

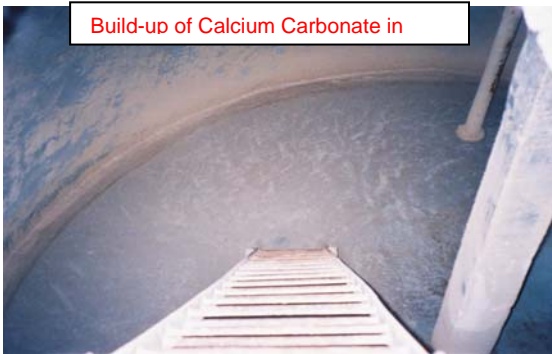
BEST PRACTICES OF WATER QUALITY

1. Storage of Quality Water Village -Adgaon , Taluka - Yaval , District : Jalgaon)

Objective : To ensure no build-up of calcium carbonate inside drinking water storage tanks and better chlorine testing

Position : Drinking water storage in village water supply systems is invariably within Elevated Storage Reservoirs (ESRs) or Ground level Storage Reservoirs (GLSRs). These tanks are the usual places for chlorination to be carried out using TCL powder (chlorinated lime).

The standard practice of chlorination is to mix TCL powder in a bucket and pour the mixture into the tank. This, however, means that the lime that is used to carry the chlorine will also be placed inside the storage tank. The build-up of lime at the bottom of the tank has to be stopped by filtering the



TCL mixture. Hence during inspection of tanks large amounts of calcium carbonate deposit, showing poor mixing practice. It was also found that residual chlorine testing is not carried out in the majority of villages.

It is necessary for all chlorinated systems and sources to be tested at regular intervals (daily). The requirement for residual chlorine depends on the level of contamination but a target for household drinking water of 0.2 parts per million (or mg. per litre) should be maintained. This can mean levels of 1ppm at the ESR if distribution networks have leaks and are contaminated.

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Residual immediately principal Test (OT Both work comparator. drinking regular tank filtration of TCL and use of correct chlorine testing procedure is essential.



chlorine testing is essential, after taking a sample. The two methods are the Orthotolidene Test) and the DPD Tablet method. on colour intensity using a simple To overcome the problems of water quality in system storage, cleaning, proper mixing and

Best Practice Adopted : In the Jalswarajya Model Village of Adgaon in Yaval Taluka of Jalgaon District awareness generation on this aspect was done and thus inspection of the village ESR and as a result a team of

villagers have cleaned the calcium carbonate deposits from the tank floor. The community has also been trained on proper chlorination procedures and appropriate testing, supported by the youth group in the village.

2. Source Protection (Village - Adgaon , Taluka – Yaval , District : Jalgaon)

Objective : To ensure that local sources of contamination do not affect quality of drinking water sources in the village

Position : Many villages take their drinking water supply from shallow dug wells that tap relatively close to the surface unconfined aquifers. These sources are often susceptible to rapid contamination from surface drainage, particularly where blocky and fractured basalt is prevalent. Drainage in most villages often allows ponding of drain water due to flat terrain and lack of cleaning and breeding of mosquitoes is the net result . Siting of community toilets, urinals and even household toilets in blocky and fractured basalt areas has often been done more with a view to convenience than looking at the potential for contamination.



Standpost drainage, Adgaon

All sources should be tested for faecal contamination on a regular basis using H₂S Tests and those showing bad result should be given a sanitary inspection in accordance with World Health Organisation Guidelines (Vol 3 Surveillance and control of community supplies). It is essential

to remove direct sources of contamination and bring the area to a satisfactory sanitary state before allowing sources to be used for drinking water.

Best Practice Adopted : In the Jalswarajya Village of Adgaon in Yaval Taluka of Jalgaon District transect walk was conducted and the community visited discussed about environmental sanitation and water quality related issues in Gram Panchayat Members and in Gram Sabha with the whole community. During a transect walk of the village with community member it was seen that a public urinal, built immediately next to a drinking water source for the village was discharging urine into the drain channel around the source and posing a direct threat to water quality. Gram Panchayat members immediately decided to demolish the urinal, which was completed in two days. Women using the adjacent clothes washing area expressed their satisfaction that the source of pollution had been removed and their health was not now at risk.

3. **Small Measure for water protection** Jalgaon District villages , viz Adgaon (Yaval Taluka), Titvi (Parola Taluka) and Malshevga (Chalisgaon Taluka).

Objective: To encourage low cost, effective household level Water, Sanitation and Hygiene actions that will have greatest impact on child health.

Position : Diarrhoeal disease is one of the WHO Target Child Survival Program diseases. In India, each year, approaching 5 lakh (5,00,000) young children die from diarrhoea.

The Jalswarajya Project puts emphasis on three important interventions – improving village awareness; a village action plan for WSS hardware; and mobilisation of women. The largest investment, in both social and financial terms is in the WSS hardware. To enable the maximum impact on the Goal of all WSS development projects, including Jalswarajya, health has to improve as a result of the combination of the planned interventions.

Best Practice Adopted : In the Jalgaon District villages , viz Adgaon (Yaval Taluka), Titvi (Parola Taluka) and Malshevga (Chalisgaon Taluka). Self Help Groups and Youth Groups have been motivated to persuade families to adopt



best practices at the family level in an effort to reduce incidence of diarrhoeal disease by creating a barrier to contamination. Some of the key measures adopted are :

Water storage vessels are having taps, covers and raised stands.

Turbid water is being filtered using 4-fold sari cloth.

Liquid chlorine drops are being added to

drinking water.

Latrines are being constructed and used.

Hand washing practices are being improved.

Chappals are being worn by children.

Women in these villages are already noticing that diarrhoea is less common after the interventions.