














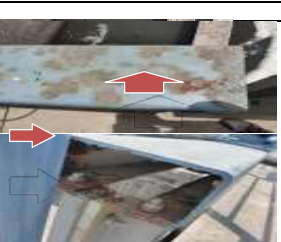







SITE INSPECTION REPORT FOR 210 MLD STP BINGAWAN					LOCATION: 210 MLD STP at BINGAWAN	Inspection Date: 14.11.2022	INSPECTED BY: <u>UPJN Team:</u> Sangeet J.R. Chavh <u>STC Team:</u> Mr. Satish Kamranje (Process Expert), Mr. Ajay Kumar Goyal (Support Engrg. Mech) Mr. Divya Mittal (Support Supervisor/Electrical) <u>KRMPL Team:</u> Mr. Abhishek Pandey, Process engineer, KRMPL Mr. Ashwin, Mechanical 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
	COD Nalla	During the UPJN & PE site visit of COD Nalla IMD site on 03/10/2022, it was found that sewage flows (Overflow) were diverted to Gauge 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 completed earlier and false information is being provided by KRMPL Plant incharge.		Leakages from the bypass sluice gate must be fixed. During the inspection of UPJN & STC team done on 14.11.2022, it was observed that the leakage in the bypass is still not attended.		27.05.2022		Pending
2	Upstream Wetwell of MPS	During the UPJN & PE site visit on 25.08.2022, it was observed that freetail 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 nos. of pumps at MPS need to be operated to tackle the problem of reversed back flow and free tail at the inlet needs to be maintained at all times.		26.10.2021		













3	Sluice gates at Upstream Weir of MPS	Non-Operational		1. Sluice gate pillar/shaft was found in bent condition. Need to be replaced. 2. Sluice gate integrated stem guide is broken. Need to be replaced. 3. Lubrication of gearbox was not properly done.		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		1) Need to be rectified at the earliest. 2) Rake mechanism must be aligned properly at the earliest. 3) Painting needs to be done properly on the stairs, walkway. 4) Chain cover must be provided. 5) Log book of mechanical screen must be maintained.		30.08.2022 03.02.2021		Long Pending
5	Mechanical Coarse screen No. 02	Operational The rake mechanism is not properly aligned and uneven gap was found between rake teeth and plate/ screen bar		1) Need to be rectified at the earliest. 2) Rake mechanism must be aligned properly at the earliest. 3) Painting needs to be done properly on the stairs, walkway. 4) Chain cover must be provided. 5) Log book of mechanical screen must be maintained.		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 checked. 2) MS Stair case and handrails found to be totally rusted.		1) Screen need to be cleaned regularly. 2) Painting needs to be done on the stairs and handrails.		03.10.2022		Pending
7	Manual bar Screen no 02	Operational 1) Manual bar screen found checked. 2) MS Stair case and handrails found to be totally rusted.		1) Screen need to be cleaned regularly. 2) Painting needs to be done on the stairs and handrails.		03.10.2022		Pending
8	MPS inlet chamber							

9	Coarse Screen Control Panel	Operational		<p>1) All Panel indicators need to be repaired/ replaced  2) Annunciator needs to be replaced.  3) Damaged Control Panel needs to be attended along with the necessary painting works.</p>	29.01.2020		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.  2) Belt conveyor needs to be operated regularly.  3) Debris disposal from the belt conveyor to be done regularly.  4) Trolley must be provided.</p>	11.04.2022 25.03.2022		Pending
11	Sludge Inlet Chamber - Sludge Side Mounting Slab	The damaged slab was finally rectified on 14.11.2022, but the casting & fixing work was poorly done.		<p>1) Do the casting &amp; fixing work properly under the supervision of civil engineer.  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.		<p>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.</p>	03.10.2022		Pending
12b	Main Pump Station(MPS) Wetwell	KRMPL has not conducted any clearing of the Wetwell since the handover. This has caused the MPS pumps to clog and frequently breakdown. Several NRV valves and Sludge 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.		<p>KRMPLs 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 KRMPLs, for review and approval at the earliest.</p>	08.07.2019		Pending



13	WPS Cable tray	Cable tray was found rusted		Needs to be painted/ Replaced	08.07.2019		Long Pending
14	WPS 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 replaced but leakage was observed during their observation.		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) Check Air valves operation and rectify the problem.	01.06.2021 03.07.2022	30.10.2021	Long Pending
15	Pump no. 1	Operational Suction Pipe line valve is not in working condition since 03.10.2022		1 Panel indicators were not working.	03.10.2022		
16	Pump no. 2	It was observed during the inspection on 14.11.2022 that pump no. 2 is operational but facing overheating and getting tripped.		1. SIO MROX KID in the panel need to be replaced. 2. Need to be overhauled at earliest. 3. Valve need to be regulated.	24.06.2022		
