

## SITE VISIT REPORT

**Inspection note of 130MLD Jajmau STP construction site and facilities by Mr. Anil Seth Kumar, Team Leader (I/C), UPJN officials and KRMPL Representative as given below.**

<b>Date of site visit</b>	<b>05/09/2023</b>
<b>Visit Team &amp; Persons met</b>	Mr. Anil Kumar Seth – Team Leader (I/C), STC Kanpur Mr. Sahazeb Iqbal – A.E. UPJN Mr. Indra Deo Paney- Support Engineer - Civil , STC Kanpur ----- ----- Mr. Palash Roy– Mechanical Engineer , KRMPL Kanpur Mr. Avanish Tripathi, Civil Engineer, KRMPL Kanpur Mr. Krishna Verma , Plant Incharge , KRMPL Kanpur Mr. Alokesh Das, Electrical Engineer, KRMPL Kanpur
<b>LOCATION</b>	<b>STP 130 MLD JAJMAU</b>

### Following are the major silent points of inspection:-

- **Collection Chamber**

1. Inlet to outlet sluice gate overhauling done.
2. Repairing work of free board of this chamber found very poor.
3. Toe guard to be provided in hand railing.
4. TWL marking should be done with paint.

- **Inlet Chamber**

1. Toe guard to be Provide in hand railing.
2. Level transmitter to be replaced.
3. Shed to be replaced.

- **Fine Screen Chamber**

1. Garbage's like Plastic bags, leather pieces, clothes must be removed from Belt conveyor of Screen Chamber regularly.
2. Proper Lighting need to be provided at Screen area.
3. Level scale should be properly cleaned and marking should be clearly visible.
4. MS Fabrication equipment & tools along with MS Shed also corroded & lost its strength.

5. Mechanical Screen not working with auto system and without sensor Need to be fix the auto system immediately.
6. Cables should be laid properly in cable trays
7. FRP coating done in Hand-railing, screen channel area.
8. Maximum gap in bar screen should be filled.
9. Screen panel handle damaged need to be rectified.

➤ **Screen no-1**

1. Mechanical Fine Screen need to be installed as per approved drawing.
2. Screen erection/installation work is not verified by STC/ UPJN.
3. Mechanical screen of teeth are damaged, KRMPL has not been repaired.
4. Mechanical Screen not working with auto system and without sensor, need to fix the auto system immediately.
5. Cable dressing not done properly.
6. Screen motor cable gland is not fixed.

➤ **Screen no-2**

1. Mechanical screen of teeth are damaged, KRMPL has not been repaired.
2. Screen needs to be cleaned periodically depending on the sewage.
3. Mechanical Screen not working with auto system and without sensor auto system to be fixed immediately.
4. Cables should be laid properly in cable trays.
5. Screen panel sensor not fixed.

➤ **Screen no-3**

1. Screen teeth's are damaged. Need to be rectified.
2. Mechanical Fine Screen to be installed as per approved drawing.
3. Screen erection/ installation work is not verified by STC.
4. Mechanical Screen not working with auto system and without sensor, the auto system need to be fixed immediately.
5. Working Procedure of screens has not been submitted by KRMPL.

• **Manual Screen**

1. KRMPL has installed manual screen. But they have not fixed it with anchorfastener. KRMPL to provide SS316/SS304 anchor fastener.

• **Grit Chamber**

1. Foundation of grit chamber should be renovated.

• **Grit Mechanism**

2. Organic pump need to be installed as per approved drawing.
3. Hydro testing is pending.
4. Cable need to be laid in Cable tray as per approved drawing.
5. LPBS need to be installed as per approved drawing.
6. Torque switches installation done without canopy at all equipment.
7. All torque switches are not working.
8. Hooter is fixed on railing with temporary cable, which is not proper and unacceptable.
9. Power supply is given to torque switch & associated equipment from temporally MCB. Permanent supply is to be provided.

