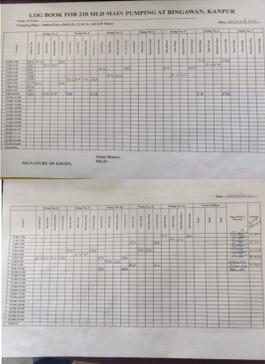


**SITE INSPECTION REPORT FOR 210 MLD STP BINGAWAN**

**BINGAWAN STP - 210 MLD**

**Date:**  
**27.05.2022**

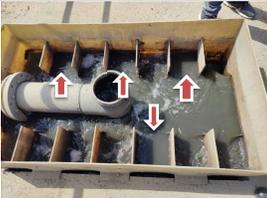
**INSPECTED BY:**  
**UPJN Team:**  
1) Mr. Md. Maaz, PM (E&M)  
2) Mr. Mahipal Singh (JE, E&M)  
3) Mr. Ajit Singh (JE, Civil)  
4) Mr. Ajay Kanaujia, Chemist  
**STC Team:**  
1) Dr. Giridhar Prabhu Kumar (TL)  
2) Mr. Satish Kamaraju, Pr. Expert  
3) Mr. Rohit Suman, Supp. Engineer, Mechanical.  
4) Mr. Pankaj Rawat, Supp. Supervisor, Civil.  
**KRMPL Team:**  
Mr. Anirban Mukherji and KRMPL team

S. No.	Equipment	Assessment of Current Condition	Assessment of Current Condition photo	Corrective Action Required	Corrective Action Completed by KRMPL	Original Date of Issue	Proposed Date to Resolve by KRMPL	Current Status of Compliance
1	Bypass Sluice Gate	When UPJN & PE visited the site, Leakage was found from the bypass sluice gate. PE had also pointed out this issue in our previous inspection reports for compliance. KRMPL plant incharge confirmed that the issue was rectified but still the same issue was observed which means the issue was not complied earlier and false information provided by KRMPL plant incharge.		Leakages from the bypass sluice gate must be fixed.		27.05.2022		
2	Reverse flow			At an average of 130 MLD flow (which is 62 % of the average design flow) is coming, therefore atleast 5 nos. of pumps are to be operated during peak flow & atleast 3 nos. pumps to be operated during non peak flow on regular basis in rotational way to tackle the problem of backflow/ reverse flow. In case the flow increase more than 130 MLD, more pumps needed to be operated.		26-10-2021		The plant is designed for an average flow of 210 MLD and a peak flow of 420 MLD and for that 8 working pumps are provided. So when the average flow is 130 MLD (i.e. 62% of designed flow) which means peak flow is 260 MLD, then 5 nos. (i.e. 62% of provided pumps as per design) of pumps to be operated at peak hours and 3 pumps to be operated at non-peak hours, which KRMPL is not following
3	Sluice gates			Lubrication must be done on regular basis.				
4	Mechanical Coarse screen (No.01)	Operational After almost 2.3 years of non-operational since 28.01.2020, the mechanical screen is now made operational on 27.05.2022 but still the rake is not properly aligned yet and uneven gap was found between rake teeth and plate/ screen bar.		1) Rake must be aligned properly at the earliest. 2) Painting needs to be done properly on the stairs, walkway, handrails etc items. 3) Chain cover must be provided. 4) Log book of mechanical screen must be maintained.  In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to rectify the issues till 18.04.2022 but not rectified yet.		28.01.2020		Long Pending False information was provided in KRMPL letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.
5	Mechanical Coarse screen (No.02)	Operational After almost 1.1 years of non-operational since 03.02.2021, the mechanical screen is finally aligned on 22.02.2022 and was operational.  1) No log book of mechanical screens was being maintained by KRMPL.		1) Painting needs to be done properly on the stairs, walkway, handrails etc items. 2) Chain cover must be provided. 3) Log book of mechanical screen must be maintained.		03.02.2021	30.10.2021	Long Pending False information was provided in KRMPL letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.
6	Manual bar Screen no.01	Operational 1) MS Staire case, handrails etc found totally rusted.		Painting needs to be done properly on the stairs, handrails etc items.		26.11.2021		Long Pending False information was provided in KRMPL letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.
7	Manual bar Screen no.02	Operational 1) MS Staire case, handrails etc found totally rusted.		Painting needs to be done properly on the stairs, handrails etc items.		26.11.2021		Long pending False information was provided in KRMPL letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.
8	MPS Inlet chamber							
9	Coarse Screen Panel	Operational		1) All Panel indicator need to be repaired/ replace 2) Ammeter needs to be replaced. 3) Damaged body part must be replaced and painting needs to be done properly.		28-01-2020	15.11.2021	Long Pending False information was provided in KRMPL letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.