17	Pump no. 3	It was observed during the inspection on 14.11.2022 that pump no. 2 is operational but facing overheating and getting tripped. 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) Leakage from the Impeller must be fixed. 3) Suction pipe line valve is not in working condition since 03.10.2022.	26.07.2022 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. NPSH 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. NPSH 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 Volmeter & ammeter not working		1. Voltmeter & Ammeter 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 Volmeter not working		1) Needs to be rectified. 2) Voltmeter must be replaced. In the meeting dated 11.04.2022, EO (T) NRCG directed KOWPL to rectify the issue till 11.04.2022 but not rectified yet.	26.12.2021 03.10.2022	30.04.2022	Long Pending
22	Pump no. 8	Non-Operational When LPA & PE visited site, it was found that the impeller of pump no. 8 was damaged and it 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. 8	Non Operational Sealless pipe the water is not working condition since 05/10/2022		Needs to be rectified	14/09/2022 05/10/2022		Pending
24	Pump no. 10	Operational Sealless pipe the water is not working condition since 05/10/2022		Needs to be rectified	05/10/2022		Pending
25	Pump no. 11	Under Maintenance MFO not working because of which the pump is not being operated properly		1) Needs to be rectified 2) MFO is not to be rectified	21/08/2022 26/07/2022 05/10/2022		
26	Pump no. 12	Under Maintenance 1) Heavy leakage was found from the gate valve & pump handle 2) MFO not working because of which the pump is not being operated properly		1) Needs to be rectified 2) Leakage from the gate valve & handle to be rectified 3) MFO not to be rectified In the meeting dated 11.04.2022, E.O. MFO Director KWRPL to verify the issue 05/10/2022 but not rectified yet	26/07/2022 26/11/2021		Long Pending In the meeting dated 11.04.2022, E.O. MFO's actioned KWRPL to rectify all the MFO pumps 05/10/2022 but many have not rectified yet
27	Pump	1 has been repaired and being kept for operational status in future, while for checking pumpers vibrations		Condition needs to be checked at the current status is long pending	27/05/2022		
28	MFS Panel	Various vibrations, anomalies, vibrations etc. were found not working		Continuing vibrations, potentials, anomalies with trouble reported at the station	27/05/2022		
29	Pump's Lightings			Plan to change needs to be made at the long pending Lighting and its alignment on the sign board			
30	Flow Meter	Non Operational Flow meter is present at the site but not installed since a long time		The water level is low level at the station in the meeting dated 11.04.2022, E.O. MFO Director KWRPL to install flow meter at the station	26/11/2021	21/07/2022	Long Pending As per Article 8 of CA, it should be installed by the concerned
31	Level Sensor of MFS 500	Calibration needs to be done		Needs to be calibrated at the station and calibration report should be submitted at the station	26/10/2021	06/11/2022 New date 01.04.2023 New date 31/07/2022	Long Pending
32	MFS pipe to PTU	When EPFA & PFC team reached the site, it was found that piping has been done but not connected at the place was found correct and not proper jointed		Needs to do proper jointing properly by following standard procedure	25/03/2022		
33	Mechanical of PTU screen no.01	Non Operational When EPFA & PFC team reached the site, we found that the screen is not in functioning properly. None of the disposed material is getting removed by the screen and also average level in upstream is higher than that of the level of downstream. Screen has associated with disposal material		Needs to be checked at the station in the meeting dated 11.04.2022, E.O. MFO Director KWRPL to verify the issue 05/10/2022 but not rectified yet	26/11/2021	10/11/2021 New date 01.04.2023 New date 31/07/2022	LONG PENDING
34	Mechanical of PTU screen no.02	Non Operational		Needs to be checked at the station in the meeting dated 11.04.2022, E.O. MFO Director KWRPL to verify the issue 05/10/2022 but not rectified yet	26/10/2021	01/01/2022 New date 01.04.2023 New date 31/07/2022	LONG PENDING
35	Mechanical of PTU screen no.03	Non operational When EPFA & PFC team reached the site, we found that the screen is not in functioning properly. None of the disposed material is getting removed by the screen and also average level in upstream is higher than that of the level of downstream. Screen has associated with disposal material		Needs to be checked at the station in the meeting dated 11.04.2022, E.O. MFO Director KWRPL to verify the issue 05/10/2022 but not rectified yet	26/10/2021		LONG PENDING
36	Mechanical of PTU Screen Panel	1) Cable is not working 2) Cable was found hanging on the floor		Needs to be checked at the station in the meeting dated 11.04.2022, E.O. MFO Director KWRPL to verify the issue 05/10/2022 but not rectified yet	26/10/2021		LONG PENDING
