
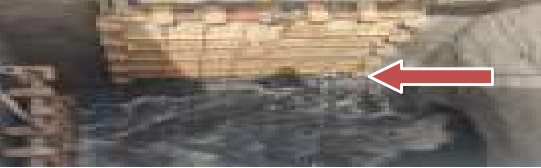



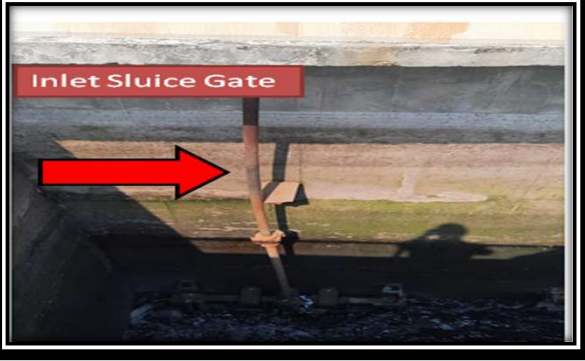


## SITE INSPECTION REPORT FOR 210 MLD STP BINGAWAN


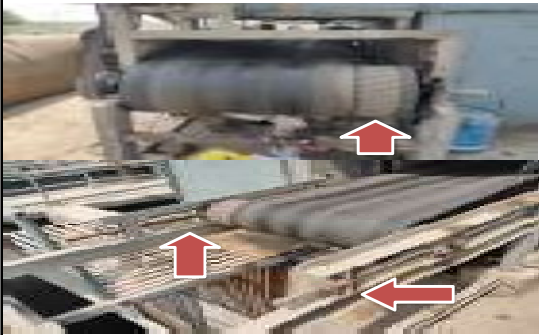



Location:  
210 MLD STP at BINGAWAN



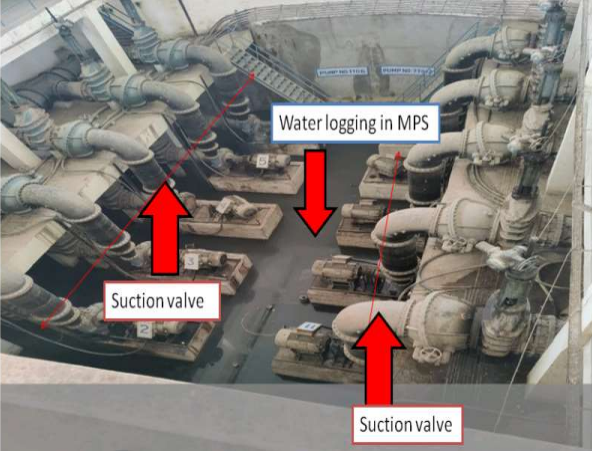
Inspection  
Date:  
03.10.2022

**INSPECTED BY:**  
**UPJN Team:**  
Mr.Rajesh (AE,E&M)  
Mr. Ajit Singh (JE, Civil)  
**STC Team:**  
Dr.Giridhar Prabhukumar(TL)  
Mr.Ajay Kumar Goyal( Support Engg. Mech)  
Mr.Rahul( Support Engg.-Ele.)  
Mr.Sadhab (Support Supervisor-Civil)  
**KRMPL Team:**  
Mr.Prakash Chutky (O&M Head)  
Mr. Abhishek Pandey, Process engineer, KRMPL

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	COD Nalla	During the UPJN & PE site visit of COD Nala I&D site on 03/10/2022, it was found that sewage flows (Overflow) were diverted to Ganga River.		Required nos. of pumps at MPS need to be operated to tackle the problem of overflow.		03.10.2022		Pending
1A	Bypass Sluice Gate at Bingawan STP Inlet Chamber	During the UPJN & PE site visit of Bingawan STP on 27/05/2022, leakage of sewage flow was found at the bypass sluice gate going to the River. PE had pointed out this issue in previous inspection reports for KRMPL 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 is being provided by KRMPL Plant Incharge.		Leakages from the bypass sluice gate must be fixed.		27.05.2022		Pending
2	Upstream Wetwell of MPS	During the UPJN & PE site visit on 25.08.2022, it was observed that freefall at the inlet of the MPS wet well was not maintained. This situation is very frequent and KRMPL is not taking any corrective measures.		Adequate no. of pumps at MPS need to be operated to tackle the problem of reverse/back flow and free fall at the inlet needs to be maintained at all times.		26.10.2021		


