





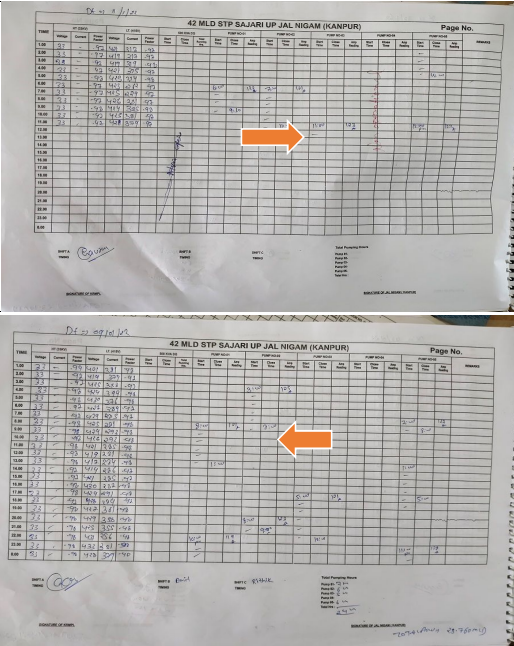
SITE INSPECTION REPORT FOR 42 MLD Sajari STP

SAJARI STP


Date:
11.01.2022






INSPECTED BY:
UPJN Team:
1) Mr. Ajay Kanaujia (Chemist)
STC Team:
1) Mr. Sunil Basutkar (Mechanical Expert)
2) Mr. Rohit Suman (Supp. Engr. Mechanical)

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	
A	INLET CHAMBER							
1	Inlet Sluice Gates	Operational						
2	Mech. Coarse screen (no.1)	<p>Non-Operational.</p> <p>1) Auto-system is installed recently but not working properly.</p> <p>2) Screen motor canopy was found supported with brick</p>		<p>1) Need to be fixed at the earliest.</p> <p>2) Auto system level settings needs to be done for proper functioning and it should be checked by UPJN & PE.</p> <p>3) Provide proper support if needed</p>		<p>1) 11.01.2022</p> <p>2) Since handover 11-10-2019</p>		LONG PENDING
		<p>After around 2 months, the rake teeth has been changed on 22.12.2021</p>				11.01.2022		
3	Mech. Coarse screen (no.2)	<p>1) Manually operational but not automated</p> <p>2) After around 2 months, the rake teeth has been changed on 22.12.2021</p>		<p>Level sensor has to be installed at earliest for automation.</p>		<p>Since handover 11-10-2019</p>	28.02.2022	LONG PENDING
4	Mechanical Screen Level transmitter display	<p>1) Auto System of Mech Coarse Screen -1 & 2 are Under Maintenance</p> <p>2) Not operating the mechanical screen perfectly</p> <p>3) Level sensor of 2nd mechanical screen is not available</p>		<p>1) The level has to be correctly set as per the inflow level.</p> <p>2) Closing gate must be fixed to the level transmitter casing box.</p> <p>3) Painting needs to be done on the casing box.</p>		<p>Since handover 11-10-2019</p>	<p>28.02.2022</p> <p>31.12.2021</p> <p>31.12.2021</p>	LONG PENDING
5	Belt Conveyor	Operational						
6	Belt Conveyor disposal							
7	Mech. Coarse Screen On-site Panel	<p>1) After around 5 months, Door glasses have now fixed on 26.12.2021</p> <p>2) Some of the indicators not working</p>		<p>Non working indicators should be replaced.</p>		31.07.2021		LONG PENDING
B	RAW SEWAGE PUMPING STATION							