• **Screw Classifier**

1. Grit removal not satisfactory.

2. Screw grit removal not working satisfactory.
3. LPBS need to be installed. Work is pending.
- **Panel room of Grit unit**
  1. Cable trench to be constructed.
  2. Flooring and finishing and window work is pending.
  3. Connection done but order as per drawing not followed.
- **Parshall Flume and Flow Channel**
  1. Flow meter not functional
  2. Channel renovation work done but hydro test of this channel is pending.
  3. Painting procedure has not been submitted by KRMPL.
  4. Level scale need to be installed for proper flow measurement.
  5. Meter box to be install at site.
  6. Cable to be laid properly in cable tray and conduit pipe.
- **Distribution Chamber and Channel no 1**
  1. Civil renovation work pending inside the chamber which is possible after taking shutdown.
  2. Sluice gate need to be replaced.
  3. Damage precast need to be replaced.
- **Primary Sedimentation tank no 1**
  1. Scum Box design need to be changed.
  2. Weir plate to be replaced at damaged portion.
  3. Remote system to be installed for PST1.
  4. Cable to be laid in cable tray.
  5. Stair hand-railing need to be provided.
  6. Fencing to be providing on Truss platform.
  7. LPBS need to be installed as per approved drawing.
  8. Torque switches installation done without canopy at all equipment.
  9. Hooter is fixed on railing with temporary cable tie, which is not proper and unacceptable.
  10. Power supply is given to torque switch & associated equipment from temporally MCB. Permanent supply is to be provided.
  11. Torque switches alarm not working properly.
  12. Torque switch not showing reading.
- **Primary sedimentation tank no 2**
  1. TWL marking done with paint.
  2. Fencing to be providing on Truss platform.
  3. Stair hand-railing need to provide in PST-2
  4. LPBS need to be installed as per approved drawing.
  5. Torque switches installation done without canopy at all equipment.
  6. Hooter is fixed on railing with temporary cable tie, which is not proper and unacceptable.
  7. Power supply is given to torque switch & associated equipment from temporally MCB. Permanent supply is to be provided.
  8. Torque switch screen show error during testing.
  9. Scum box design need to be changed.
- **Primary Sedimentation tank no 3**
  1. Weir plate to be replaced at damaged portion.

2. Remote system to be installed for PST-3.
3. Hooter is fixed on railing with temporary cable tie, which is not proper and unacceptable.
4. LPBS need to be installed as per approved drawing.
5. Power supply is given to torque switch & associated equipment from temporarily MCB. Permanent supply is to be provided.
6. Toe guard to be in stair hand railing.
7. Bridge need to paint.

- **Aeration Tank**

1. Aeration outlet gate to be replaced.
2. Floor found in poor condition and need to be rehabilitated.
3. New Hand railing needs to be installed on walkway.
4. Cable need to lay in cable tray.
5. LPBS system to be installed at site.

- **Aerators**

1. Painting of gear box need to be done.
2. New cable need to be fixed with new cable gland.
3. Canopies to be installed on the top of motor.
4. Cable need to be laid in cable tray.
5. LPBS system to be installed at site.
6. Earthling not done in some places
7. 1 aerator under maintenance since 3 month.

- **Distribution chamber no 3**

1. Cleaning and finishing work to be done in this chamber.
2. Railing to be replaced / repaired.
3. Operational wheel found missing and needs to install for proper operation of the gates
4. Damaged precast slabs need to be replaced.
5. Inside renovation work pending.

- **Final Sedimentation Tank**

1. Width of stain need to be increase FST 02.
2. Remote system to be installed for FST-1.
3. Cable need to be laid in cable tray.
4. Torque switch not working and Installed without canopy.
5. LPBS system needs to be install at site.

- **Old TEPH**

1. New Treated effluent pump house has already been proposed in CA and needs to keep this pump house in working condition till the renovation period.
2. Civil drawing of pump foundation not submitted by KRMPPL for Renovation work.
3. Out of 11 pumps only 7 Nos. pumps were working at site.
4. Pump foundation are found in damaged condition.
5. Hand railing to be repaired and installed.
6. Lighting arrangement and Cable to be laid in cable tray.
7. Thermometer and vibration meter should be at site.
8. Railing to be repaired till the renovation period.
9. Pressure gauge is found in damaged condition and need to be replaced.
10. Leakage has been detected 2 number pumps which are in operation, and directed to

repair the same immediately.