10	Conveyor belt	Operational When UPJN & STC team visited the site, it was observed that the Belt conveyor is not alignment properly and the screenings were not properly collected on the conveyor. On this, KRMPL's operator informed that the alignment issue is due to damaged check nut bolts.		1) Belt alignment needs to be done immediately. 2) Debris disposal from the belt conveyor to be done regularly. 3) Trolley must be provided every time and at the time of shifting debris, spare trolley also needs to be provided.		11.04.2022 25.03.2022		False information was provided in KRMPL letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.
11	Sluice Gate Slab	When STC team reached the site, it was again found that the damaged slab which was casted in the past has again found damaged. This means that KRMPL is not doing casting work properly and not deployed any civil engineer as of now at site for supervision work.		1) Do the casting work properly under the supervision of civil engineer. 2) Deploy Civil engineer for the supervision works.		22.02.2022 26.10.2021	31.05.2022	Pending
12	Main Pump House Sump	When STC team reached the site, some garbage was again found in the sump.		Garbage must be cleaned from the sump and mechanical screen must be operated regularly to avoid such conditions i.e, garbage carry over.		25.03.2022		Pending
13	Cable tray	Cable tray was found rusted		Needs to be painted		18-08-2021	31.07.2022	Long Pending
14	Butterfly Valve chamber (Civil work)	1) Finishing work is not completed yet. 2) Proper slab placing, finishing works etc found not completed. 3) MS structures are not properly painted yet. 4) Also the pipe for air valve was found bend. 5) Valve chamber was found filled with mud like material.		1) To complete RCC finishing works at the earliest. 2) Proper slab placing work needs to be done at the earliest. 3) Painting and finishing works needs to be done 4) Air valve pipe must be fixed and air valve should be installed at the earliest. 5) Valve chamber needs to be cleaned completely.		01.04.2021	30.10.2021	Long Pending False information was provided in KRMPL letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.
15	Pump no.1	Operational						
16	Pump no.2	Operational						
17	Pump no.3	Operational 1) After 1.5 months of non-operational since 26.10.2021, it was made operational on 10.12.2021 2) Voltmeter not working 3) Leakage found from the Impeller was observed		1) Voltmeter must be changed. 2) Leakages from the Impeller must be fixed.		26-10-2021 11.04.2022	30.06.2022	Long Pending
18	Pump no.4	Non-Operational		Need to be overhauled at earliest.  <b>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to rectify the issue till 21.04.2022 but not rectified yet.</b>		06.05.2021	30.11.2021. After above date, new date i.e., 31.01.2022 is provided. Again 31.05.2022 is provided.	Long Pending
19	Pump no.5	Operational Voltmeter not working		Voltmeter must be changed.		26-10-2021	30.06.2022	Long Pending
20	Pump no.6	Operational						
21	Pump no.7	Non-Operational Voltmeter not working		1) Needs to be rectified. 2) Voltmeter must be replaced.  <b>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to rectify the issue till 21.04.2022 but not rectified yet.</b>		21.01.2022 26.11.2021	30.06.2022	Long Pending
22	Pump no.8	Operational						
23	Pump no.9	Operational After 3 months of non-operational since 25.08.2021, it was made operational on 30.11.2021						

24	Pump no.10	Operational						
25	Pump no.11	Operational This pump was made operational on 04.04.2022						
26	Pump no.12	Operational 1) Heavy leakage was found from the gate valve & pump impeller. 2) NRV not working because of which the pump is not being operated perfectly.		1) Leakages from the gate valve & Impeller must be fixed. 2) NRV must be rectified.  <b>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPPL to rectify the issue till 21.04.2022 but not rectified yet.</b>	26.11.2021			Long Pending  <b>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPPL to rectify all the issues of MPS pumps till 21.04.2022 but many issues not rectified yet.</b>
27	Pumps	It has been observed from long back that vibration meter is not there at site for checking pumps vibration.		Vibration meter needs to be provided at the earliest which is long pending	27.05.2022			
28	MPS Panel	Various indicators, ammeters, voltmeters etc were found not working		All non-working indicators, ammeters, voltmeters etc must be replaced at the earliest.	27.05.2022			
29	Pump Logbooks			Plant Incharge needs to review the log books regularly and do signature on the log book.				
30	Inlet Flow Meters	Non Operational		Flow meter need to be fixed at the earliest  <b>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPPL to install flow meter at the earliest.</b>	28.01.2020	31.07.2022		Long Pending  As per Article 8 of CA, it should be installed by the concessionaire.
31	Level Sensor of MPS Sump	Calibration needs to be done.		Must be calibrated at the earliest and calibration report should be submitted at the earliest.	26-10-2021	30.01.2022 new date 30.06.2022		Long Pending
32	MS pipe to PTU	When UPJN & PE team reached the site, it was found that painting has been done but still some part of the pipes are found rusted and not properly painted.		Needs to do epoxy painting properly by following standard procedure.	25.03.2022			
33	Mechanical Fine screen no.01	When STC / UP Jal Nigam team reached the site, we found that the screen is still not functioning properly. None of the disposal material is getting removed by the screen and also sewage level in upstream is higher than that of the level at downstream. Screen bars are choked with disposal materials.		Must be Overhauled at the earliest  <b>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPPL to rectify the issue till 18.04.2022 but not rectified yet.</b>	28/1/2020	15.11.2021. Next date given is 31.01.2022 Next date given is 31.07.2022		LONG PENDING
34	Mechanical Fine screen no.02	Non Operational		Must be Overhauled at the earliest  <b>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPPL to rectify the issue till 18.04.2022 but not rectified yet.</b>	26-10-2021	31.01.2022 Next date given is 31.07.2022		LONG PENDING
35	Mechanical Fine screen no.03	When STC / UP Jal Nigam team reached the site, we found that the screen is not functioning properly. None of the disposal material is getting removed by the screen and also sewage level in upstream is higher than that of the level at downstream. Screen bars are choked with disposal materials.		Must be rectified at the earliest  <b>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPPL to rectify the issue till 18.04.2022 but not rectified yet.</b>	26-10-2021	31.01.2022 Next date given is 31.07.2022		LONG PENDING
36	Mechanical Fine Screen Panel	1) Various indicators not working. 2) Cables was found lying on the floor.		1) Panel indicators need to be repaired/ replace. 2) Damaged part of the panel must be replaced and painting must be done properly 3) Cable tray must be provided for the cables and must be dressed properly.	28-01-2020	1) 30.06.2022		LONG PENDING
37	Conveyor belt	Operational						
38	Manual Screen no. 1 & 2			Regular cleaning of manual screens needs to make sure.				