1	Raw Sewage Pump-01	Non-Operational		1) Need to be rectified at the earliest. 2) Discharge line pressure gauge needs to be replaced		1) 10.01.2022 2) 21.09.2021	15.01.2022	LONG PENDING
2	Raw Sewage Pump-02	Operational		Discharge line pressure gauge needs to be fixed and the PG line must be cleaned		31.07.2021	15.01.2022	LONG PENDING
3	Raw Sewage Pump-03	Operational						
4	Raw Sewage Pump-04	Non-Operational		1) Need to be rectified at the earliest. 2) Discharge line pressure gauge needs to be replaced.		1) 30.12.2021 2) 31.07.2021	15.01.2022	LONG PENDING
5	Raw Sewage Pump-05	Operational		Discharge line pressure gauge needs to be replaced		27-10-2021	15.01.2022	LONG PENDING
6	Collection Sump Lever 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		As per Article 8.8 (a), this has to be provided by the concessionaire
7	Raw Sewage Pumps operation	<p>1) When STC team reached the site, it was found that only one pump was being running by KRMPL. Upon asking by PE, KRMPL started one more pump.</p> <p>2) On previous dates, it was found that KRMPL was running one pump most of the time and on some time, two pumps are being operated.</p> <p>3) Pumps were found not being operated at night hours.</p>		<p>At an average of 23 MLD flow (which is 55 % of the average design flow) is coming, therefore atleast 2 to 3 nos. of pumps has to be operated during peak flow & atleast 1 to 2 nos. of pumps to be operated during non peak flow on regular basis in rotational way to tackle the problem of backflow/ reverse flow.</p> <p>In case the flow increase more than 23 MLD, more pumps needed to be operated.</p>		27-10-2021		
8	EOT	After around 2 months, the Upward movement of rope was rectified on 22.12.2021.		Do lubrication work on regular basis				






9	Raw Sewage Pump Starter cable	Raw Sewage pump starter cable dressing are not done		Need to do dressing of cable starter properly		31.07.2021		LONG PENDING
10	Raw Sewage Pump Starter-5	After around 2 months since 27.10.2021, starter has been fixed on 04.01.2022				11.01.2022		
11	DI Common header Line							
12	Electro-Magnetic flow meter			Get the calibration done & submit the calibration certificate at earliest		Since handover 11-10-2019		LONG PENDING
13	Panel Room	1) HT Panel & float cum boost charger ammeter not working. 2) Some of the indoor light lights not working. 3) One no. exhaust fan not working.		1) HT Panel ammeter need to be replace. 2) Indoor light 7 no. need to be replace. 3) Exhaust fan 1 no. need to be repaire. 4) Float cum boost charger ammeter need to be repaire immediately.		21-09-2021		LONG PENDING
C PRIMARY UNIT								
1	Fine screen (No. 1 Mech)	The bar spacing at some places in the screen has increased.		Need to be rectified at earliest.		27-10-2021	15.01.2022	Pending
2	Fine screen (No.2 Mech)	The bar spacing at some places in the screen has increased.		Need to be rectified at earliest.		27-10-2021	15.01.2022	Pending
3	Fine Mechancial 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	Past date i.e 28.02.2021, is mentioned in KRMPL letter no. 2037 dated 23.12.2021	LONG PENDING