37	Conveyor belt	Operational		Motor cover need to be replaced	05/10/2022		Pending
38	Water Screen no. 1 & 2			Require reviewing of normal screen needs to be done			
39	Flanking works of PTU	When EPFA & PFC visited the site, it was found that painting work was not done properly on the fence and PTU. By checking through only, only the painted parts in coming and the fence parts were found correct. Also other parts which were not painted properly were again get corrected as per the site		Painting must be done properly and other parts must be checked in the meeting dated 11.04.2022, E.O. MFO Director KWRPL to verify the issue 05/10/2022 but not rectified yet	26/11/2021 (New pending)		Long Pending
40	PTU/MF sampling holes and PTU			Need must be done and design must be submitted daily			
41	Grit removal mechanism and 1000 liter Classifier line, Organic pump	Under Maintenance 1) Very low quantity of grit was being removed by the grit classifier 2) No change took in status of equipments 3) Classifier was not working		1) Proper alignment work of grit classifier must be done as per the site 2) Classifier must be provided on all sides 3) Grit disposal has to be checked 4) Grit disposal and cable tray needs to be checked properly 5) Classifier cable tray must be replaced and cable drawing needs to be done 6) Classifier needs to be rectified	03/10/2022		LONG PENDING
42	Grit removal mechanism and 1000 liter Classifier line, Organic pump	Operational Less quantity of grit was being removed by the grit classifier		1) Proper alignment work of grit classifier must be done as per the site 2) Classifier must be provided on all sides 3) Grit disposal has to be checked 4) Grit disposal and cable tray needs to be checked properly 5) Classifier cable tray must be replaced and cable drawing needs to be done 6) Classifier needs to be rectified	25/08/2021		Long Pending
43	Grit removal mechanism and 1000 liter Classifier line, Organic pump	Operational 1. Less quantity of grit was being removed by the grit classifier 2. Organic pump was not working		1) Proper alignment work of grit classifier must be done as per the site 2) Classifier must be provided on all sides 3) Grit disposal has to be checked 4) Grit disposal and cable tray needs to be checked properly 5) Classifier cable tray must be replaced and cable drawing needs to be done 6) Classifier needs to be rectified	26/10/2021	21/08/2022	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 05.10.2021	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.		Block Handover 08-07-2019	2) 15.01.2022 new date 2) 30.06.2022 new date 2) 31.07.2022	LONG PENDING
46	Grit Disposal Area	When UPJN & PEC 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 & unsanitary environmental condition.		Truly at every location needs to be provided for collection of Grit from shades & screenings from conveyor every time as directed by NMCO team and PEC 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		20.06.2020		
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		10.03.2021		
52	UASB Reactor- no.6	Operational		Processing needs to be optimized		10.01.2022		
53	UASB Reactor- no.7	Operated but filled with sludge 3) Various downward pipes from the feed box were found choked.		NMCO has directed KRSMPPL to deploy more teams for clearing 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	-	

56	UKSB Reactor no.9	Operational		Processing needs to be optimized		04.12.2021		
57	UKSB Reactor no.10	Operational		Processing needs to be optimized		18.12.2021		
58	UKSB Reactor no.11	Operational After almost 2 years (since 28.01.2020) of non operational, it was cleaned on 25.04.2022.		Processing needs to be optimized		25.04.2022		
59	UKSB Reactor no.12	Operational 1) After about 22 months (since 28.01.2020) of non operational, it was cleaned on 05.11.2021. 2) At various places, KQPS pipe was found hanging without any support.		Processing needs to be optimized KQPS pipe support needs to be provided.		26.11.2021 25.03.2022		
60	UKSB Reactor no.13	Under Maintenance since Jan. 2022 This reactor has been inspected by UPJN & PFC against the RPI issued by KRNMP, and it was found that many of the items have not been complied by KRNMP. STC Letter no. 1773 dated 23.08.2022 may be referred regarding this.		1. In NMCG meeting dated 11.04.2022, KRNMP promised and submitted the previous date to complete clearing of reactor. 08 May 2022 but not cleared yet. 2. Stacks are observed to be either old, or failed or damaged. Therefore stacks must be replaced. 3. PVP plates require sealing.		28.01.2020	28.02.2022 From 31.03.2022 New Date: 15.06.2022	LONG PENDING
61	UKSB Reactor no.14	Under Maintenance since Nov 2021		In NMCG meeting dated 11.04.2022, KRNMP promised and submitted the previous date to complete clearing of reactor. 08 May 2022 but not cleared yet.		28.01.2020	10.02.2022 From 28.02.2022 New Date: 15.07.2022	LONG PENDING