39	Painting works on PTU	When UPJN & PE visited site, it was found that painting work is not done properly on the items on PTU. By scratching through nails only, the painted parts is coming out and the below portion was found rusted. Also various parts which was not painted properly was again get corroded as shown in the pic.		<p>Painting must be done properly and all the rusted parts on PTU needs to be painted.</p> <p>Apart from this, painting procedure needs to be submitted at the earliest.</p> <p>All the parts on which painting is not done by following standard procedure, needs to be repainted properly.</p>			26.11.2021 (Since long back)		<p>Long Pending</p> <p>False information was provided in KRML letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.</p>
40	RTOLMS sampling bucket on PTU			Bucket must be clean and sludge must be removed daily.					
41	Grit removal mechanism-Detritor no.01 Main drive, Classifier drive, Organic pump	Operational 1) Very less quantity of grit was being removed by the grit classifier. 2) No canopy found on motors of equipments.		<ol style="list-style-type: none"> <li>1) Proper alignment work of grit classifier must be done at earliest.</li> <li>2) Canopy must be provided on all motors.</li> <li>3) Grit disposal tray must be cleaned.</li> <li>4) MS walkway and cable tray needs to be painted properly.</li> <li>5) Damaged cable tray must be replaced and cable dressing needs to be done.</li> </ol>			25.08.2021	2) 28.02.2022	<p>LONG PENDING</p> <p>False information was provided in KRML letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.</p>
42	Grit removal mechanism-Detritor no.02 Main drive, Classifier drive, Organic pump	Operational Less quantity of grit was being removed by the grit classifier.		<ol style="list-style-type: none"> <li>1) Proper alignment work of grit classifier must be done at earliest</li> <li>2) Canopy must be provided on all motors.</li> <li>3) Grit disposal tray must be cleaned.</li> <li>4) MS walkway and cable tray needs to be painted properly.</li> <li>5) Damaged cable tray must be replaced and cable dressing needs to be done.</li> </ol>			25.08.2021		<p>Long Pending</p> <p>False information was provided in KRML letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.</p>
43	Grit removal mechanism-Detritor no.03 Main drive, Classifier drive, Organic pump	Operational Less quantity of grit was being removed by the grit classifier.		<ol style="list-style-type: none"> <li>1) Proper alignment work of grit classifier must be done at earliest.</li> <li>2) Canopy must be provided on all motors.</li> <li>3) Grit disposal tray must be cleaned.</li> <li>4) MS walkway and cable tray needs to be painted.</li> <li>5) Damaged cable tray must be replaced and cable dressing needs to be done.</li> </ol>			26-10-2021	2) 28.02.2022	<p>LONG PENDING</p> <p>False information was provided in KRML letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.</p>
44	Grit removal mechanism-Detritor no.04 Main drive, Classifier drive, Organic pump	Operational 1) Organic return pump was found non-operational. 2) MS structure was not found properly painted.		<ol style="list-style-type: none"> <li>1) ORP needs to be rectified at the earliest.</li> <li>2) Canopy must be provided on all motors.</li> <li>3) Grit disposal tray must be cleaned.</li> <li>4) MS walkway and cable tray needs to be painted.</li> <li>5) Damaged cable tray must be replaced and cable dressing needs to be done.</li> </ol>			1) 22.02.2022 26-10-2021	2) 28.02.2022 3) 31.01.2022	<p>LONG PENDING</p> <p>False information was provided in KRML letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.</p>
45	Parshall Flume	No ultrasonic level sensor and no scale were found at site		<ol style="list-style-type: none"> <li>1) Level sensor must be installed at earliest.</li> <li>2) Scale &amp; chart for flow measurement must be fixed at earliest.</li> </ol>			Since Handover 08-07-2019	2) 15.01.2022 new date 2) 30.06.2022	<p>LONG PENDING</p>
46	Grit Disposal Area	When UPJN & PE visited the site, it was found that no trolley was provided for screening collection and much of the screenings was getting splashed to the nearby locations.  Proper drains and CC road below grit tray are still not prepared which is creating pollution & unhygienic environmental condition.		<p>Trolley at every location needs to be provided for collection of Grit from chutes &amp; screenings from conveyor every time as directed by NMCG team and PE also.</p> <p>CC way need to be prepared as required for this area and required drain also needs to be provided.</p>			26-10-2021	30.10.2021	<p>LONG PENDING</p> <p>False information was provided in KRML letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.</p>

