

Most Lahorites get contaminated

Society & Social problems
Dawn 4.4.01

By I.H.Raashed

LAHORE, April 3: Most of the citizens of Lahore get contaminated drinking water supply, says a study based on the chemical analysis of water by the Pakistan Council of Scientific and Industrial Research (PCSIR).

The study was carried out by a committee of experts appointed by an NGO, Lahore Civic Forum. The committee headed by former ambassador Inayatullah consisted of 14 members who included high MCL, Wasa, WWF, Planning and Development Department, engineering consultants and hydrology experts.

The committee collected 10 samples of water supplied by Wasa tubewells in different parts of the city and sent them for chemical and microbiological examination to the PCSIR laboratories. They found that six of the samples had no potable water and four had potable water. However, Wasa carried out its own examination of its 27 water samples collected from different parts of the city served by Wasa and found all of them fit for human consumption.

While the committee members observed that the PCSIR laboratories results should be a cause of serious concern for the relevant authorities as the findings show that most of the citizens of Lahore were not receiving uncontaminated water supply, they did not dispute the Wasa's claim that the water at

source pumped from its 320 tubewells, was potable and was of acceptable quality.

The committee found following seven causes of contamination and impurities in the water supplied to the citizens:

1. Whenever there is negative pressure in the supply lines, the possibility of sewage waste water mixing with drinking water cannot be ruled out.
2. Toose joints in water pipelines, particularly in cases of illegal water connections.
3. Industrial effluents at various levels of water supply.
4. Untreated liquid waste disposal.
5. Imbalance in the chemical composition of water caused by over-chlorination.
6. Intrusion of saline water from peripheral areas (including Hudiarah drain area).
7. Rusting and leakage of old and worn out water pipes installed by the water consumers.

The committee suggested the following measures to ensure safe drinking water supply to the citizens.

1. Wasa must make necessary efforts to maintain adequate positive pressure in the water supply lines round the clock to prevent the inaction of pollutants like sewage waste water, industrial effluents, storm water etc into this

supply.

2. Poor and loose joints of water supply lines which lead to the induction of pollutants, must be immediately repaired and monitored. A leakage-points survey should be carried out every month and repairs done without delay. Wasa should disconnect all illegal water connections.

3. A regular system of monitoring the quality of water should be established at all the possible points of contamination i.e the source as well as the distribution system. The private tubewells normally located at shallow depth should also be monitored regularly regarding the quality of their water.

4. The consumers should be educated to maintain their internal water supply system properly. The desired results cannot be obtain without creating public awareness on water management and conservation. The consumers should be educated about the importance of the water quality for human use as well as the health hazards of using polluted water.

Besides examining the quality of drinking water the committee of experts also studied the question of sustained availability of potable water to the citizens of Lahore. There were two views on the question. One group of experts was the view that groundwater

nated water supply

of Lahore was depleting at a high rate and the city would face shortage of potable water in years to come if no remedial measures were taken. The high rate of ground water extraction has developed groundwater depression in the aquifer beneath the densely populated areas.

The group feared that if the situation continued the entire aquifer would be ultimately contaminated by intrusion of brackish and marginal quality groundwater from the Hudiarah drain area in the South and through seepage from already contaminated upper layers of aquifer.

The other group of experts including Wasa engineers was of the view that the situation was not as alarming despite the rate of depletion of 1.5 (one point five) foot per year. They, however, shared the element of worry with other experts.

The committee recommended the following measures for making improvements in the worrisome situation of groundwater depletion:

1. Water conservation practices may be introduced to reduce groundwater pumpages and re-charge aquifer. One of them may be the supply of reduced water to the consumer per day.

2. No new tubewell should be installed within the Wasa jurisdiction area.

3. New wells should only be established in the surrounding rural areas outside the MCL boundary. This arrangement would provide some relief to the already over-stressed part of the source aquifer where closely spaced concentrated pumpage has drastically increased the rate of lowering of water-table due to over abstraction interference.
4. Various methods for re-charging the depleting aquifer should be investigated (vide Mashadi and Anwar technical paper attached at Annexure-E).

5. Government should examine the desirability of determining the quantum of abstractions from, and re-charge into, the aquifer.
6. The Parks and Horticulture Authority should be asked to rehabilitate/establish all official green belts and parks within the limits of the LMC. Presently, most of green belts are filled up with debris and solid waste and stand at level or above the adjoining roads. These belts must be excavated and kept deeper than the roads and foot-paths so that the rainwater, instead of spoiling the roads and footpaths, is stored in belts and parks and meets the water requirement of plantations. In this way the PHA will save expenditure presently being spent on pumping and transportation of water. This will also add to a conservative use of the aquifer.