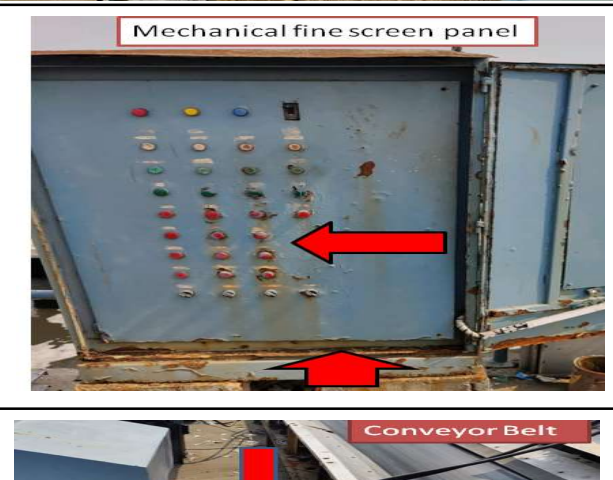
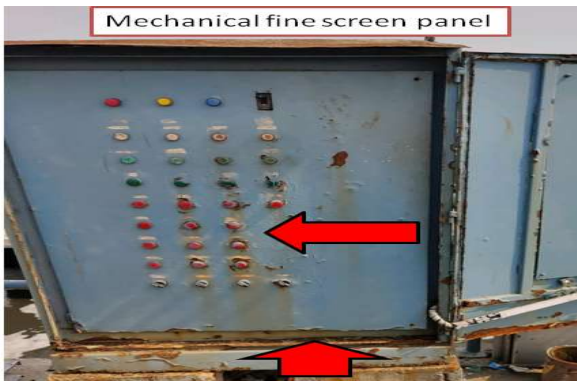

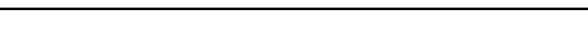
3	Sluice gates at Upstream Wetwell of MPS	Non-Operational		<p>1.Sluice gate pillar/shaft was found in bent condition.Need to be replaced.</p> <p>2.Sluice gate integrated stem guide is broken. Need to be replaced.</p> <p>3.Lubrication of gearbox must be done on regular basis.</p>		03.10.2022			
4	Mechanical Coarse screen (No.01)	Non-operational The rake mechanism is not properly aligned and uneven gap was found between rake teeth and plate/ screen bar.		<p>1) Need to be rectified at the earliest.</p> <p>2) Rake mechanism must be aligned properly at the earliest.</p> <p>3) Painting needs to be done properly on the stairs, walkway, handrails etc.</p> <p>4) Chain cover must be provided.</p> <p>5) Log book of mechanical screen must be maintained.</p>		20.08.2022 03.02.2021			Long Pending
5	Mechanical Coarse screen (No.02)	Non-operational The rake mechanism is not properly aligned and uneven gap was found between rake teeth and plate/ screen bar.		<p>1) Need to be rectified at the earliest.</p> <p>2) Rake mechanism must be aligned properly at the earliest.</p> <p>3) Painting needs to be done properly on the stairs, walkway, handrails etc.</p> <p>4) Chain cover must be provided.</p> <p>5) Log book of mechanical screen must be maintained.</p>		18.08.2022 28.06.2022 03.02.2021	30.10.2021		Long Pending
6	Manual bar Screen no.01	Operational 1) Manual bar screen found choked. 2) MS Stair case and handrails found to be totally rusted.		<p>1) Screen need to be cleaned regularly.</p> <p>2) Painting needs to be done on the stairs and handrails.</p>		03.10.2022			Pending
7	Manual bar Screen no.02	Operational 1) Manual bar screen found choked. 2) MS Stair case and handrails found to be totally rusted.		<p>1) Screen need to be cleaned regularly.</p> <p>2) Painting needs to be done on the stairs and handrails.</p>		03.10.2022			Pending
8	MPS Inlet chamber								