47	UASB Reactor- no.1	Operational		Processing needs to be optimized		23.01.2021		
48	UASB Reactor- no.2	Operational		Processing needs to be optimized		21-04-2021		
49	UASB Reactor- no.3	Operational		Processing needs to be optimized		20-08-2020		
50	UASB Reactor- no.4	Operational		Processing needs to be optimized		23-01-2021		
51	UASB Reactor- no.5	Operational		Processing needs to be optimized		15-03-2021		
52	UASB Reactor- no.6	Operational		Processing needs to be optimized		10.01.2022		
53	UASB Reactor- no.7	Operated but filled with sludge 1) Various downward pipes from the feed box were found choked.		NMCG has directed KRMPL to deploy more team for cleaning of UASB reactors to complete the process with in 3 to 4 week for each reactor.		28.01.2020		LONG PENDING
54	UASB Reactor- no.8	Operational		Processing needs to be optimized		23-01-2021		
55	UASB Reactor- no.9	Operational		Processing needs to be optimized		04.12.2021		
56	UASB Reactor- no.10	Operational		Processing needs to be optimized		16.12.2021		
57	UASB Reactor- no.11	Operational After almost 2.3 years (since 28.01.2020) of non operational, it was cleaned on 25.04.2022.		Processing needs to be optimized		25.04.2022		
58	UASB Reactor- no.12	Operational 1) After about 22 months (since 28.01.2020) of non operational, it was cleaned on 08.11.2021. 2) At various places, HDPE pipe was found hanging without any support.		Processing needs to be optimized HDPE pipe support needs to be provided.		26.11.2021 25.03.2022		
59	UASB Reactor- no.13	Under Maintenance since Jan. 2022		In NMCG meeting dated 11.04.2022, KRMPL promised and extended the previous date to complete cleaning of reactors till May 2022 but not cleaned yet		28.01.2020	28.02.2022 then 31.03.2022 New Date 15.06.2022	LONG PENDING
60	UASB Reactor- no.14	Under Maintenance since Nov. 2021		In NMCG meeting dated 11.04.2022, KRMPL promised and extended the previous date to complete cleaning of reactors till May 2022 but not cleaned yet		28.01.2020	15.02.2022 then 28.02.2022 New Date 15.07.2022	LONG PENDING
61	UASB Reactor- no.15	Under Maintenance since 03.01.2022		In NMCG meeting dated 11.04.2022, KRMPL promised and extended the previous date to complete cleaning of reactors till May 2022 but not cleaned yet		28.01.2020	31.01.2022 then 31.03.2022 New Date 31.07.2022	LONG PENDING
62	UASB Reactor- no.16	Under Maintenance		In NMCG meeting dated 11.04.2022, KRMPL promised and extended the previous date to complete cleaning of reactors till May 2022 but not cleaned yet		28.01.2020	15.01.2022 then 15.03.2022 New Date 15.08.2022	LONG PENDING
63	UASB reactors			Scum cleaning needs to be done and cleaning must be done regularly. Also adequate nos. of labour must be deployed for reactors scum cleaning.  In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to deploy more manpower for cleaning of scum from UASB reactors and also directed to do daily & regular cleaning of the scum.		22.02.2022		Long Pending

