

Tender- Raw Water Treatment Plant Upgrade, Using Zero Chemicals

Lautoka Sugar Mill

The current water supply to the Housing Compound and Factory is Raw Water from nearby dam located in a Hilly Valley some Km away.

The existing Water Treatment Plant is old and in need of an urgent upgrade.

Present Treatment System

1. Consists of an Alum Mixing Tank (existing one not Automated).
2. A holding tank after Alum Treatment.
3. A pair of large sand filters that are presently backwashed manually.
4. A filtered water holding tank and a series of purges, on manual control.
5. Various untreated and treated water pipes and Valves (cross contamination occurs).

Tender Requirements

1. To supply Portable Water that is not treated by any chemicals.

Scope of Work - To Be Carried Out By Tender Company/Bidder.

1. Review existing Water Treatment Plant Operations.
2. Clean all internal walls of all Tanks and connecting pipes and Valves.
3. Supply and change Sand in the Sand Filters, Clean the internals of these vessels.
4. Paint Internals of all Tanks with suitable Paints that are safe/hygienic for Portable Water use.
5. Install Chemical Free Water Treatment optional methods to be quoted for FSC to Select.
6. Paint all externals of piping, mark directions of flow and Water Quality in such pipes.
7. Install a PLC Automated Control System for presently installed Pumps.
8. All pump drives has to be controlled by VF drives.
9. Sand Filter vessel has to be fitted with Automated Backwash System that also helps agitate the sand for improved Back washing.
10. Successful Tender Contractor/Bidder has to carry out prior Pathogen Water Analysis and also Pathogen Water Analysis After the system upgrade. These Test Results are to be presented to FSC.
11. Tender to Commission the new Water Treatment Systems including Training FSC's selected operators/Staffs.
12. Supply new system flow P.I Bond and Systems description.
13. Supply All new equipment manuals and O&M Manual for New Treatment Plant.
14. Carry out weekly water samples for 3 months after Plant Commissioning, Present Findings Report to FSC on a weekly Basis.