

## **Abstract of Presentation**

Presentation Title:

Drinking Water Production System for Arsenic Removal: Case Study in Moo 2, Ronpiboon Sub-district, Ronpiboon District, Nakhon Sri Thammarat

Abstract:

Drinking water production system using membrane technology was installed to serve 550 families at Moo 2, Ronpiboon Sub-district, Ronpiboon District, Nakhon Sri Thammarat. Feed water was directly from district pipeline water which was drawn from a mountain reservoir. Feed water quality was weekly examined to analyze particularly for arsenic content. Permeate was found to be arsenic free (<0.01 ppm) while arsenic in the feed was from 0.10-0.16 ppm. The water production rate was 208 L/h at the beginning and gradually declined to 198 L/h at the end of 3 months. From questionnaires, it revealed that a number of families did not consume the produced water, due to being far from the center and having adequate reserved rain water. About 97% of the questionnaires showed preference for having a community membrane filtration unit. The cost of drinking water produced from the unit was estimated on a 3 month basis to be 0.15 Baht/L.