		When UPJN & STC team reached the site, it was found that almost all reactors overflow v-notch was not alignment properly and also the notches were found choked at various places. At various places no overflow was being observed through the v-notch.		Alignment and cleaning of v-notches must be done at the earliest so that smooth flow of treated sewage takes place.		25.03.2022		Long Pending
64	UASB reactors sludge withdrawing.	When UPJN & PE visited site, it was found from the register that sludge withdrawal are not being done from each reactors daily.		Required quantity of sludge needs to be withdrawn from all the reactors daily and accordingly required nos. of BFP & sludge pump need to be operated.		27.05.2022		
65	Sampling Chamber	When STC / UPJN team reached the site, it was found that: 1) Some of the sampling chambers beside reactors are cleaned and various chambers were filled with sewage/ water and many sampling points were packed with concrete. 2) Various bottom sludge drawing pipes in the chambers are found choked and no sludge removal is taking place from the below pipe.		1) All Sampling chambers must be cleaned at the earliest. 2) Sampling points must be cleaned and valves to the point needs to be fixed. 3) Bottom sludge drawing pipes needs to make operational.		26.11.2021		LONG PENDING
66	HT Cable	HT Cable line from grit to the transformer near aerators is non functional		Needs to be rectified and connected with the transformers (near aerators) at the earliest.		Since Sept. 2021	15.08.2022	LONG PENDING
67	Aerator no.01	Operational						
68	Aerator no.02	Operational						
69	Aerator no.03	Operational						
70	Aerator no.04	Operational						
71	Aerator no.05	Operational						
72	Aerator no.06	Operational After approx 2 months since 26.03.2022, it was found operational on 27.05.2022.				27.05.2022		
73	Aerator no. 07	Operational						
74	Aerator no. 08	Operational						
75	Aerator no. 09	Operational						
76	Aerator no. 10	Operational After approx 6 months since 26.11.2021, it was found operational on 27.05.2022.				27.05.2022		
77	Aerator no. 11	Operational						
78	Aerator no. 12	Operational						
79	Aerator no. 13	Operational						
80	Aerator no. 14	Operational						
81	Aerator no. 15	Operational						
82	Aerator no. 16	Operational After approx 2 months since 25.03.2022, it was found operational on 27.05.2022.				27.05.2022		
83	Aerator no. 17	Operational						
84	Aerator no. 18	Operational After approx 3 months since 22.02.2022, it was found operational on 27.05.2022.				27.05.2022		
85	Aerators earthing	When UPJN & PE visited the site, it was found that improper earthing has been provided by connected with thin wire instead of GI strip. All aerators earthing work still found not done.		All aerators earthing GI strip (of required dimension) connection must be done at the earliest which is still pending.		22.01.2022		Long Pending False information was provided in KRMP letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.

86	Aeration Lagoon no. 1	<p>1) When STC / UPJN team reached the site, a joint depth measurement for aeration lagoon no. 1 was done at three different points, and sludge was found at an average depth of 0.6m below the top water level, which means 3.4 m approx. sludge is present inside aeration lagoon no. 1 at corners.</p> <p>2) At the time of visit, no desludging work was found.</p> <p>3) At the middle portions of the lagoon, sludge was seen above the top water levels also with clearly indicates that the lagoon is completely filled with sludge.</p>		<p>Desludging needs to be done on immediate basis.</p> <p>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPPL to submit complete and detailed plan &amp; schedule for bypass line within 7 days (i.e., 18.04.2022).</p> <p>ED (T) NMCG directed KRMPPL to submit cleaning schedule of aeration lagoon within 7 days (i.e., 18.04.2022).</p>		26.11.2021 (Since long back)	15.01.2022 New date 31.08.2022	Long Pending
87	Aeration Lagoon no. 2	Filled with sludge		Desludging needs to be done on immediate basis.		18.08.2021		Long Pending
88	RSP pump no. 1	<p>Non-Operational</p> <p>After around 2 months of non-operational since 20.01.2022, it was made operational on 23.03.2022 and again found non-operational on 27.05.2022.</p> <p>Apart from this, sewage was found on the floor creating unhygienic condition.</p>		<p>1) Needs to be rectified at the earliest.</p> <p>2) Sludge accumulated on the floor needs to be cleaned.</p>		27.05.2022		
89	RSP pump no. 2	Operational						
90	RSP pump no. 3	Operational						
Belt Filter Press Unit								
91	Poly dosing pump No.1	Operational.						
92	Poly dosing pump No.2	Operational						
93	Poly dosing pump No.3	Non Operational		Need to be replaced		07.10.2021	30.10.2021. Next date given 15.02.2022 Next date given 30.06.2022	LONG PENDING
94	Service water pump No.1 (For BFP)	Operational						
95	Service water pump No.2 (For BFP)	Non Operational		Need to be replaced		Since Handover 08-07-2019	15.11.2021. Next date given 28.02.2022 Next date given 30.06.2022	LONG PENDING
96	Belt filter Press No.1	<p>Non-Operational</p> <p>After approx 5 months of non-operational since 23.09.2021, it was found operational on 22.02.2022 and again found non-operational on 27.05.2022.</p> <p>No record of non operation of BFP was mentioned in the maintenance register. Also the plant incharge was not aware of the condition of the BFP and when asked about the operation by UPJN &amp; PE, giving false information that the BFP is operational.</p> <p>1) Discharge sludge box was found totally rusted and damaged.</p> <p>2) BFP building shed was found rusted</p>		<p>1) Need to be rectified at the earliest</p> <p>2) Panel door, ammeter, voltmeter, limit switch, indicator lights need to be repaired / replaced.</p> <p>3) Cable tray need to be painted.</p> <p>4) BFP panel no. 1 buzzer need to be replace.</p> <p>5) Discharge sludge box must be replaced.</p> <p>6) BFP building shed needs to be epoxy painted by following standard method.</p> <p>7) Maintenance register needs to be maintained properly.</p>		27.05.2022 23-09-2021	30.11.2021. Next date given 31.01.2022 Next date given 10.06.2022	LONG PENDING
97	Belt filter Press No.2	<p>Operational</p> <p>Discharge sludge box was found totally rusted and damaged.</p>		<p>1) Need to be required lubrication on daily basis</p> <p>2) Panel door, ammeter, voltmeter, limit switch need to be repaired.</p> <p>3) Cable tray need to be painted.</p> <p>4) Discharge sludge box must be replaced.</p>		23-09-2021	30.11.2021 Next date given 31.01.2022 Next date given 31.05.2022	LONG PENDING

