

Jansajee Thipphayasoonthranont 2012: Health Effects of Domestic Sewage Odor on Songthevada Canal, Bangkhunsri, Bangkok Noi District, Bangkok. Master of Science (Environmental Science), Major Field: Environmental Science, College of Environment. Thesis Advisor: Assistant Professor Surat Bualert, Ph.D. 99 pages.

The objectives of this research, Health Effects of Domestic Sewage Odor on Songthevada Canal, Bangkhunsri, Bangkok Noi District, Bangkok, were to study the health effect of the domestic sewage in this area and to study the environmental factors that affect the odor perception. The sites were Trokpai-Wat Bangsaotong Community and Pracharuamjai Community which were in the north and south of Songthevada canal, Soi Jarunsanitwong 23 and Soi Jarunsanitwong 25. There were the water pollution and odor nuisance in this canal that interrupt the people who lived in those areas. This study focused on the 3 dimensions of health; physical health, mental health, and social health. Data collection was conducted through the survey of 278 people which was sampling by stratified sampling. The results of this study showed that most of the participants were female (64%) with 49 years old on average. There were 115 participants (41.4%) smelled odor nuisance from canal while living in their houses. There were 43 participants (15.5%) affected from odor nuisance, most of them were female (83.7%) who did not live next to Songthevada canal, the period of time that smell the odor was at dawn (14.0%) every day (46.5%). The character of odor were rotten egg-liked (20.9%), the symptoms were headache/dizziness, respiratory irritation and burning nose (65.1% and 58.1% respectively), the effects of these symptoms were not bothersome and harmful to the everyday life (48.8% and 72.1% respectively). However, the people were satisfied by their life and surrounding. The solutions for the water pollution are getting rid of the sediment and setting up the water reclamation system. The statistics analysis between the other factors and health effect by Chi-square shown that sex and the period of time that smelling of the odor from Songthevada canal related to health effect significantly ($p\text{-value}<0.05$).

Student's signature

Thesis Advisor's signature