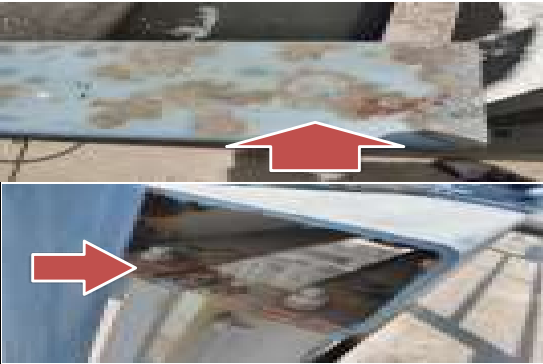

9	Coarse Screen Control Panel	Operational		<p>1) All Panel indicators need to be repaired/ replaced</p> <p>2) Ammeter needs to be replaced.</p> <p>3) Damaged Control Panel needs to be attended along with the necessary painting works.</p>		28.01.2020			Long Pending
10	Mechanical Coarse Screens Conveyor belt	Operational When UPJN & STC team visited the site on 25/03/2022, it was observed that the Belt conveyor was not aligned properly and the screenings were not properly collected on the conveyor.		<p>1) Belt alignment needs to be done immediately.</p> <p>2) Belt conveyor needs to be operated regularly.</p> <p>3) Debris disposal from the belt conveyor to be done regularly.</p> <p>4) Trolley must be provided.</p>		11.04.2022 25.03.2022			Pending
11	Main Inlet Chamber - Sluice Gate Mounting Slab	When UPJN & STC team reached the site on 03/10/2022, it was found damaged slab not rectified since long time.		<p>1) Do the casting &amp; fixing work properly under the supervision of civil engineer.</p> <p>2) Deploy Civil engineer for the supervision works.</p>		22.02.2022 26.10.2021			Long Pending
12a	Main Pump Station(MPS) Wetwell	When UPJN & STC team reached the site on 03/10/2022, significant floating material was found in the wetwell.		Floating material needs to be removed from the wetwell. The mechanical screens must be operated regularly to avoid such conditions i.e, garbage carry over.		03.10.2022			Pending
12b		KRMPL has not conducted any cleaning of the Wetwell since the handover. This has caused the MPS pumps to clog and frequently breakdown. Several NRV valves and Sluice valves have also been damaged due to the intake of debris. The failure of mechanical coarse screens are the main reason for accumulation of debris in the wetwell.		KRMPL to plan and shutdown 50% of the wetwell at a time depending on the inlet flows, drain the section and clean out the bottom debris. The schedule for the same is to be submitted by KRMPL for review and approval at the earliest.		08.07.2019			Pending




