weir plate. 3) No record of dilution water intake to thickeners was found at site. 4) During inspection, thickened sludge sump was found full of sludge because of non-operation of thickened sludge pumps.		1) Sludge thickener must be operated regularly, processing needs to be optimised. Also experienced operator must be deployed. 2) Weir plate must be properly levelled and cleaned. 3) Dilution water intake & supernatant overflow record need to be maintained. 4) TSS test of supernatant overflowing thickener needs to be conducted and recorded. 5) Thickened sludge pumps needs to be overhauled and operated so that sludge build up in the thickened sludge sump may not take place.		11.01.2022		Pending
3	Thickened sludge pump 1	Operational						
4	Thickened sludge pump 2	Operational						

5	Sludge digester-01	Operational					
6	Sludge digester-02	Operational KRMPL submitted Volias inspection report for the inspection of the digester done on 07.03.2022 on which PE has given condition clearance to charge sludge into Digester no. 2 only after complying the conditions mentioned in STC letter no. 1526 dated 01.04.2022. KRMPL has charged the digester without complying STC letter no. 1526.		In the meeting dated 11.04.2022, ED (T) NMCG instructed KRMPL that it is the duty of KRMPL to get every rectification work witnessed by PE & UPJN and the issues raised by UPJN & PE must be complied.		11.04.2022 01.08.2020	
7	Flow Meter for Bio gas.	Non-Operational		Must be rectified at the earliest		18.11.2021	28.02.2022 / 31.07.2022 New Date 31.08.2022/New Date 31.10.2022 LONG PENDING Again new date i.e., 31.08.2022 is proposed by KRMPL vide KRMPL Letter no. 036 dated 05.07.2022.
8	Gas engine -1	Operational					
9	Gas engine -2	Operational					
10	Gas engine -3	Non Operational		Need to be rectified at earliest.		15.04.2022	31-08-2022/New Date 31.09.2022 Long Pending
11	Gas Scrubbers	Operational					
12	Bio gas blower 1 & 2	Operational					
13	Pressure & Temperature Gauges inside Scrubber room	Various pressure & temperature gauges were found not working		Pressure & temperature gauges needs to be replaced		07.03.2022	31.05.2022 New Date 31.07.2022 Long Pending
14	Sludge drying bed 1	Filled with sludge		1.Beds are required to be emptied periodically and Sludge to be disposed on regular basis. 2. Do the house keeping works on regular basis		23.02.2021	LONG PENDING
15	Sludge drying bed 2	Empty				04.01.2022	LONG PENDING
16	Sludge drying bed 3	Filled with Sludge since 05.10.2022		1.Beds are required to be emptied periodically and Sludge to be disposed on regular basis. 2. Do the house keeping works on regular basis		05.10.2022	No record of disposal of sludge was found in the register.
17	Sludge drying bed 4	Empty This bed was filled with sludge since 23.02.2021 and found empty / cleaned during UPJN & PE visit on 08.06.2022 but no record of cleaning was found in the log book. This bed was found cleaned on 08.06.2022 but in the register, it is written that this bed was cleaned after 08.06.2022 which clearly shows that KRMPL is manipulating the records. Also by seeing the record, it is observed that the records for whole month is prepared on a single day.				12.07.2022	This bed was found cleaned on 08.06.2022 but in the register, it is written that this bed was cleaned after 08.06.2022 which clearly shows that KRMPL is manipulating the records.
18	Sludge drying bed 5	Empty After approx 4 months since 12.02.2022, the sludge cleaning work started from 03.06.2022, and cleaning work was completed on 08.06.2022.					
19	Sludge drying bed 6	Partially filled with the sludge.		Beds are required to be emptied periodically and Sludge to be disposed on regular basis		11.04.2022	Pending
20	Sludge drying bed 7	Empty		No house keeping works was found			
21	Sludge drying bed 8	Filled with Sludge		1.Beds are required to be emptied periodically and Sludge to be disposed on regular basis.		05.10.2022	

