

Chapter 5

Conclusion and Recommendation

The tap water samples and survey results were collected from houses owned by families and rented out. In general, the tap water quality which was categorised into chemicals that are of health significance and parameters which may give rise to complaints from consumers was considerably good.

As for the chemicals that are of health significance, most of them were within limits. All samples complied to the guidelines for Cadmium, Chromium, Copper, Iron, Lead, Manganese and Nickel. However no samples complied to the guidelines for Barium. As for Magnesium, no samples complied to its advisable concentration.

As for parameters that may give rise to complaints from consumers, different areas are affected by different areas. For colour and turbidity, only 2 out of 20 areas, USJ and Puchong were not within limit. The acidity of tap water were below pH 7 for 3 areas; Section 12, Tropicana and Bandar Utama while the residual chlorine exceeded the taste threshold for 2 areas; SS1 and Taman Tun Dr. Ismail. Other parameters Copper, Iron, Manganese, Sulphate and Zinc were within limit. Therefore there should not be much complaints however all areas have soft water should be noted.

It would be recommended that more samples be collected throughout the state of Selangor from different main sources, reservoirs and houses. A comparison then can be made between the water quality from the reservoir

and houses. It is also possible to identify whether contamination has taken place while the water flows through the distribution system. A comparison can also be made between water from different main sources and also water from the same main source but different reservoirs.

For more accurate and consistent results, water samples should be collected in duplicates. Samples should also be collected during dry and wet seasons. From these samples, comparison on the concentration of chemicals and especially the physical parameters which determine the water quality can be made. Not only should water samples be collected in two different seasons but consumers' feedback on their tap water quality too.

If there are any parameters, may it be chemical or physical which are not within limit, then a study should be conducted to find out its cause whether it is of natural source or contamination.