62	UKSB Reactor no.15	Under Maintenance since 03.01.2022		In NMCG meeting dated 11.04.2022, KRNMP promised and submitted the previous date to complete clearing of reactor. 08 May 2022 but not cleared yet.		28.01.2020	31.01.2022 From 31.03.2022 New Date: 15.07.2022	LONG PENDING
63	UKSB Reactor no.16	Under Maintenance		In NMCG meeting dated 11.04.2022, KRNMP promised and submitted the previous date to complete clearing of reactor. 08 May 2022 but not cleared yet.		28.01.2020	10.01.2022 From 10.03.2022 New Date: 15.08.2022	LONG PENDING
64	UKSB reactors	Some improvement in scum clearing was observed during Jan. and Feb.  When UPJN & STC team reached the site, it was found that almost all reactors scumflow vessels were not aligned properly and also the reactor were found checked at various places. At various places no scumflow was being observed through the vessels. Apart from this, 3. Four teams found that the pipes just before UKSB reactors were found only the gaps.		Scum-flowing needs to be done regularly.  1) Alignment and clearing of scumflow vessels to be done at the earliest so that smooth flow of scumflow is observed. 2) Gases just before UKSB reactors needs to be removed.		28.03.2022 26.07.2022		Long Pending
65	UKSB reactors sludge with piping	When UPJN & PFC visited site, it was found from the register that sludge withdrawal are not being done from each reactor's daily.		Required quantity of sludge needs to be withdrawn from all the reactors daily and accordingly required nos. of BPP & sludge pump need to be operated.		27.05.2022		Pending
66	Sampling Chamber	When STC / UPJN team reached the site, it was found that 1) Some of the sampling chambers inside reactor are cleaned and various chambers were filled with sewage/ water and many sampling points were not marked with colorable. 2) Various bottom-sludge cleaning pipes in the chambers are found checked and no sludge removal is taking place from the bottom pipes.		1) All sampling chambers must be cleaned at the earliest. 2) Sampling points must be cleaned and where the pipes needs to be fixed. 3) Bottom sludge drawing pipes needs to make operational.		26.11.2021		LONG PENDING
67	HT Cable	HT Cable line from grill to the transformer base sections is not functional.		Needs to be rectified and connected with the transformer (lower section) at the earliest.		Since Sept 2021	31.07.2022	LONG PENDING
68	Aerator no.01	Operational						
69	Aerator no.02	Operational						
70	Aerator no.03	Operational						
71	Aerator no.04	Operational						
72	Aerator no.05	Operational After approx 2 months since 28.03.2022, it was found operational on 27.05.2022 and again found non operational since 30.05.2022		During the inspection on 14.11.2022 it was observed that the motor has broken. Therefore, it should 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				05.08.2022		
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	Under Maintenance After approx 6 months since 03.02.2022, it was found operational on 27.05.2022		Needs to be rectified at the earliest.		03.10.2022		
85	Aerators working	When UPJN & PFC visited the site, it was found that improper working has been provided by connected with this work without of G2 strip. An aerator working work will found the done.		All aerator working (2 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 good depth measurement for aeration lagoon no. 1 was done at three different points, and sludge was found at an average depth of 0.5m below the top water level, which means 2.5 m approx. sludge is present inside aeration lagoon no. 1 at corners. 2) At the time of visit, no landscaping work was found. 3) At the middle portion of the lagoon, sludge was seen above the top water level 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 (I) directed KRNMP to submit complete and detailed plan & schedule for bypass the water 7 days (i.e. 15.04.2022). ED (I) NMCG directed KRNMP to submit desludging schedule of aeration lagoon within 7 days (i.e. 15.04.2022).		26.11.2021 (Since long back)	15.01.2022 From 31.03.2022	Long Pending








07	Aeration Laggon no. 2	Filled with sludge		Desludging needs to be done on immediate basis.		18.08.2021		Long Pending
08	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 27.03.2022. Apart from this, leakage was found on the floor creating hygienic condition.		1) Needs to be rectified at the earliest. 2) Sludge accumulated on the floor needs to be cleaned.		27.05.2022		
09	RSP pump no. 2	Operational						
10	RSP pump no. 3	Operational						
Belt Filter Press Unit								
01	Poly dosing pump No.1	Operational				03.10.2022		Pending
02	Poly dosing pump No.2	Operational		1) Heavy vibration was found. Need to be rectified at the earliest. 2) Leakage need to be rectified at the earliest.				
