

SECTION E

PRELIMINARY STUDIES ON TAP WATER CHEMISTRY IN KANDY REGION

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More than 80% of cancer cases are of environmental origin, long term exposure to low concentrations of certain metals being one of the contributing factors. Tap water is a potential carrier for such trace metals.

The composite sampling method was used throughout this tap water survey in the Kandy region. Zinc, copper, lead and iron were determined using atomic absorption. It was observed that metal concentrations depended on pH, temperature, period of contact with pipelines and the presence of soluble bicarbonates. The highest values observed for copper and lead were associated with heavily welded, aged pipelines. Nitrate content was higher in PVC pipelines than in metal pipelines, due to the ability of metals to denitrify the slightly acidic water.

References

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