98	Belt filter Press No.3	Operational Discharge sludge box was found totally rusted and damaged.		1) Need to be required lubrication on daily basis 2) Panel door, ammeter, voltmeter, limit switch need to be repaired. 3) Cable tray need to be painted. 4) Discharge sludge box must be replaced.	23-09-2021	30.11.2021 Next date given 31.01.2022 Next date given 31.05.2022	LONG PENDING
99	Tractor Trolley	No spare trolley was found available at site		Spare trolley must be provided at every time.	22.02.2022		Pending False information was provided in KRML letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.
100	Filtrate pump no. 1	Non-Operational		Need to be overhauled at the earliest	10.12.2021		Long Pending A temporary pump is being installed for temporary operation.
101	Filtrate pump no. 2	Non-Operational		Need to be overhauled at the earliest	10.12.2021		Pumps needs to be installed on its original arrangements only. False information was provided in KRML letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.
Chlorination Area							
102	Booster Pump No.1	Operational 1) PG found damaged 2) Leakage found from the Impeller 3) Apart from this, it was found that even after closing the ball valves, water flow was observed from the valves in close position.		1) Pressure gauge must be fixed/ replaced at the earliest 2) Leakages must be fixed at the earliest 3) Ball valves needs to be rectified / replaced.	26.11.2021		Pending False information was provided in KRML letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.
103	Booster Pump No.2	Operational Leakage found from the Impeller		1) Leakages must be fixed at the earliest 2) Ball valves need to be checked for any flow in close position.	22.02.2022		Pending False information was provided in KRML letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.
104	Chlorine Tonners ( Total 20 Nos )	1) The missing tonners were finally brought at site on 11.12.2021 which were missing after handover dated 08.07.2019. 2) 5 nos. of chlorine tonners were found connected with discharge chlorine line out of which only one tonner was found filled and rest 4 connected tonners were found almost empty. 3) Chlorine dosing was not found appropriate and the fecal coliform was found exceeding the permissible limit by a huge margin. 4) One foundation of Tonner was found totally damaged. 5) Chlorinator no. 1 was found not working. 6) When STC & UPJN visited site, it was again observed that KRML has prepared a new register in a new format. Apart from this no record of chlorine entry was found in the register. 7) Still the chlorination system has not been rectified resulting in inappropriate dosing of chlorine. 8) Pressure gauge of 2nd chlorine line is not working.		1) Take license for storing chlorine. 2) Arrange Chlorine stock for one week at least. 3) Dose proper amount of chlorine which is still not being done and continuously zero chlorine is being found in the effluent. Chlorine dosing to be calculated to control fecal coliform within limit and accordingly chlorine dosing should be adjusted. 4) Do the restoration work of the damaged foundation. 5) Chlorinator no. 1 must be rectified at the earliest. 6) Chlorine register must be maintained properly as it was maintained earliest day wise which was not found at site. Apart from this, if KRML wants to maintain chlorine register in some other format, they can do it for their internal purpose. Chlorine dosing record entry must be done correctly by measuring the weight of tonner. 7) Chlorination system must be rectified at the earliest. 8) PG must be replaced.	16.12.2021	1) 31.07.2022 4) 20.06.2022 5) 25.05.2022	Long Pending
105	Gas Holder No.01	Operational After approx 2 yrs. since 28.01.2020, the gas holder was found operational on 18.02.2022.		Pressure gauge needs to be installed	28-01-2020		LONG PENDING
106	Gas Holder No.02	Operational		Pressure gauge needs to be installed	28-01-2020		LONG PENDING
107	Gas Blower near Gas holders	Operational After months of non-operational, it is now found operational			27.05.2022		
108	Gas Blower 1 & 2 near Scrubber	When UPJN & PE visited site, it was found that 1) only one blower for blowing gas from gas holders to scrubber unit was operational and blower no. 2 was not found operational. KRML was not able to get blower no. 2 running checked by UPJN & PE. 2) No Pressure gauges were found after each blower.	 	1) Blower no. 2 needs to be overhauled and made operational at the earliest. 2) Pressure gauges after blowers must be installed. 3) Ball valves and pipes must be checked and it should be replaced if found damaged. 4) Rusted nut bolts must be replaced. 5) Blower pit must be cleaned. 6) House keeping around blower area must be done.	Since Handover 08-07-2019		Long Pending