03	Poly dosing pump No.3	Non Operational					03.10.2021 Next date given 10.02.2022 Next date given 10.02.2022 New date 15.07.2022	
04	Service sander pump No.1 (for BFP)	Operational		Need to be replaced		07.10.2024		LONG PENDING
05	Service sander pump No.2 (for BFP)	Non Operational		Need to be replaced		Shree Handover 08-07-2019	15.11.2021 Next date given 24.02.2022 Next date given 30.06.2022 New date 15.07.2022	LONG PENDING
06	Belt Filter Press No.1	Operational After around 3 months of non-operational since 23.08.2021, it was found operational on 23.03.2022 and again found non-operational on 27.03.2022. Again found operational has no record found at site. No record of non-operation of BFP was mentioned in the maintenance register. 1) Discharge sledge box was found badly rusted and damaged. 2) BFP building shed was found rusted.		1) Front door, sensor, solenoid, limit switch, indicator Belt need to be repaired / replaced. 2) Cable tray need to be painted. 3) BFP sensor no. 1 cable needs to be replaced. 4) Discharge sledge box must be replaced. 5) BFP building shed needs to be spray painted by following standard method. 6) Maintenance register needs to be maintained properly.		23.09.2021	20.11.2021 Next date given 24.02.2022 Next date given 31.01.2022 Next date given 10.06.2022	LONG PENDING
07	Belt Filter Press No.2	Operational Discharge sledge box was found badly rusted and damaged.		1) Need to be required lubrication on daily basis. 2) Front door, sensor, solenoid, limit switch need to be replaced. 3) Cable tray need to be painted. 4) Discharge sledge box must be replaced.		23.09.2021	20.11.2021 Next date given 31.01.2022 Next date given 31.05.2022	LONG PENDING



	Belt Filter Press No.3	Operational Discharge sludge box was found badly rusted and damaged.		1) Need to be required lubrication on daily basis. 2) Panel door, arrester, valve, limit switch need to be required. 3) Cable tray need to be painted. 4) Discharge sludge box must be replaced.	23.08.2021	20.11.2021 Next date given 21.01.2022 Next date given 21.03.2022	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	Filterate 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 arrangement only.
101	Filterate pump no. 2	Non-Operational		Need to be overhauled at the earliest	10.12.2021		False information was provided to KRMPL letter no. 2455 dated 12.05.2022 regarding commissioning to PE inspection.