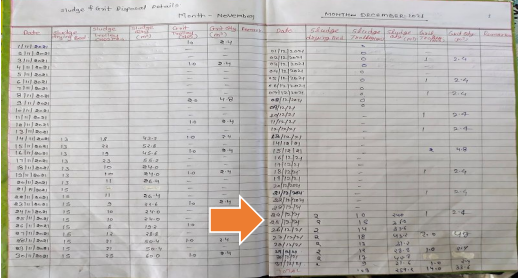


4	Cable tray	Fine Screen cable tray has been found in Rusted condition		Need to paint the rusted cable tray		21-09-2021	Past date i.e 15.01.2021, is mentioned in KRMPL letter no. 2037 dated 23.12.2021	LONG PENDING
5	PTU On site Panel	Door glasses not available and some of the indicators not working		<ol style="list-style-type: none"> 1) Door glass must be fixed. 2) Non working indicators should be replaced. 3) Panel box painting need to be done. 		27-10-2021		LONG PENDING
6	Manual screen	Operational						
7	Grit chamber-1 1)Organic pump withMotor 2)Scraper 3)Classifier Mechanism	Operational		<ol style="list-style-type: none"> 1) Classifier alignment need to be rectified. 2) Canopy must be provide on every motors. 3) Numbering of Grit Mechanism must be done in bold letter so that it can be seen from far positions also. 		31.07.2021	31.12.2021 31.01.2022 15.01.2022	LONG PENDING
8	Grit chamber- 2 1)Motor 2)Scraper/Starter 3)Rack Classifier Mechanism	Operational		<ol style="list-style-type: none"> 1) Canopy must be provide on every motors. 2) Local push button must be rectified at the earliest. 3) Numbering of Grit Mechanism must be done in bold letter so that it can be seen from far positions also. 		31.07.2021	31.01.2022 15.01.2022 15.01.2022	LONG PENDING
9	Grit Disposal	Trolleys were found below grit chute but no trolley was found available below conveyor chute.		<ol style="list-style-type: none"> 1) Provide trolley below conveyor chute. 2) Remove the grit on regular basis. 3) Apart from this, make sure that spare trolley must be provided in case of shifting/ removing grit. 		11.01.2022		

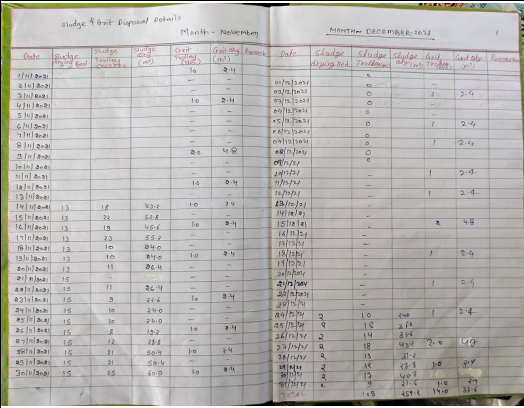
10	Parshall Flume	No ultrasonic level sensor was found at site. Also, the fixed scale is not readable.		1) Level sensor must be installed at the earliest. 2) Readable scale must be installed. 3) Chart for flow measurement must be fixed at the earliest. 4) Kindly provide the necessary documents on the basis of which scale reading has been provided. 5) KRMPL must record the flow through parshall flumes at every required time intervals on daily basis and its register has to be maintained.		1) Since handover 11-10-2019 2) 11.01.2022		LONG PENDING As per Article 8.8 (a), this has to be provided by the concessionaire
11	PST 1	Operational Sewage is not flowing uniformly through weir notch		1) Weir notch must be levelled at earliest, 2) Vibration check on regular basis through vibration meter and lubrication to be done on regular basis for PST-1.		27-10-2021	31.01.2022	LONG PENDING
12	PST 2	Operational 1) Sewage is not flowing uniformly through weir notch. 2) Local push buttons was found not working		1) Weir notch must be levelled at 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.		27-10-2021	31.01.2022 15.01.2022	LONG PENDING
13	Cable tray of PST-1 & PST-2	PST-1 & PST -2 Cable tray has been found rusted condition		Need to paint the rusted cable tray		31.07.2021	15.01.2022	LONG PENDING
D AREATION TANK								
1	Aerator no 1	Operational		1) Bottom part rusted, servicing required. 2) Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regularly for each areator.		21-09-2021	15.01.2022	LONG PENDING
2	Aerator no 2	Operational		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regularly for each areator.		21-09-2021		LONG PENDING
3	Aerator no 3	Operational		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regularly for each areator.		31.07.2021		LONG PENDING