109	Gas scrubber Unit	<p>When UPJN &amp; PE officials visited site, it was found that</p> <ol style="list-style-type: none"> <li>1) PG was not working and KRMPPL was unable to get the pressure checked at the outlet of scrubber unit.</li> <li>2) KRMPPL has not installed any permanent gas analyser yet for checking gas quality.</li> <li>3) KRMPPL is claiming that moisture tapping system has been corrected, scrubber system has been rectified etc which require third party analysis report for checking the performance.</li> </ol>		<ol style="list-style-type: none"> <li>1) Working Pressure gauge must be provided after scrubber.</li> <li>2) Gas analyser must be installed (as per article 8.7 (b) of CA.) so that the scrubbed gas quality could be checked at site.</li> <li>3) Third party analysis of bio gas and scrubbed gas through approved agency from UPJN, needs to be conducted and witnessed by UPJN &amp; PE and report needs to be submitted to check whether operation is corrected or not as claimed by KRMPPL.</li> </ol>		28.01.2020		LONG PENDING
110	Gas Flaring Unit at DG yard	<p>Non Operational</p> <p>Auto ignition system of the gas flaring system is not working and it is being temporarily ignited manually which is not a good practice and the way in which KRMPPL personal is igniting is a serious safety issue.</p>		<p>Need to be repaired and painted immediately.</p>		28-01-2020	30.06.2022	LONG PENDING
111	DFG no. 1	<p>Non-Operational</p> <p>After 3 months of non-operational since 16.12.2021, it was made operational on 12.03.2022. Again, DFG is non operational since 10.04.2022.</p>		<ol style="list-style-type: none"> <li>1) Need to be rectified at the earliest</li> <li>2) Needs to be painted</li> </ol>		10.04.2022 16.12.2021	31.05.2022	<p>PENDING</p> <p>False information was provided in KRMPPL letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.</p>
112	DFG no. 2	<p>Non-Operational</p>		<ol style="list-style-type: none"> <li>1) Need to be rectified at the earliest</li> <li>2) Needs to be painted</li> </ol>		1) 24.03.2022 2) 23-09-2021	31.05.2022	<p>PENDING</p> <p>False information was provided in KRMPPL letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.</p>
113	House Keeping	<p>House Keeping work is found to be in very poor condition. This implies that KRMPPL is not doing house keeping work which is clear from the photographs.</p>		<p>House keeping work of the plant needs to be improved at the earliest and done regularly. Sufficient manpower for house keeping work must be deployed.</p>		26.10.2021		<p>LONG PENDING</p> <p>False information was provided in KRMPPL letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.</p>
114	Leakage at Civil Unit	<p>When UPJN &amp; PE visited site, heavy leakage was observed as shown in the picture because of which the area below division channel was filled with sewage. Also leakages from various structures were found.</p>		<p>Need to be repaired permanently</p>		28.01.2020	15.01.2022	<p>LONG PENDING</p> <p>False information was provided in KRMPPL letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.</p>