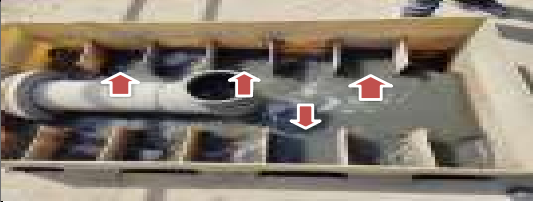
13	MPS Cable tray	Cable tray was found rusted		Needs to be painted/ Replaced	08.07.2019			Long Pending
14	MPS Discharge Header Air Release Valve Chamber (Civil work)	1) Valve Chamber Roof Panels Finishing work is not completed yet. 2) Air Valve Vertical Pipe was found bent. 3) Valve chamber was found filled with mud. 4) Air valves were found non-operational.		1) Complete roof panel finishing works at the earliest. 2) Air valve pipe must be fixed 3) Clean the valve chamber at the earliest. 4) Exercise the air valves for efficient operation and repair/replace them if required. 5) Valve chamber needs to be cleaned completely. 6) Air Valves needs to be rectified at the earliest.	01.04.2021 6)26.07.2022	30.10.2021		Long Pending
15	Pump no.1	Operational Suction Pipe line valve is not in working condition 03.10.2022				03.10.2022		
16	Pump no.2	Non Operational Leakage found from the Impeller was observed Suction Pipe line valve is not in working condition since 03.10.2022		1. Need to be overhauled at earliest 2. Valve need to be replaced .		24.09.2022		
17	Pump no.3	Non-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. 3.) Suction pipe line valve is not in working condition since 03.10.2022.		20.07.2022 03.10.2022		Long Pending
18	Pump no.4	Non-Operational 1.Suction pipe line valve is not in working condition since 03.10.2022. 2.NRV not working because of which the pump is not being operated perfectly.		1.Need to be overhauled at earliest. 2. Suction pipe line valve is not in working condition since 03.10.2022. 3. NRV not working because of which the pump is not being operated perfectly.		06-05-2021 03.10.2022		Long Pending
19	Pump no.5	Operational Voltmeter not working		1.Voltmeter must be changed. 2. Suction pipe line valve is not in working condition since 03.10.2022		26-10-2021 03.10.2022	30.06.2022	Long Pending
20	Pump no.6	Non Operational 1.Heavy sound coming from Pump 2.Suction pipe line valve is not in working condition since 03.10.2022		Needs to be rectified.		26-07-2022 03.10.2022		Pending
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 KRMPPL to rectify the issue till 21.04.2022 but not rectified yet.</b>		25.12.2021 03.10.2022	30.06.2022	Long Pending
22	Pump no.8	Non-Operational When UPJN & PE visited site, it was found that the impeller of pump no. 8 was damaged and it's replaced with the impeller of pump no. 4.		1) Needs to be rectified. 2)Impeller of pump no. 8 must be rectified at the earliest. 2.Suction pipe line valve is not in working condition since 03.10.2022		16.07.2022 03.10.2022		Pending

23	Pump no.9	Non-Operational & Suction pipe line valve is not in working condition since 03.10.2022		Needs to be rectified.		14-06-2022 03.10.2022		Pending
24	Pump no.10	Operational Suction pipe line valve is not working condition since 03.10.2022		Needs to be rectified.		03.10.2022		Pending
25	Pump no.11	operational NRV not working because of which the pump is not being operated perfectly.		1) Needs to be rectified. 2) NRV must be rectified		21.08.2022 26.07.2022 03.10.2022		
26	Pump no.12	Non-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) Needs to be rectified. 2) Leakages from the gate valve & impeller must be fixed. 3) NRV must be rectified. <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>		29.07.2022 26.11.2021		Long Pending in the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to rectify all the issues of MPS pumps till 21.04.2022 but many issues not rectified yet.
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 KRMPL 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 new date 31.07.2022	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		







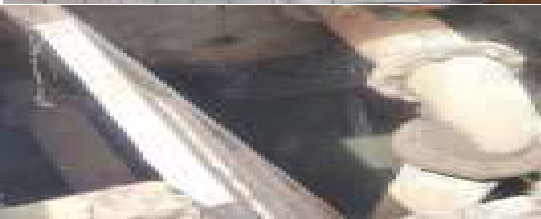
33	Mechanical Fine screen no.01	Non Operational When STC / UP Jal Nigam team reached the site, we found that the screen is still not functioning properly. None of the disposal material is getting removed by the screen and also sewage level in upstream is higher than that of the level at downstream. Screen bars are choked with disposal materials.		Must be Overhauled at the earliest In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to rectify the issue till 18.04.2022 but not rectified yet.	28.01.2020	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 In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to rectify the issue till 18.04.2022 but not rectified yet.	26.10.2021	31.01.2022 Next date given is 31.07.2022	LONG PENDING
35	Mechanical Fine screen no.03	Non operational 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 In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPL to rectify the issue till 18.04.2022 but not rectified yet.	26.10.2021		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		LONG PENDING
37	Conveyor belt	Operational		Motor cover need to be replaced	03.10.2022		Pending
38	Manual Screen no. 1 & 2			Regular cleaning of manual screens needs to make sure.			