4	Aerator no 4	Operational		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regularly for each areator.		31.07.2021		LONG PENDING
5	Aerator no 5	Non-Operational		1) Needs to be rectified at the earliest. 2) Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regularly for each areator.		1) 11.01.2022 2) 31.07.2021		LONG PENDING
6	Aerator no 6	Operational		Vibration to be checked on regular basis by vibration meter and lubrication needs to be done on regularly for each areator.		31.07.2021		LONG PENDING
7	Aerator no 7	After operating 2nd stream from 18.10.2021 for around 1.5 months, KRMPL 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 regularly for each areator.		31.07.2021		KRMPL is operating only one stream but no labour force has been deployed for Schedule maintenance works.
8	Aerator no 8	After operating 2nd stream from 18.10.2021 for around 1.5 months, KRMPL 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 regularly for each areator.		31.07.2021		
9	Aerator no 9	After operating 2nd stream from 18.10.2021 for around 1.5 months, KRMPL 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 regularly for each areator.		31.07.2021		
10	Aerator no 10	After operating 2nd stream from 18.10.2021 for around 1.5 months, KRMPL 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 regularly for each areator.		31.07.2021		
11	Aerator no 11	After operating 2nd stream from 18.10.2021 for around 1.5 months, KRMPL 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 regularly for each areator.		18-11-2021		
12	Aerator no 12	After operating 2nd stream from 18.10.2021 for around 1.5 months, KRMPL 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 regularly for each areator.		31.07.2021		
E	SECONDARY CLARIFIER AREA							



1	SST 1	Operational 1) Hand railing was not found beside RCC stair 2) Sewage is not flowing uniformly through weir notch		1) Hand railing must be provided at the earliest 2) Weir notch must be levelled at earliest.		27-10-2021	31.01.2022	LONG PENDING
2	SST 2	Sewage is not flowing uniformly through weir notch		Weir notch must be levelled at earliest.		18.11.2021	31.01.2022	LONG PENDING
3	Return sludge pump 1	After approx 9 months since 03.03.2021, pump was fixed on 25.12.2021 and is now operational.				11.01.2022		
4	Return sludge pump 2	Operational After around a month, on-site starter was fixed on 07.01.2022.		In the register, operator is mentioning 2nd pump non-operational & 3rd pump operational which needs to be corrected and this kind of error must not be repeated any further.		22.12.2021		
5	Return sludge pump 3	Non-Operational Pressure Gauge not available		1) Needs to be repaired at the earliest. 2) Pressure gauge must be fixed at earliest.		09.12.2021	31.01.2022	PENDING
F	CHLORINATION AREA							
1	Chlorine Tonners(Total Qty.=06 Nos)	Operational 1) The missing tonners were finally brought at site on 11.12.2021 which were missing since 04.01.2020. 2) Weighing machine is not available at site.		1) Weighing machine must be provided at site. 2) KRMPL must ensure no chlorine leakage from the tonner and chlorination system.		27.10.2021		PENDING
2	Booster Pump no. 1 & 2	1) Operator doesn't know the operation perfectly. 2) Even after closing the gate valves, some flow was been observed through valves. Also leakage through valve was found		1) Leakage from Gate valve and through its internal gland must be fixed at earliest. 2) Deploy experienced operator who knows the operation.		21-09-2021	15.01.2022	LONG PENDING
3	Chlorination Leak detection device	During visit, 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		LONG PENDING
4	Safety shower	Operational						