115	Log Boogs/ Registers	<p>It was found that no record/ log book or register for gas generation, Bio gas flaring, Mechanical screens, aerators, Sludge pumps operation etc were maintained by KRMPL.</p> <p>Even maintenance register was not found properly maintained as BFP no. 1 was non-operation but no information of BFP was found in the maintenance register.</p> <p>Apart from this, various rectification works which the plant incharge is claiming was not found in the maintenance register.</p> <p>Also the log book of chlorination system which was maintained earlier was not available at site and no record of chlorine stock was found in the new register.</p>		All Log books / registers (i.e. Operation log book of each equipment / process units, DG log book, collection sump level transmitter log book, maintenance register, In/out material register, first aid register, attendance register, visit register etc) must be maintained daily and should be available at site all the time.	26-10-2021		LONG PENDING
116	Internal Road Restoration	Internal roads were found damaged at various places		Internal road restorational must be started at earliest and should be done on phased manner.	26-10-2021	31.01.2022 New date 30.06.2022	LONG PENDING
117	Marking Equipments	It was found that some markings has been done by KRMPL and various marking on the equipments/ units are still pending which had already been clarified to the plant incharge.		Each equipments / units must be marked (like 1st, 2nd etc) in bold letters so that the equipments/ units can be identified easily.	26-10-2021	28.02.2022	LONG PENDING
118	Laboratory	<p>1) KRMPL lab testing results are not matching with other agency's testing report.</p> <p>2) Calibration Tests of Lab equipment are not performed.</p> <p>3) SOPs available at the lab are incomplete.</p> <p>4) Fecal coliform results is exceeding the permissible limit with a huge margin.</p> <p>5) Inside temperature of fridge where composite samples are stored, was found 24° C which is not acceptable.</p> <p>6) It was found that lab technician is mixing different volume of grab samples to the composite sample bottle.</p> <p>7) Chemists do not have adequate orientation and training (evident from the above lapses indicated in points 1 to 5. Also, the chemist was not able to explain the procedure being adopted for different tests being conducted in the lab.</p>		<p>1) KRMPL lab testing results are not matching with other agency's testing report. KRMPL must do the testings properly as per standard operating procedure as per CA / CPHEEO manual.</p> <p>2) Lab. equipments must be calibrated.</p> <p>3) KRMPL is required to submit in writing procedures (along with the reference from where taken) of all the tests conducting in the lab for verification by PE.</p> <p>4) Fecal Coliform tests need to be validated due to huge variation with the 3rd party lab results.</p> <p>5) Separate fridge for storing composite samples needs to be provided to achieve required temperature of 4° C.</p> <p>6) Equal volume of grab samples must be added to the composite sample bottle.</p> <p>7) Either proper training to be provided to the lab chemist or trained chemist to be deployed.</p>	25.03.2022 26.10.2021		LONG PENDING
119	MS structures, Hand railings in whole plant, MS staires	Various MS Structures, MS staires and all the hand rails on UASB reactors etc were found totally rusted		Epoxy painting must be done properly by following standard procedure on all the corroded items of the plant at the earliest.	26.11.2021 (Since long back)	30.06.2022	Long Pending
120	UASB Reactor Hand railing.	Hand rails on the UASB reactors are totally rusted.		Handrailing needs to be either replaced or painted with epoxy paint at the earliest.	26.11.2021 (Since long back)	30.06.2022	Long Pending
121	Sludge Disposal	<p>When STC / UP Jal Nigam team reached the site, we found that still sludge was being disposed at various locations inside the plant on the ground without any permission.</p> <p>As instructed by ED (Technical) on 08.10.2021 &amp; 11.04.2022 that sludge disposal is to be done as per norms of UPPCB but still KRMPL is not following it.</p> <p>UPPCB vide their letter no. 1386/5-658/21 dated 04.12.2021 also instructed KRMPL to dispose the sludge as per the norms but still sludge is being disposed on the ground at an inappropriate place.</p>		<p>Still UPPCB norms are not being followed and sludge disposal is being done inside the plant on the muddy ground.</p> <p>Sludge disposal must be done as per UPPCB norms.</p> <p><b>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to follow UPPCB norms for sludge disposal &amp; storage inside the plant but KRMPL still not following the norms.</b></p>	01.12.2021		LONG PENDING

122	Final Polishing Unit 1 & 2	When UPJN & STC officials reached the site, it was found that FPU lagoons are completely filled with sludge		Desludging needs to be done on immediate basis.  <b>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to submit cleaning schedule of final polishing pond (FPU) within 7 days (i.e, 18.04.2022).</b>	22.01.2022 (Since long back)		LONG PENDING
123	Internal Lights, Exhaust fans etc. of Panel rooms	Various lights and exhaust fans inside various panel rooms were found not in working condition		Various lights and exhaust fans must be rectified / replaced at the earliest.	22.01.2022	30.06.2022	Pending
124	LT Panel Room	Various indicators, ammeters, voltmeters etc were found not working		All non-working indicators, ammeters, voltmeters etc must be replaced at the earliest.	25.03.2022	30.06.2022	Pending
125	Plant External Lights	When UPJN & PE officials visited site, it was found that some of the lights were replaced and various lights are still not working/ not available, which needs to be rectified / replaced.		Defective lights needs to be replaced at the earliest.  <b>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to install all lights within a day (i.e, 13.04.2022) and must ensure its 100% availability/ functioning.</b>	28.01.2020	30.06.2022	LONG PENDING
126	Water taps at various locations inside plant	When UPJN & PE visited the site, it was found that at various locations, the water taps are not working and the civil works are damaged and on some places no foundation and drain line were available.		1) Water taps must be rectified at all places. 2) Civil foundation works must be restored at all places. 3) At the places where civil foundations are not available, construct it. 4) Proper drain line from the water tap area needs to be constructed and conneted to the nearest drain.	22.02.2022		Pending False information was provided in KRMPL letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.
127	Safety shower	Safety shower civil structure was found damaged and the system is not working properly. Also the eye wash paddle is not working		1) Eye wash paddle needs to be fixed and piping system must be fixed properly. 2) Civil foundation work must be restored. 3) Proper drain line to the nearest drain must be constructed.	22.02.2022	30.06.2022	Pending False information was provided in KRMPL letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.
128	O&M Staff	Every time when UPJN & PE team visited the site, it was found that qualified & adequated nos. of O&M staff/ workers are not available / deployed at site for proper O&M of the site.		Qualified and adequate nos. of staffs/ workers must be deployed by KRMPL.  <b>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL that atleast 90 % of the deployed manpower must be sufficiently qualified for the operation of the plants and instructed KRMPL to submit the detailed credentials.</b>	22.02.2022 (Since long back)		Long Pending
129	Power connection through Bingawan Plant	When UPJN & STC officials visited site, a temproray power line from Panel room (near aeration tank) to UPJN SWEZ plant was found.		This temporary connection needs to be removed.	27.01.2022		Pending Required action needs to be taken by UPJN.

*P. G. G. G.*