

Ref. STC / PE / KNP /1311 / Shuklaganj**Date** 04/12/2021**To,**Superintendent Engineer,
3rd Circle, UP Jal Nigam
Lucknow**Sub:** **HAM KANPUR:** 05 MLD STP Shuklaganj Site inspection Report of dated 9th & 17th
November 2021

Dear Sir,

With reference to the above said subject inspection report of 05 MLD Shuklaganj for the month of November 2021 is attached herewith for your information.

Yours Sincerely,

(Dr. Giridhar Prabhukumar)
TEAM LEADER, STC Kanpur

Copy to the following for information and necessary action:

- i. Mr. R.K. Gupta, SWMS, NMCG, New Delhi
- ii. Chief Engineer, UP Jal Nigam, Lucknow
- iii. SE, E&M, UP Jal Nigam, Lucknow
- iv. EE, CD, UP Jal Nigam, Unnao.
- v. Project Manager Kanpur River Management Pvt. Ltd., Kanpur
- vi. Mr. Sumit Katiyar, Manager- Construction, KRMPL

SITE INSPECTION REPORT - 05 MLD STP AT SHUKLAGANJ

Date of site Inspection	9 th & 17 th November 2021
STC Site Inspection team	Dr. Giridhar Prabhukumar, Team Leader STC Kanpur Mr. Linga Krishna Rao – Safety Expert, STC Kanpur Mr. Priyesh Shukla, Support - Engg. STC Kanpur Mr. Karm Veer Singh - Supp. Sup. STC Kanpur
KRMPL Personal	Mr. Sugreev Singh, AE UP Jal Nigam, Unnao Mr. Ankur Saxena, JE UPN Lucknow Mr. Kaushal Sharma KRMPL

1. COVID 19 precautions followed at site

Compliance of COVID 19 protocols like wearing face masks, installation of hand sanitizer units etc. were not followed at the site. Workers were also not found wearing PPE's like Ear Plugs, Goggles, Hand gloves and Safety helmets. Disinfection spray fogging is being done in labour camps. Personal screening and awareness programme are implemented. It is advised for procurement and usage of the PPE usage during work by workers, staff and visitors.

2. Specific Points related to the site inspection

- i. Dr. Giridhar Prabhukumar, Team Leader STC Kanpur discussed about the progress of work, no. of labours, quality checks with UPJN and STC representatives.
- ii. During inspection total 22 nos. of manpower / workers were deployed at the site.
- iii. Despite directions given during several NMCG meetings, manpower has not been increased by KRMPL up to 80-100.
- iv. During visit, progress of different STP components was checked as per the approved construction plan and it was found that progress of 05 MLD STP is very slow. **Total progress till 30 November 2021 was found approx 15.5% against the target of 25%.**
- v. At present 2nd milestones is in progress which is scheduled to be completed on 1st Nov. 2021. 3rd milestone is in running, KRMPL needs to expedite the progress by increasing the manpower and working on multiple fronts.
- vi. Work was stopped due to flood on 27th Oct, 2021 and water logged in STP area and submerged whole Construction area and equipments, but on 3rd Nov, 2021 the water was gone and it was a workable condition but KRMPL have not yet started work as on 9th Nov, 2021.
- vii. The Major issue of labour, they have lack of manpower only 8(eight) persons available on 9th Nov, 2021.
- viii. Progress of different STP components as per milestone 1 & 2 on dated 30.11.2021 are as following:

SN	Proposed Works of STP as per Construction Plan	Progress of Works as per Milestone 1&2 till 01-11-2021	Actual Progress till 30-11-2021
i)	SBR Basin Area		
1	Site Clearance	100%	100%
2	Excavation wall footing	100%	100%
3	PCC wall footing	80%	-
4	RCC Foundation/Raft of wall	26%	-
ii	Chlorination Tank Area		
1	Site Clearance	100%	100%
2	Excavation	100%	-
3	PCC	100%	-
4	RCC Foundation/Raft	100%	-
iii	Chlorination Room Area		
1	Site Clearance	100%	100%
2	Excavation	100%	-
3	PCC	100%	-
4	RCC Foundation/Column footing	100%	-
5	Column & Beam	100%	-
iv	Guard Room Area		
1	Site Clearance	100%	100%
2	Excavation	100%	100%
3	PCC	100%	100%
4	RCC Foundation/column footing	100%	100%
5	Column & Beam	100%	100%
v	Admin Bldg Area (G+1)		
1	Site Clearance	100%	100%
2	Excavation	100%	100%
3	PCC	100%	-
4	Column footings/Foundation	80%	-
vi	Air Blower Room Area		
1	Site Clearance	100%	100%
2	Excavation	100%	100%
3	PCC	100%	-
vii	Staff Quarter Area (G+1)		
1	Site Clearance	100%	100%
2	Excavation	100%	100%
3	PCC	100%	-
4	RCC Foundation/column footing	100%	-
5	Column & Beam up to ground floor slab	100%	-
viii	Sludge Thickener Area		
1	Site Clearance	100%	100%
2	Excavation	100%	100%
3	PCC	100%	100%
4	RCC Foundation Wall/base slab	100%	100%
ix	Supernatant Sump Area		
1	Site Clearance	100%	100%
2	Excavation	100%	100%
3	PCC	100%	100%
4	RCC Foundation wall/base slab	100%	100%