11. LBPS system to be installed at site.
12. Motor cover to be arranged.
13. Cable tray need to be painted immediately.

- **RSPH**

1. Only outer and pump house painting work done not done in panel room.
2. Dewatering arrangement need to be arranged.
3. Cables to be arranged in proper manner and should be laid in cable tray.
4. Leakage has been detected in the pipes connecting of pumps.
5. Foundation renovation work needs to be done.
6. Renovation work of internal wall need to be done.
7. Lighting arrangement and Cable to be laid in cable tray.
8. LPBS system to be installed at site.
9. New Panel installation on progress.
10. All Indoor Light to be replace immediately.
11. Precast slab on cable trench channel pending.
12. Window need to be replaced and Painting work not done properly.
13. Out of 4 nos. pump set 3 renovation with all valve and renovation of 4<sup>th</sup> to be done. NRV is pending

- **Thickener and Blending Tank**

1. Both thickener commissioning & Testing pending.
2. Cable to be laid in cable tray.
3. Hand railing to be replaced.
4. Torque switches Installation done without canopy at all equipment.
5. Hooter is fixed on railing with temporary cable tie, which is not proper and unacceptable.
6. Both thickeners not working properly.
7. Cleaning to be done in blending tank.
8. Torque switch and Alarm are not working.

- **TSPH**

1. Pump house structure plastering and finishing work should be proper.
2. Cracks should be treated with proper technique.
3. Remote system to be installed for TSPH.
4. All Thickened sludge pumps to be replaced as per CA.
5. Dewatering pump to be installed for removing extra water.
6. Window need to be replaced.
7. EOT crane, lighting, exhaust fan to be install.
8. Civil Renovation work required in RCC Stair.

- **Digester**

1. Removal of centrally located sludge mixing shaft from Primary Digester 1.
2. Gate to be overhaul.
3. Inside painting pending in Digester 2
4. Landia system installation progress in Digester 2.
5. Digester 1 Cleaning work pending.
6. Civil Structure of the Digester to be renovates and cracks to be treated.
7. Leakage to be arrested in the Digester.
8. Installation of the Railing at the boundary of the dome.
9. In secondary Digester 60% sludge cleaned.

10. Finishing work to be done.

• **DSPH**

1. Installation of the railing on the boundary of the sump.
2. Precast cover to be replaced or constructed on the sump.
3. Stairs at the pump house to be renovate.
4. Plastering work and finishing work to be done in the pump house.
5. Foundation of the pumps to be repaired.
6. Railing to be repair in the Pump house.
7. LPBS System to be installed .
8. Cable need to be laid in cable tray.
9. Dewatering pump to be installed.

• **Belt Filter Press**

1. 2 no BFP installed but not working properly.OEM should be called for checking.
2. 2 no BFP only placed.
3. Dewatering arrangement need to be arranged.
4. Housekeeping to be done.
5. Sign boards are required.
6. No approach road found at site to get on this unit/component.
7. Proper lighting arrangement to be required at site.
8. 1 bore for fresh water made and 2<sup>nd</sup> is to be constructed.
9. For installation of balance 2nos BFP there material shortage like pipe fitting, relay of Panel, nuts and bolts etc.

• **Gas Holder**

1. Civil structure renovated partially.
2. MS Dome to be repaired.
3. Railing to be repaired
4. Valves need to be overhaul or repair.
5. Plastering and finishing work to be done in the civil structure.
6. For installation of gas holder there is hand drilling material problem and civil work of central Colum is left.

• **Gas Scrubber and Flaring.**

1. Civil foundation work done
2. Mechanical equipment only placed not installed. Scrubber blower have come but De-humidifier supply is pending
3. Flaring unit done but connection still pending.

• **DFG Unit**

1. Proper lighting arrangement to be required at site.
2. DFG to be replaced as per CA and BEP.
3. 2 nos Rental DG sets are available at site for power backup.
4. Biogas engine supplied but they are to be installed which could not be done due to EOT breakdown and radiator supply is pending

• **New Construction**

1. New CCT work on progress wall casting done baffle wall casting done connecting channel is pending approximately 90% workdone.
2. New TEPH construction work on progress slab reinforcement work on progress approximately 75% work done.(11 nos pumps and motors, valves and pipe have come)
3. Chlorination building construction work done approximately 56% work done.(Booster pump, Blower, gauges, injector pipe walls have come but 16 nos toner supply is pending.
4. New HT-LT panel construction work on progress approximately 85% work done.(PCC panel has not come, Plc panel and RTLOMS are not yet supplied)
5. Ventilation construction 70% work done.(Material supply pending)
6. Chimney foundation civil work has been done mechanical work pending.

7. New BFP construction work approximately 95% work done.
8. Scrubber foundation done.
9. Flare Unit foundation done.

**Note:-**

1. Balance material list to be provided for which supply is pending.
2. Finishing work to be done neatly.
3. Replaced material should be staged properly and record should be maintained.
4. Site development should be attended properly.
5. Special attention be given for painting work of units/ valves/pipes.

**No instrumentation activities being carried out at the plant.**







