

ARIYALUR



MECHANICAL

Issue No. 01	Rev. No: 00	No: 00 Effective Date: 01-11-2019		SOP/MECH/199
Issued By: M.R			Approved By: HOD (Me	ech)
SOP-JSA FOR STP SLUDGE REMOVING				

Scope : This SOP is applicable to Safe working for STP SLUDGE REMOVING.

Responsibility : Section Engineer - Mech.

Accountability : Section Manager - Mech.

PPE:

- 1. Helmet.
- 2. Safety shoe.
- 3. Ear plug.
- 4. Safety goggles.
- 5. Rubber hand gloves.
- 6. Hand Gloves.
- 7. Nose mask.

Tools:

- 1. Box Spanner set.
- 2. Ring Spanner set.
- 3. Shovel.
- 4. Waste cloth.







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Hazards:

Risks associated

Mitigating Measures

Pressurized water release/

Rotating parts.

- 1. Safe pressure release on pipeline.
- Fall of objects 1. Usage of certified lifting tools.
- Slip and fall 1.Proper supports.

Training needs:

- 1. Fire fighting.
- 2. Emergency preparedness.
- 3. Electrical prevention training.
- 4. Assembly procedure.
- 5. Safe work near running equipment's.







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Procedure:

- 1. Check the MLSS on aeration tank if it is 350ml and above.
- 2. Transfer the sludge under clarifier tank to dying bed by closing the return sludge valve and by opening the dying bed sludge pipe line to return sludge.
- 3. After the sludge completely dryed out after around 72 hours.
- 4. Scoop the sludge out of dying bed by shovel.

Emergency / Emergency Shut OFF:

1. If body injury is there, First aid will be given and inform to the Safety department or Call Emergency number 3108/9865152222

Records/Annexure:

- 1. JSA is enclosed below.
- 2. Isolation Matrix.





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JOB SAFETY ANALYSIS: (JSA)

Job Safety Analysis	Job:Sludge removing	Date: 04- 05 - 2020	Analysis by: Section Engineer	Reviewed by: Section Head
Title of employee doing job: Section Engineer	Supervisor: Section Engineer	Department: Mech.	Section: UTILITY	Approved by: HOD Machanical

Req'd/recommended PPE: Safety helmet, Safety shoe, Safety goggles, Ear plug, nose mask & Rubber hand Gloves.

Sequence of Basic Job Steps	Potential Hazards	Recommended Safe Job Procedure	What Could Go Wrong	Corrective Action
Valve operation	Hand injury / Fatal	Closed the out let valve and open the drain (manual) valve	System will be pressure raised it will blasting the system	Ensure valve condition before start the work
Shoveling of sludge	Slip and fall	Proper fixing of supports	May be a slip and fall	Certification of lifting tools and tackles.







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Isolation Matrix:

SL No	Activity		Isolation Matrix for Utility & General Equipment. Isolation Type		
		Electrical Energy	Other Energy		
1	STP SLUDGE REMOVING	Isolate the Related other energy isolatio n	Isolate or closed the valves		