SN	Proposed Works of STP as per Construction Plan	Progress of Works as per Milestone 1&2 till 01-11-2021	Actual Progress till 30-11-2021
5	Wall 50% of total lift work	100%	20%
x	EXTERNAL DEVELOPMENT		
	Boundary Wall with Gate		
1	Site Clearance	100%	100%
2	Excavation	60%	100%
3	PCC	50%	100%
4	RCC Column footing	50%	100%
5	RCC Column & Beam	46%	80%
6	Brickwork	20%	2%
7	Plaster	15%	-
B	MPS-20 MLD		
	Civil Work		
i	Construction of Raw Sewage Sump		
1	Site Clearance	100%	100%
2	Excavation	100%	40%
3	PCC	100%	-
4	RCC Foundation/Raft	100%	-
ii	Construction of Inlet Chamber & Screen Channel		
1	Site Clearance	100%	100%
C	SEWER SYSTEM AREA		
2	Supply of pipes	90%	55%
3	Excavation and Laying of pipes including bed preparation & backfilling	20%	-
D	E&M WORK		
i)	GRIT CHAMBER AREA		
	A. On supply - Grit Scraper Mechanism	100%	-
ii)	MEP		
	C. Supply - Hoist	100%	-
	E. Supply - Pumps & Motors(MEP)	100%	-

- ix. Excavation of soil was done for the Construction of SBR/Staff quarters/Administrative building. To increase of the soil bearing capacity Provide Engineering Filling 1:3(1 Aggregate and 3 available Backfill Earth) was done dated 20-12-2021.
- x. Due to encounter of water level at 3.5 Meter below ground the MPS was filled with water for which dewatering is being done. Looking into the progress of site it is too early to start.



Engineering Filling



Dewatering is in progress of MPS

- xi. Shifting of pipe has started dia 900 mm, shifted 82.5mtr against of 400mtrs, the laying of pipe should have started as of now, but it was not yet initiated.



- xii. During visit quality check register was inspected by PE, STC for different construction materials like, cement, brick, concrete cube, construction water sample etc.
- xiii. Approach road to the plant is narrow and congested. The alternate route was suggested by UPJN for which KRMPL need to pursue the matter as it is very difficult to carry heavy machinery and material in bulk to the site through present route.

3. General Points related to the site

- i. Excavation of soil was done for the Construction of SBR/Staff quarters/Administrative building. To increase of the soil bearing capacity layers of sand and morum etc., was pressed with roller.
- ii. Hard barricading around the excavated structures completely not provided which may lead to unwarranted mishap.
- iii. Around excavated MPR, SBR and along with excavated units hard barricading is urgently needed. IS 3764: 1992, IS 7323: 1994
- iv. Number of Site safety slogan boards and caution boards display are to be increased in different places of site area like: DANGER-DEEP EXCAVATION, MEN AT WORK, ELECTRICAL HAZARD, ASSEMBLY POINT, SITE ENTRANCE MAIN BOARD, FIRE EXTINGUISHER, FIRE POINT, and EMERGENCY TELEPHONE NOS.etc. IS 3764 -1992, IS 1642: 1989. IS 9457; 1980.
- v. Proper site house-keeping need to be done.
- vi. Basic PPE's to be arranged to workers. Safety helmets and safety shoes and safety face masks to be provided to all workers, staff and visitors.
- vii. Permanent fire hydrant plan to be planned and incorporated in the Shuklaganj 5 MLD STP Construction site.
- viii. Monthly safety committee meeting to be conducted by KRMPL along with workers, staff from each department, consultant representative and client representative. Such committee meeting minutes need to be circulated and resolved by the next month

meeting. KRMPL advised to schedule meeting on regular basis and communicate the same to STC & UPJN in weak advance through mail.

- ix. Scrap yard to be developed for storage of scrap material in the site. Hot work area to be marked and barricaded separately work-wise for each sub-contractor.
- x. Mock drills need to be conducted at site once in a month Example of topics for mock drill:
 - i. Fire mock drill
 - ii. Incident mock drill
 - iii. Poison mock drill
 - iv. Electrical shock mock drill
 - v. Excavation collapse mock drills.
- xi. Every mock drill report to be prepared and response, response time and the gap analysis to be done accordingly. It can be used as lesson learning and improvement on mock drills as part of onsite emergency plan. Mock drill schedule information to be given at least a week in advance to PE and UPJN.
- xii. During the rainy and after rainy season doctor consultation to be introduced to workers once in a weak for an hour in labor camp to prevent and control of workers health from viral attacks and reduce from sick and to speed up progress as per schedule.
- xiii. Workers monthly payment has not being done before 7th of every month. July 2021 payment details not provided by KRMPL during visit. This is against applicable labor laws of State and against commitment of KRMPL on statutory compliance as per CA. KRMPL to comply to the same immediately.
- xiv. Concessioner site in charge along with site safety officer safety audit and safety inspections to be done periodically and such reports along with the compliance to be sent to UPJN / STC. IS 14489; 1998.
- xv. As per IS 8990:1978 Code of practice of maintenance and care of industrial safety clothing to be followed.
- xvi. As per IS 11972:1980 Safety colours and Safety signs not following by KRMPL.
- xvii. KRMPL must follow work permit system including but not limited to:
 - i. Excavation
 - ii. Electrical work(HV/LV)
 - iii. Opening manholes, covers and grills
 - iv. Blasting operations
 - v. Works on plant,
 - vi. Machinery & other power-driven equipment
 - vii. Working at height
 - viii. Working at night.

It is requested UPJN to advise KRMPL to rectify the shortfalls, expedite the progress and submit compliance of inspection report.