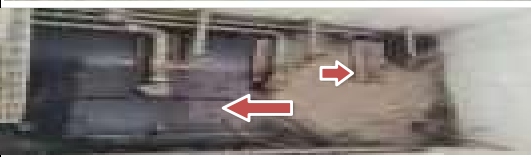

39	Painting works on PTU	<p>When UPJN &amp; PE visited site, it was found that painting work is not done properly on the items on PTU. By scratching through nails only, the painted parts is coming out and the below portion was found rusted.</p> <p>Also various parts which was not painted properly was again get corroded as shown in the pic.</p>		<p>Painting must be done properly and all the rusted parts on PTU needs to be painted. 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)			Long Pending
40	RTOLMS sampling bucket on PTU			<p>Bucket must be clean and sludge must be removed daily.</p>					
41	Grit removal mechanism- Detritor no.01 Main drive, Classifier drive, Organic pump	<p>Non -operational</p> <p>1) Very less quantity of grit was being removed by the grit classifier.</p> <p>2) No canopy found on motors of equipments.</p>		<p>1) Proper alignment work of grit classifier must be done at earliest.</p> <p>2) Canopy must be provided on all motors.</p> <p>3) Grit disposal tray must be cleaned.</p> <p>4) MS walkway and cable tray needs to be painted properly.</p> <p>5) Damaged cable tray must be replaced and cable dressing needs to be done.</p>		03.10.2022			LONG PENDING
42	Grit removal mechanism- Detritor no.02 Main drive, Classifier drive, Organic pump	<p>Operational</p> <p>Less quantity of grit was being removed by the grit classifier.</p>		<p>1) Proper alignment work of grit classifier must be done at earliest.</p> <p>2) Canopy must be provided on all motors.</p> <p>3) Grit disposal tray must be cleaned.</p> <p>4) MS walkway and cable tray needs to be painted properly.</p> <p>5) Damaged cable tray must be replaced and cable dressing needs to be done.</p>		25.08.2021			Long Pending
43	Grit removal mechanism- Detritor no.03 Main drive, Classifier drive, Organic pump	<p>Operational</p> <p>Less quantity of grit was being removed by the grit classifier.</p>		<p>1) Proper alignment work of grit classifier must be done at earliest.</p> <p>2) Canopy must be provided on all motors.</p> <p>3) Grit disposal tray must be cleaned.</p> <p>4) MS walkway and cable tray needs to be painted.</p> <p>5) Damaged cable tray must be replaced and cable dressing needs to be done.</p>		26.10.2021	2) 28.02.2022		LONG PENDING