22	Sludge drying bed 9	Empty		2. Do the house keeping works on regular basis				
23	Sludge drying bed 10	Empty						LONG PENDING
24	Sludge drying bed 11	Filled with Sludge						
25	Sludge drying bed 12	Filled with Sludge						
26	Sludge drying bed 13	Filled with Sludge						
27	Sludge drying bed 14	Filled with Sludge						
28	Sludge drying bed 15	Filled with Sludge						
29	Sludge drying bed 16	Empty						LONG PENDING
30	Sludge drying bed 17	Filled with Sludge						LONG PENDING
31	Sludge drying bed 18	Empty						LONG PENDING
32	Sludge disposal from digester to Sludge drying bed.			Sludge disposal needs to be done regularly as per the requirement to stabilize the processing and false record keeping needs to be stopped.				
33	Sludge drying bed	Leakage found around sludge drying bed		1) RCC Slab must be provided on all chambers.	29.10.2021	10.06.2022 New date 31.08.2022New date 31.10.2022		Pending
34	Tube well pump 1	Operational		1.The bolt needs to be fixed. 2.Lubrication needs to be done on a regular basis	15.10.2022			Pending
35	Dilution water submersible pump-1	Operational						
36	Dilution water submersible pump- 2	Operational						
37	Filtration pump no. 1	Operational						
38	Filtration pump no. 2	Non-Operational		Needs to be rectified.	08.07.2022	15.09.2022 still pending		
Miscellaneous								
Other issues experienced at the site				1.The open chamber must be closed. 2.Dead pigs need to be removed from the screen chamber.	15.10.2022			Pending
1	Motor Canopy	STC found that no canopies were present on the motors of equipments		Fix canopy to each motors of equipments.	27.10.2021	31.01.2022/ 30.05.2022 New Date 31.07.2022/New date 30.09.2022		Long Pending
2	Outdoor lighting	When STC team visited site, it was found that various outdoor lights were not working. Apart from this, all light poles are rusted and LCS box non-operational.		1) Needs to be replaced at the earliest. 2) All light poles need to be painted. 3) All non-working LCS box must be fixed in the meeting dated 11.04.2022. ED (T) NMCG directed KRMPIL to install all lights within a day (i.e. 13.04.2022) and must ensure its 100% availability/ functioning.	27.10.2021 (since long back)	30.06.2022 New Date 15.07.2022/ New date15.09.2022		Long Pending
				*) Garavanta follow for station microscope monitor needs to be				Pending

				<p>a) equipment through the existing temperature designed to be provided to achieve required temperature of 48°C.</p> <p>3) Laboratory testings needs be done correctly by following right procedure.</p> <p>4) Soxhelt apparatus must be rectified at the earliest.</p> <p>5) List of equipment working/ not-working must be maintained properly and for all equipments.</p> <p>6) All lab equipments must be calibrated and the calibration report needs to submitted to UPJN & PE for review.</p> <p>7) The measurement of residual D.O in aeration basins using portable D.O meter has to be done in-situ in the tank only.</p> <p>8) A piping system must be connected to exhaust of laminar air flow cabinet and must be discharged outside laboratory room/ building.</p>		20.09.2022		Pending
4	Log Books & Register	<p>1) No log book of dilution water, supernatant overflow from thickeners etc, filtration pump operation etc found at site.</p> <p>2) When UPJN & PE visited on 12.07.2022, no entry of Gas engines was found in the register after 28.06.2022 and minutes after the visit, fabricated entry was written in the logbook by the operator.</p> <p>3) No record of bio gas generation was found at site.</p> <p>4) Sludge drying bed no. 3 was found cleaned on 12.07.2022 but no record was available in the register. Sludge drying bed no. 4 was.</p>		<p>1) Log Books and registers must be maintained and remain available for all units and KRMPIL needs to stop providing false and misleading records.</p> <p>2) Maintenance register must be filled properly.</p>	12.07.2022		15.09.2022	Maintenance register proper filling suggestions had already been given to KRMPIL site incharge.
5	House Keeping works	<p>At various locations inside the plant, no house keeping works was found.</p> 		<p>1) House keeping work at all locations inside the plant has to be done for which deployment of manpowers needs to be done.</p> <p>2) Do the house keeping works on regular basis</p>		27.10.2021		LONG PENDING
6	Equipments Numbering	<p>Still equipment numbering at various places are pending.</p>		<p>Numbering must be provided in bold letters to all the equipments so that it could be seen easily and there should not remain any confusion about which item is no. 1 & which is no. 2</p>		27.10.2021	31.01.2022	LONG PENDING Not done completely and it should be done properly.
7	Damaged civil structures	<p>It has been observed that floor near over head tank is damage</p> 		<p>Needs to be restored.</p>		12.07.2022	15.09.2022	LONG PENDING
8	Gas Holders		<p>Level scale must be provided properly showing capacity of gas at various levels.</p>			08.02.2022		LONG PENDING

P. Ganeshaiah