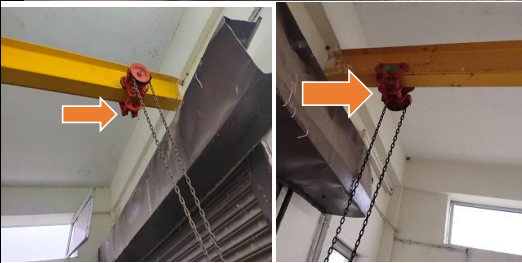
G	Sludge system							
1	Sludge thickeners 1	Operational Sludge Thickener is filled with sludge and influent is not properly treated by Sludge Thickener. No outlet flow of supernatant through weir plate was observed and weir plate was found choked.		1) Do cleaning of Sludge thickner. 2) Overhaul whole mechanical system 3) Painting of MS structures must be done at the earliest.		03.03.2021		PENDING
2	Sludge thickeners 2	After around 10 months of non-operational since 03.03.2021, it was made operational on 07.01.2022. This thickner was taken into cleaning and without informing/ witnessing it to UPJN or PE, sludge was filled on 07.01.2022.		1) Thickner processing must be stabilised. 2) Painting of MS structures must be done at the earliest.		11.01.2022		
3	Thickened sludge pump 1	After around a month of non-operational, it has been made operational on 25.12.2021 and its now operational.				11.01.2022		
4	Thickened sludge pump 2	Operational						
5	Sludge digester-01	Operational						
6	Sludge digester-02	Non-Operational PE along with UPJN, have inspected digester no. 2 and found that the replaced impeller is colliding with the surrounding DI pipe which is causing heavy noise, which means installation work is not properly done. PE letter no. 1385 dated 11.01.2022 has been issued regarding the inspection for compliance.		Needs to be rectified at the earliest		01.06.2020		LONG PENDING
7	Flow Meter for Bio gas.	Non-Operational		Must be rectified at the earliest		18.11.2021	28.02.2022	LONG PENDING

8	Gas engine -1	Operational						
9	Gas engine -2	Operational						
10	Gas engine -3	Operational						
11	Gas Scrubbers	Operational		UPIN has advised KRMPL to connect a pipe from scrubber exit directly to H2S analyser for knowing the value of H2S present in scrubbed gas just exiting scrubber.		11.01.2022		
12	Bio gas compressor - 1	Operational						
13	Sludge drying bed 1	Filled with sludge		Beds are required to be emptied periodically and Sludge to be disposed on regular basis		23.02.2021		No record of disposal of sludge is available.
14	Sludge drying bed 2	<p>After approx 10 months since 23.02.2021, the sludge cleaning work started from 24.12.2021 and cleaning work has been completed but the removed sludge is lying beside the bed on the road resulting in road blockage.</p> <p>As per the register, cleaning work of this bed continued till 04.01.2022 which means from 04.01.2022, the removed sludge which is lying on the road has not been removed from the plant.</p>	 	Removed sludge lying on the road must be cleaned at the earliest.		11.01.2022		
15	Sludge drying bed 3	Filled with sludge		Beds are required to be emptied periodically and Sludge to be disposed on regular basis		23.02.2021		No record of disposal of sludge is available.

16	Sludge drying bed 4	Filled with sludge		Beds are required to be emptied periodically and Sludge to be disposed on regular basis		23.02.2021		No record of disposal of sludge is available.
17	Sludge drying bed 5	Filled with sludge						
18	Sludge drying bed 6	Filled with sludge						
19	Sludge drying bed 7	Filled with sludge						
20	Sludge drying bed 8	Filled with sludge						
21	Sludge drying bed 9	Filled with sludge						
22	Sludge drying bed 10	Filled with sludge						
23	Sludge drying bed 11	Filled with sludge						
24	Sludge drying bed 12	Filled with sludge						
25	Sludge drying bed 13	<p>After approx 9 months since 23.02.2021, the sludge cleaning work was started from 14.11.2021 and continued till 20.11.2021 but the cleaning work was pending as stated in PE's Dec. 2021 inspection report.</p> <p>At the time of visit, we have been informed that wet sludge has been taken in the drying bed. But the entry of sludge cleaning work which was pending is not found in the register entry, which means either KRMP L has taken the wet sludge without cleaning the bed completely or KRMP L had not mentioned it in the register.</p>		<p>KRMP L is either misleading us by not cleaning the drying bed completely or not maintaining the register properly.</p> <p>If the pending desludging work was done, then where is the entry of the work? Kindly Justify?</p>		11.01.2022		
26	Sludge drying bed 14	Filled with sludge		Beds are required to be emptied periodically and Sludge to be disposed on regular basis		23.02.2021		No record of disposal of sludge is available.
27	Sludge drying bed 15	<p>After approx 9 months since 23.02.2021, the sludge cleaning work started from 21.11.2021 and continued till 30.11.2021 but the cleaning work was pending as stated in PE's Dec. 2021 inspection report.</p> <p>At the time of visit, we have been informed that wet sludge has been taken in the drying bed. But the entry of sludge cleaning work which was pending is not found in the register entry, which means either KRMP L has taken the wet sludge without cleaning the bed completely or KRMP L had not mentioned it in the register.</p>		<p>KRMP L is either misleading us by not cleaning the drying bed completely or not maintaining the register properly.</p> <p>If the pending desludging work was done, then where is the entry of the work? Kindly Justify?</p>		11.01.2022		
28	Sludge drying bed 16	Filled with sludge		Beds are required to be emptied periodically and Sludge to be disposed on regular basis		23.02.2021		No record of disposal of sludge is available.
29	Sludge drying bed 17	<p>At the time of visit, it was found that desludging work is in progress but no record of desludging is being found in the register.</p>		<p>It seems that KRMP L is not maintaining the record properly which raise a question of doubt in KRMP L's record keeping. Justify?</p> <p>Kindly maintain the desludging register properly.</p>		<p>1) 11.01.2022</p> <p>2) 23.02.2021</p>		No record of disposal of sludge is available.
30	Sludge drying bed 18	Filled with sludge		Beds are required to be emptied periodically and Sludge to be disposed on regular basis		23.02.2021		No record of disposal of sludge is available.

