

Inspection Report of 210 MLD Bingawan STP under O&M inspected by Sri A.K. Gupta, Chief Engineer (K.Z.), U.P. Jal Nigam, Kanpur on 28/ 01/ 2020

Visited and Inspected 210 MLD Bingawan STP site which is being operated and maintained by M/s Kanpur River Management Pvt. Ltd. (KRMPL), Kanpur-a SPV formed by M/s Sapoorji Pallonji Pvt. Ltd. under HAM-PPP project on 28/ 01/ 2020

Following UPJN, STC (Project Engineer, nominated by NMCG to this project) and KRMPL officials were present at Bingawan STP site:

1. Mr. Mohammad Ahsaan PM III GPCU UPJN, Kanpur
2. Mr. Mohammad Maaz, P. M. (E&M) GPCU UPJN, Kanpur
3. Mr. J, P, Tripathi O & M Engineer STC
4. Mr. L. K. Rao Safety Expert STC
5. Mr. Aswini Kumar – Mech. Engr. – KRMPL
6. Mr. Dharmendra Kumar – Sr. Safety Officer - KRMPL
7. Mr. Shailesh kumar – Lab chemist - KRMPL

Observations:

This plant along with all related pumping stations and I & D works has been handed over to M/s KRMPL by UPJN on 08.07.2019. Following observations were made during inspection.

General:

- Attendance Sheet of the manpower deployed for the Month of Dec. 2019 shows that Work of O & M of Bingawan Facilities has been sub contracted to M/s Suyojan Multitech Services (I) Pvt. Ltd. without approval of UPJN.
- Mr. Amit Bhambre O&M In charge is not available in Kanpur for last 20 days
- It is told that Mr Shriram Saste is the Plant In charge of Bingawan also along with Sajari but he is not present at Bingawan Site inspite of having information of the inspection programme.

MPS:

- Only 5 pumping plants out of 12 pumping plants installed at MPS are in working condition. It is informed that 2 PPs are out of order due to Electric panel defect, 2 PPs have bearing problem and casing of 1 PP is damaged. 2 PPs have been repaired and are to be installed.
- Motors coupling guards to be arranged for all pumps



- UPJN & KRMPPL officials are instructed to keep all the 12 PPs in working condition for 100% availability of MPS otherwise compensation as per Schedule 7 to be imposed on the Concessionaire.
- No servicing of Electric Panel installed in MPS has been done since handing over of the plant on 8th July 2019. The servicing is required at 6 months interval.
- Raw Sewage inflow measured as 123 MLD which is less. UPJN officials were instructed to check all pumping stations for their running status and find the reason and report.
- Painting of corroded parts is required immediately.

Inlet Chamber:

- 1 out of 3 Mechanical Screens is out of order for last 5 days..
- There is oil leakage in moving system of Mechanical Screens.
- Out of 3 steams only 2 are running
- Coupling guards and chain belt guards to be provided for all the moving parts in the site area.
- Screen waste and grit removed should be disposed off on daily basis

UASB Reactors:

- Sludge Extraction is not being done properly from the reactors and all the reactors are full of sludge affecting the efficiency of UASB Reactors. Gas generated is leaking outside instead of collecting in the gas collection hoop. Immediate action is required in this matter, by M/s KRMPPL other wise serious problem will arise ultimately affecting the performance of the plant.
- Painting of all corroded parts to be done.

Aeration Tanks:

- 1 out of 18 Aerators is not working from 20/01/2020, No action to get it repaired has been taken so far. Necessary action to repair the aerator is to be taken immediately to avoid formation of stagnation zone in that area.

Belt Filter Press for sludge removal:

- Out of 3 sludge belt filter press only 1 is in working condition. 2 filter presses are not in use from 5/11/2019.

- Average quantity of sludge disposal is only 8 Tons/day against assessed about 56Tons/ day at present inflow, i.e. sludge is not being withdrawn properly.

Chlorination Room & CCT:

- Only 2 chlorine cylinders are filled out of 20 cylinders installed in the chlorination room. PM III GPCU UPJN is instructed to calculate chlorine dosing and accordingly requirement of chlorine cylinders to be procured..
- Safety Shower installed near chlorination room is not connected to water supply system and therefore of no use. This is very serious safety lapse. M/s KRMPPL should take immediately action.
- CCT is filled with sludge, needs to be cleaned at the earliest.

Boundary Wall:

- Remaining boundary wall under AMRUT is to be completed at the earliest. PM-III instructed to expedit the work.
- 10 out of 40 lights fitted on boundary wall are not in use, needs to be repaired immediately
- Separate Corridor to the Mazar is to be provided. PM-III instructed to do needful at the earliest.
- Open well near Mazar is to be covered by iron screen.

Performance of the Plant:

Performance of the plant observed not up to the make. Guaranteed characteristics of treated effluent ($COD < 100$, $BOD < 30$, $TSS < 50$) is not meeting upto the prescribed level. BOD is in the range of 33 to 35 while COD in the range of 125 to 140 and TSS in the range of 50 to 60 mg/l. The reason for BOD is that UASB reactors poor performance due to not withdrawal of sludge from inflow pipes and reactors. Higher COD may be due to high COD level in influent (more than 520 ppm as designed level). For this, Project Manager-III, GPCU, UPJN and KRMPPL officials were instructed to find out industrial ingress point by jointly surveying area and then to take further action accordingly.

Instructions:

Officials of M/s KRMPL were instructed to rectify all the shortcomings as mentioned above and take necessary action as suggested during inspection. UPJN officials are also required to do needful under their scope. Higher authorities of M/s KRMPL are also advised to take the observations into their notice and do needful required for the running of plant satisfactorily with all safety measures.

(A.K. Gupta)
Chief Engineer (K.Z.)

OFFICE OF THE CHIEF ENGINEER (K.Z.), U.P. JAL NIGAM, KANPUR

Letter No. 401 / W-39 / 06

Dated: 28 /01/2020

Copy to following for information and necessary action:-

1. P.S. to Chairman/Managing Director, U.P. Jal Nigam, Lucknow for information.
2. Joint Managing Director (Ganga), U.P. Jal Nigam, Lucknow for information.
3. Chief Engineer (Ganga), U.P. Jal Nigam, Lucknow.
4. Secretary (Management), U.P. Jal Nigam, Lucknow.
5. General Manager, Ganga Pollution Control Unit, U.P. Jal Nigam, Kanpur, for compliance.
6. Project Manager (III), Ganga Pollution Control Unit, U.P. Jal Nigam, Kanpur, for compliance.
7. Mr. J.P. Tripathi, O & M Engineer, STC, Kanpur.
(E_Mail- stcnmcgkanpur@gmail.com).
8. Mr. P.C. Shukla, Project Director, M/s Sapporji Pallonji Pvt. Ltd. (E_Mail- prakash.shukla@shapporji.com).
9. Mr. Amit Bhambre, O & M Incharge, M/s KRMPL.
(E_Mail- amit.bharambe@shapporji.com).
10. Gaurd file.


Chief Engineer (K.Z.)