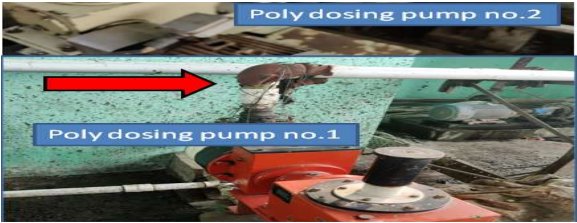




44	Grit removal mechanism- Detritor no.04 Main drive, Classifier drive, Organic pump	Operational MS structure was not found properly painted.		1) Canopy must be provided on all motors. 2) Grit disposal tray must be cleaned. 3) MS walkway and cable tray needs to be painted. 4) Damaged cable tray must be replaced and cable dressing needs to be done.		1) 22.02.2022 26-10-2021	2) 28.02.2022 3) 31.01.2022	LONG PENDING
45	Parshall Flume	No ultrasonic level sensor and no scale were found at site		1) Level sensor must be installed at earliest. 2) Scale & chart for flow measurement must be fixed at earliest.		Since Handover 08-07-2019	2) 15.01.2022 new date 30.06.2022 new date 2) 31.07.2022	LONG PENDING
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.		Trolley at every location needs to be provided for collection of Grit from chutes & screenings from conveyor every time as directed by NMCG team and PE also. CC way need to be prepared as required for this area and required drain also needs to be provided.		26.10.2021		LONG PENDING
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 This reactor has been inspection by UPJN & PE against the RFI raised by KRMPPL and it was found that many of the works have not been completed by KRMPPL. STC Letter no. 1773 dated 22.08.2022 may be referred regarding this.		In NMCG meeting dated 11.04.2022, KRMPPL 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, KRMPPL 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, KRMPPL 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, KRMPPL 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	Some improvement in scum cleaning was observed during site visit.  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. Apart from this, it has been found that the gates just before UASB reactors were found only little open.		Scum cleaning needs to be done regularly.  1) Alignment and cleaning of v- notches must be done at the earliest so that smooth flow of treated sewage takes place. 2) Gates just before UASB reactors needs to be opened fully.		30.06.2022  25.03.2022 26.07.2022		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		Pending
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	31.07.2022	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	Non-Operational After approx 2 months since 26.03.2022, it was found operational on 27.05.2022 and again found non-operational since 30.05.2022		Needs to be rectified at the earliest.		30.05.2022		
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				25.08.2022		
79	Aerator no. 13	Non Operational		Needs to be rectified at the earliest.		03.10.2022		
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 Made operational but no maintenance record found at site				03.06.2022		

84	Aerator no. 18	Non Operational After approx 3 months since 22.02.2022, it was found operational on 27.05.2022.		Needs to be rectified at the earliest.		03.10.2022		
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
86	Aeration Lagoon no. 1	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. 2) At the time of visit, no desludging work was found. 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.		Desludging needs to be done on immediate basis. In the meeting dated 11.04.2022, ED (T) NMCG directed KRML to submit complete and detailed plan & schedule for bypass line within 7 days (i.e., 18.04.2022). ED (T) NMCG directed KRML to submit cleaning schedule of aeration lagoon within 7 days (i.e., 18.04.2022).	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	Non-Operational 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. Apart from this, sewage was found on the floor creating unhygienic condition.		1) Needs to be rectified at the earliest. 2) Sludge accumulated on the floor needs to be cleaned.		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.						


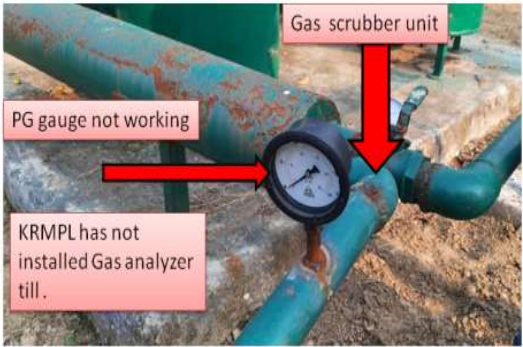
92	Poly dosing pump No.2	Operational		<p>1. Heavy vibration was found. Need to be rectified at the earliest.</p> <p>2. Leakage need to be rectified at the earliest.</p>		03.10.2022		Pending
93	Poly dosing pump No.3	Non Operational		Need to be replaced		07.10.2021	<p>30.10.2021. Next date given 15.02.2022 Next date given 30.06.2022 New date 15.07.2022</p>	LONG PENDING
94	Service water pump No.1 (For BFP)	Operational						
95	Service water pump No.2 (For BFP)	Non Operational		Need to be repaired		Since Handover 08-07-2019	<p>15.11.2021. Next date given 28.02.2022 Next date given 30.06.2022 New date 15.07.2022</p>	LONG PENDING
96	Belt filter Press No. 1	<p>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, again found operational but no record found at site. No record of non operation of BFP was mentioned in the maintenance register.</p> <p>1) Discharge sludge box was found totally rusted and damaged.</p> <p>2) BFP building shed was found rusted</p>		<p>1) Panel door, ammeter, voltmeter, limit switch, indicator lights need to be repaired / replaced.</p> <p>2) Cable tray need to be painted.</p> <p>3) BFP panel no. 1 buzzer need to be replaced.</p> <p>4) Discharge sludge box must be replaced.</p> <p>5) BFP building shed needs to be epoxy painted by following standard method.</p> <p>6) Maintenance register needs to be maintained properly.</p>		23.09.2021	<p>30.11.2021. Next date given 31.01.2022 Next date given 10.06.2022</p>	LONG PENDING

