HAZARD ANALYSIS, RISKS ASSESSMENT AND PRIORITIZE OF TRANSMISSION AND DISTRIBUTION OF KSWTP TO DEVELOP A WATER SAFETY PLAN

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Abstract

Currently drinking water quality control has been based on the detection of pathogens and measuring the concentration of chemicals .After that compare with the national and international standards. But this methodology is very slow, Complex and high cost. As well as water supply systems end product testing hardly can be considered a sound method for representative of water quality states. Because a small fraction of the total volume of water used for chemical and physical analysis .So that do not know what happen to the other large fractions. That means there chemical and physical analysis .Moreover, the monitoring frequency does not guarantee representative results in time and space as well.

A circumstantial description of the water supply system is essential for the latter risk assessment process. Because system is provide considerable information to identify the places where the system is vulnerable to hazardous events and related hazards. Data analysis was done by using graphs and tables. Risk assessment was done by using semi quantitative risk matrix from previously collected data. After that two maps were plotted from the residual chlorine variation along direct line and the tanks. In risk assessment the significant and less significant risk was differentiated

According to the semi-quantitative risk approach lot of risks in transmission and distribution system of KSWTP are in high level and they are significant. Most risks are mainly affected to the human health and cause harmful effect to the human.Eventhough KSWTP providing high quality water to the consumer it can be changed during the transmission and distribution