

## **Sources of Water Supply and Water Quality for Local Consumption: The Case Study of Eco-Tourism Village, Suan Luang Sub- District Municipality, Ampawa District, Samut Songkram Province, Thailand**

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**Abstract :** The aim of this research paper was based on an examination of sources of water supply and water quality for local consumption, conducted at eco-tourism villages of Suan Luang Sub- District Municipality of Amphawa District, Samut Songkram Province. The study incorporated both questionnaire and field work of water testing as the research tool and method. The sample size of 288 households was based on the population of the district, whereas the selected sample water sources were from 60 households: 30 samples were ground water and another 30 were surface water. Degree of heavy metal contamination in the water including copper, iron, manganese, zinc, cadmium and lead was investigated utilizing the Atomic Absorption- Direct Aspiration method. The findings unveiled that 96.0 percent of household water consumption was based on water supply, while the rest on canal, river and rain water. The household behaviour of consumption revealed that 47.2 percent of people routinely consumed water without boiling or filtering prior to consumption. The investigation of water supply quality found that the degree of heavy metal contamination including metal, lead, iron, copper, manganese and cadmium met the standards of the Department of Health.

**Keywords :** sources of water supply, water quality, water supply, Thailand

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