97	Belt filter Press No.2	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
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 and the sludge cake was also found collected on floor		Spare trolley must be provided at every time.		22.02.2022		Pending
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. Pumps needs to be installed on its original arrangements only. False information was provided in KRMLP letter no. 2455 dated 12.05.2022 regarding compliance to PE inspection.
101	Filtrate pump no. 2	Non-Operational		Need to be overhauled at the earliest		10.12.2021		
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		Long Pending






103	Booster Pump No.2	Operational Leakage found from the Impeler		1) Leakages must be fixed at the earliest 2) Ball valves need to be checked for any flow in close position.		22.02.2022		Long Pending
104	Chlorine Tonners ( Total 20 Nos )	<p>1) The missing tonners were finally brought at site on 11.12.2021 which were missing after handover dated 08.07.2019.</p> <p>2) 5 nos. of chlorine tonners were found connected with discharge chlorine line.</p> <p>3) Chlorine dosing was not found appropriate and the fecal coliform was found exceeding the permissible limit by a huge margin.</p> <p>4) One foundation of Tonner was found totally damaged.</p> <p>5) Chlorinator no. 1 was found not working.</p> <p>6) Still the chlorination system has not been rectified resulting in inappropriate dosing of chlorine.</p> <p>7) Pressure gauge of 2nd chlorine line is not working.</p>		<p>1) Take license for storing chlorine.</p> <p>2) Arrange Chlorine stock for one week at least.</p> <p>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.</p> <p>4) Do the restoration work of the damaged foundation.</p> <p>5) Chlorinator no. 1 must be rectified at the earliest.</p> <p>6) Chlorination system must be rectified at the earliest.</p> <p>7) PG must be replaced.</p>		16.12.2021	<p>1) 31.07.2022</p> <p>4) 20.08.2022</p> <p>5) 25.05.2022</p> <p>New date 15.07.2022</p>	Long Pending
105	Gas Holder No.01	Non Operational After approx 2 yrs. since 28.01.2020, the gas holder was found operational on 18.02.2022.		<p>1. Pressure guage needs to be installed.</p> <p>2. No gas was found in side the gas holder.</p>		03.10.2022		PENDING
106	Gas Holder No.02	Non Operational		<p>1. Pressure guage needs to be installed.</p> <p>2. No gas was found in side the gas holder.</p>		03.10.2022		PENDING









107	Gas Blower near Gas holders	Non Operational			03.10.2022		PENDING
108	Gas Blower 1 & 2 near Scrubber	<p>When UPJN &amp; PE visited site, it was found that</p> <ol style="list-style-type: none"> <li>1) only one blower for blowing gas from gas holders to scrubber unit was operational and blower no. 2 was not found operational. KRMPPL was not able to get blower no. 2 running checked by UPJN &amp; PE.</li> <li>2) No Pressure gauges were found after each blower.</li> </ol>	<ol style="list-style-type: none"> <li>1) Blower no. 2 needs to be overhauled and made operational at the earliest.</li> <li>2) Pressure gauges after blowers must be installed.</li> <li>3) Ball valves and pipes must be checked and it should be replaced if found damaged.</li> <li>4) Rusted nut bolts must be replaced.</li> <li>5) House keeping around blower area must be done.</li> </ol>		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>		Need to be repaired and painted immediately.	28.01.2020	30.06.2022 New Date 31.08.2022	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>		<p>1) Need to be rectified at the earliest</p> <p>2) Needs to be painted</p>	10.04.2022 16.12.2021	31.05.2022, New date 31.07.2022, New Date 15.08.2022	LONG PENDING
112	DFG no. 2	Non Operational		<p>1) The autocharge must be rectified.</p> <p>2) Needs to be painted</p> <p>3) Exhaust silencer needs to be overhauled.</p>	03.10.2022		PENDING
		House Keeping work is found to be in very poor		House keeping work of the plant needs to			

