Thesis Title Effect of Flood on Arsenic Contamination in water well at Ronphiboon District, Nakornsrithammarat Province, Southern Thailand.

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ABSTRACT

There were two environment hazard events occured in tin mine area of Ronphiboon District, Nakorn Sri Thamarat Province. First, local people in the area had caught illness from arsenic accumulation in blood stream higher than norm because of arsenic contamination in drinking water. Second, there was a wide-spread flood later on which dispense arsenic over domestic water well.

First, the arithmetric means of the amount of arsenic in surface water well before and after flood in 29 wells were compared and the result were tested by student t- test method. Second, the amounts of arsenic in flood water well and non-flood water well were described. Third, different of the amount of arsenic before and after flood were displayed

The study indicated that the arsenic content in the flood water well after flooding was higher than the content before flooding., the arsenic content in non-flood after flooding was lower than before flooding. and the arsenic content after flooding in the central area or tin mined area was higher than those in the

surrounding area.

The result showed that flood water pulled up arsenic contaminated water in mined area into surface water well.