Chlorination Area							
102	Booster Pump No.1	Operational 1) PG found damaged 2) Leakage found from the tripper 3) Apart from this, it was found that even after clearing the well sludge, water flow was observed from the valves in close position. 4) During the inspection on 14.11.2022, it was observed that chlorine booster for pump no. 1 was not working		1) Pressure gauge must be fixed/ replaced at the earliest. 2) Check the status of the fixed or replaced / replaced. 3) Ball valves needs to be rectified / replaced.	26.11.2021		Long Pending
103	Booster Pump No.2	Operational Leakage found from the tripper		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	Sampling Pump	During the inspection on 14.11.2022 it was observed that suction pipe when was filled with sand/sludge.		Need to be rectified at the earliest.	14.11.2022		
105	Chlorine Tankers ( Total 2 Nos )	1) The missing chlorine were finally brought at site on 13.12.2021 which were missing after hardware dated 06.07.2021 2) 5 nos. of chlorine tankers were found connected with wrong chlorine line. 3) Chlorine during was not found disengaged and the fixed platform was found exceeding the permissible limit by 4 inches margin. 4) One foundation of Tanker was found badly damaged. 5) Chlorinator no. 1 was found not working. 6) Still the chlorination system has not been rectified resulting in inappropriate dosing of chlorine. 7) Pressure gauge of 2nd chlorine line is not working. 8) In chlorinator no. 2 the chlorine reading was observed to be 15 Kg/h but actually it should be 50 Kg/h.		1) Take license for starting chlorine. 2) Arrange Chlorine stock for one week at least. 3) Check proper amount of chlorine which is still not being allowed continuously into chlorine is being received in the effluent. Chlorine dosing is to be controlled to control local odours within limit and accordingly chlorine dosing should be adjusted. 4) On the completion work of the damaged foundation. 5) Chlorinator no. 1 must be rectified at the earliest. 6) Chlorination system must be rectified at the earliest. 7) PG can be replaced. 8) Digital read out was not working properly therefore should be rectified.	16.12.2021	1) 31.07.2022 4) 20.08.2022 6) 25.09.2022 New date 15.07.2022	Long Pending
106	Gas Holder No.01	Non-Operational After approx 2 yrs. since 28.01.2020, the gas holder was found operational on 16.10.2022.		1. Pressure gauge needs to be installed. 2. No gas was found in side the gas holder.	03.10.2022		PENDING
107	Gas Holder No.02	Operational 1. Chlorine properly installed 2. State not properly connected		1. Pressure gauge needs to be installed. 2. No gas was found in side the gas holder.	03.10.2022		PENDING
108	Gas Blower near Gas holders	Non-Operational			03.10.2022		PENDING
109	Gas Blower 1 & 2 near Scrubber	When UPLN & PFC 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. KRMPL was not able to get blower no. 2 working checked by UPLN & PFC. 2) No Pressure gauge was found after each blower.		1) Blower no. 2 needs to be overhauled and made operational at the earliest. 2) Pressure gauge after blower must be installed. 3) Ball valves and pipes must be checked and it should be replaced if found damaged. 4) Flashed nut bolts must be replaced. 5) House keeping around blower area must be done.	Blower Breakdown 06-07-2019		Long Pending
110	Gas scrubber Unit	When UPLN & PFC visited site, it was found 1) PG was not working and KRMPL was unable to pressure checked at the outlet of scrubber unit. 2) KRMPL has not installed any permanent gas meter for checking gas quality. 3) KRMPL is claiming that moisture trapping system in gas line must be checked and the effluent sample analysis report for checking the performance		1) Working Pressure gauge must be provided after activation. 2) Gas analyzer must be installed (as per article 6.7 of O&A) and that the scrubbed gas quality could be checked at site. 3) Third party analysis of the gas and scrubbed gas through approved agency from UPLN needs to be conducted and submitted to UPLN, PFC and report needs to be submitted to check whether operation is connected or not as claimed by KRMPL.	28.01.2020		LONG PENDING

111	Gas Flaring Unit at DG yard	Operational 1) Auto ignition system of the gas flaring system is finally made operational on 14.11.2022 2) Cable laying was not proper. Temporary cable correction is being used.		Need to be repaired and painted immediately.		28.01.2020	30.06.2022 New Date 31.08.2022	LONG PENDING
112	DFG No. 1	Non-Operational 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.		1) Needs to be rectified at the earliest 2) Needs to be painted		10.04.2022 16.12.2021	31.05.2022, New date 31.07.2022, New Date 15.08.2022	LONG PENDING
113	DFG No. 2	Operational		1) The autocharge must be rectified. 2) Needs to be painted. 3) Exhaust blower needs to be overhauled.		03.10.2022		PENDING
114	House Keeping	House Keeping work is found to be in very poor condition. This implies that KRMPL is not doing house keeping work which is clear from the photographs.		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.		03.10.2022		PENDING