113	House Keeping	condition. This implies that KRMPL is not doing house keeping work which is clear from the photographs.		be improved at the earliest and done regularly. Sufficient manpower for house keeping work must be deployed.		03.10.2022			PENDING
114	Leakage at Civil Unit	When UPJN & 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.		Need to be repaired permanently		28.01.2020	15.01.2022 New Date 31.08.2022	LONG PENDING	
115	Log Boogs/ Registers	It was found that no record/ log book or register for Mechanical screens, Sludge pumps operation etc were maintained by KRMPL. Even maintenance register was not found properly maintained as BFP no. 1 was found operation but no information of BFP was found in the maintenance register. Apart from this, various rectification works which the plant incharge is claiming was not found in the maintenance register.		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 some 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	1) KRMPL lab testing results are not matching with other agency's testing report. 2) Calibration Tests of Lab equipment are not performed. 3) Fecal coliform results is exceeding the permissible limit with a huge margin. 4) List of equipment complete details are not found available at site. 5) It was found that the samples were kept at negative temperature.		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. 2) Lab. equipments must be calibrated. 3) Fecal Coliform tests need to be validated due to huge variation with the 3rd party lab results. 4) Detailed list of lab equipment with all information must be prepared and made available at site. 5) Temp. regulated fridger must be made available for storing samples.		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 New Date 31.08.2022	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. 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 KRML is not following</p>  <p>it.</p> <p>UPPCB vide their letter no. 1386/5- 658/21 dated 04.12.2021 also instructed KRML 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. Sludge disposal must be done as per UPPCB norms.</p> <p>In the meeting dated 11.04.2022, ED (T) NMCG directed KRML to follow UPPCB norms for sludge disposal &amp; storage inside the plant but KRML still not following the norms.</p>	01.12.2021		LONG PENDING
122	Final Polishing Unit 1 & 2	<p>When UPJN &amp; STC officials reached the site, it was found that FPU lagoons are completely filled with sludge</p> 		<p>Desludging needs to be done on immediate basis. In the meeting dated 11.04.2022, ED (T) NMCG directed KRML to submit cleaning schedule of final polishing pond (FPU) within 7 days (i.e, 18.04.2022).</p>	22.01.2022 (Since long back)		LONG PENDING
123	Internal Lights, Exhaust fans etc. of Panel rooms	<p>Various lights and exhaust fans inside various panel rooms were found not in working condition</p>		<p>Various lights and exhaust fans must be rectified / replaced at the earliest.</p>	22.01.2022	30.06.2022	Long Pending
124	LT Panel Room	<p>Various indicators, ammeters , voltmeters etc were found not working</p>		<p>All non-working indicators, ammeters, voltmeters etc must be replaced at the earliest.</p>	25.03.2022	30.06.2022	Long 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. Apart from this, almost all DB of light pole is non-functional.		1) Defective lights needs to be replaced at the earliest. 2) All defective DB needs to be rectified. <b>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPPL 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 conncted to the nearest drain.		22.02.2022		Pending
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
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 KRMPPL. <b>In the meeting dated 11.04.2022, ED (T) NMCG directed KRMPPL that atleast 90 % of the deployed manpower must be sufficiently qualified for the operation of the plants and instructed KRMPPL 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 temporary power line from Panel room (near aeration tank) to UPJN SWEZ plant was found.		This temporary connection needs to be removed.		27.01.2022		Required action needs to be taken by either KRMPPL or UPJN if required.

*P. Govindhan*