Drinking Water Sampling and Monitoring

MOE Director Approved 0.3 CE Units, 3 hour course

The primary reason that sampling and monitoring is performed is to ensure that water is safe to drink. Monitoring enables a water supplier to gain a better understanding of the performance of their drinking-water supply and allows them to make better decisions while operating it. Micro-organisms pose the greatest and most immediate risk of contamination to a water distribution system, this course stresses the importance of proper site selection and sampling method so that the most representative results can be obtained. During this course trainees will learn that the reliability of results depends equally on sampling procedures and analytical procedures and that improper sample sites or contaminated bottles will yield inaccurate, non-representative results.

Good record keeping is also essential to any monitoring program. Monitoring records prove to regulators that water quality is being checked at the frequencies required by legislation and the results of these tests are the evidence that is required to satisfy a drinking water inspector that you are in compliance with regulations.

Sampling and monitoring is also done at a variety of locations for a variety of reasons, some reasons are regulatory while others are operational. A review of common field and station sampling parameters such as pH, turbidity, fluoride, disinfection residual, hardness, iron and manganese will also be discussed.