115	Leakage at CW Unit	When UPJN & PE visited site, heavy leakage was observed as shown in the picture because of which the service division channel was filled with sewage. Also leakages from various structures were found.		1. Need to be repaired permanently 2. Cleaning and substitution for channel valves is required to be done.		28.01.2020	15.01.2022 New Date 31.08.2022	LONG PENDING
116	Log Register 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 exchange 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, Inlet material register, first aid register, attendance register, visit register etc) must be maintained daily and should be available at site all the time.		28.10.2021		LONG PENDING

117	Internal Road Restoration	Internal roads were found damaged at various places		Internal road restoration must be started at earliest and should be done on phased manner.	26.10.2021	03.10.2022	Pending
118	Marking Equipments	It was found that some markings has been done by KSMPL and some marking on the equipment carts 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 equipment/units can be identified easily.	26.10.2021	28.02.2022	LONG PENDING
119	Laboratory	1) KSMPL 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) KSMPL lab testing results are not matching with other agency's testing report. KSMPL must do the testings properly as per standard operating procedure as per CIL / CHNEED 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 fridge must be made available for storing samples.	20.03.2022 26.10.2021		LONG PENDING
120	MS structures, Hand railings at whole plant, MS stairs	Various MS Structures, MS stairs and all the hand rails on URBB 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
121	URBB Reactor Hand railing	Hand rails on the URBB reactors are totally rusted.		Handrailing needs to be either repainted or painted with epoxy paint at the earliest.	26.11.2021 (Since long back)	30.06.2022 New Date 31.08.2022	Long Pending

122	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 EO (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.</p> <p>UPPCB vide their letter no. 1306/S-608/21 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>SIR UPCCB 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 UPCCB norms.</p> <p>In the meeting dated 11.04.2022, EO (T) NMCO directed KRMPL to follow UPCCB norms for sludge disposal &amp; storage inside the plant but KRMPL still not following the norms.</p>	01.12.2021		LONG PENDING
123	Final Polishing Unit 1 & 2	When UPJN & STC officials reached the site, it was found that PPJ lagoons are completely filled with sludge.		<p>Desludging needs to be done on immediate basis.</p> <p>In the meeting dated 11.04.2022, EO (T) NMCO directed KRMPL to submit clearing schedule of final polishing pond (FPP) within 7 days (i.e. 18.04.2022).</p>	22.01.2022 (Since long back)		LONG PENDING
124	Internal Lights, Exhaust fans etc. of Panel rooms	Various lights and exhaust fans inside various panel rooms were found not in working condition.		<p>Various lights and exhaust fans must be rectified / replaced at the earliest.</p>	22.01.2022	30.06.2022	Long Pending
125	L-7 Panel Room	Various indicators, ammeters, voltmeters etc were found not working.		<p>All non-working indicators, ammeters, voltmeters etc must be replaced at the earliest.</p>	25.03.2022	30.06.2022	Long Pending
126	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.		<p>1) Defective lights needs to be replaced at the earliest.</p> <p>2) All defective O/S needs to be rectified. In the meeting dated 11.04.2022, EO (T) NMCO directed KRMPL to install all lights within a day (i.e. 13.04.2022) and must ensure its 100% availability functioning.</p>	28.01.2020	30.06.2022	LONG PENDING
127	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.		<p>1) Water taps must be rectified at all places.</p> <p>2) Civil foundation works must be restored at all places.</p> <p>3) At the places where civil foundations are not available, construct it.</p> <p>4) Proper drain line from the water tap area needs to be constructed and connected to the nearest drain.</p>	22.02.2022		Pending
128	Safety shower	Safety shower civil structure was found damaged and the system is not working properly. Also the eye wash bottle is not working.		<p>1) Eye wash bottle needs to be fixed and piping system must be fixed properly.</p> <p>2) Civil foundation work must be restored.</p> <p>3) Proper drain line to the nearest drain must be constructed.</p>	22.02.2022	30.06.2022	Pending
129	O&M Staff	Every time when UPJN & PE team visited the site, it was found that qualified & adequate nos. of O&M staff workers are not available / deployed at site for proper O&M of the site.		<p>Qualified and adequate nos. of staff workers must be deployed by KRMPL.</p> <p>In the meeting dated 11.04.2022, EO (T) NMCO 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.</p>	22.02.2022 (Since long back)		Long Pending
130	Power connection through Birgaon Plant	When UPJN & STC officials visited site, a temporary power line from Panel room (near aeration tank) to LPJN SVE2 plant was found.		<p>This temporary connection needs to be removed.</p>	27.01.2022		<p>Required action needs to be taken by either KRMPL or UPJN if required.</p>

P. G. Sharma