31	Sludge drying bed	Leakage found around sludge drying bed		1) Needs to be restored at the earliest. 2) RCC Slab must be provided on all chambers.		29.10.2021		Pending
32	Tubewell pump 1	Operational						
33	Dilution water submersible pump-1	Operational Various Nut bolts was found rusted		Replace all rusted nut bolts with GI nut bolts		18.11.2021	31.12.2021	Pending

34	Dilution water submersible pump- 2	Operational 1) Various Nut bolts was found rusted. 2) Cable tray was found rusted		1) Replace all rusted nut bolts with GI nut bolts. 2) Painting must be done on cable tray.		18.11.2021	31.12.2021 15.01.2022	LONG PENDING
35	Filtration pump no. 1	Non-Operational		Needs to be rectified at the earliest.		01.12.2021		LONG PENDING
36	Filtration pump no. 2	Operational						
37	Treated effluent outlet channel							
Miscellaneous								
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	Long Pending
2	Chlorination Unit Stock & consumption register							
3	Laboratory	1) Deployed Chemist do not have the right training/ experience for conducting laboratory analyses. 2) Daily analysis results reported by KRMPL are not matching with NABL laboratory (Shriram) reports		1) Trained chemist has to be deployed for testings at laboratory. 2) Lab. Chemist has to maintain date wise base data of all the testings done. 3) Fecal coliform tests must be done properly. 4) A piping system must be connected to exhaust of laminar air flow cabinet and must be discharged outside laboratory room/ building. 5) Laboratory testings needs be done correctly by following right procedure.		27-10-2021		LONG PENDING
4	Log Books & Register			1) Log Books and registers must be maintained and remain available for all units 2) Maintenance register must be filled properly.		27-10-2021		Pending
5	House Keeping works	At various locations inside the plant, no house keeping works was found.		1) House keeping work at all locations inside the plant has to be done for which deployment of manpowers needs to be done. 2) Do the house keeping works on regular basis		27-10-2021		LONG PENDING

6	Equipments Numbering			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		27-10-2021	31.01.2022	LONG PENDING
7	Manually operated crane	Manually operated crane pulley in Return sludge pump house, primary sludge pump house, thickened sludge pump house etc. were missing lifting chain.		Provide the lifting chain at every places.		18.11.2021		Pending Not Provided yet as indicated in KRMPL Letter no. 2037 dated 23.12.2021 for compliance to inspection carried on 18.11.2021 by PE.