Pattaraporn Keadsiri 2011: Effects of Ventilation on Indoor Hydrogen Sulfide Concentration Living Area Nearby Songtevada Canal, Bangkunsri, Bangkok Noi District, Bangkok. Master of Science (Environmental Science), Major Field: Environmental Science, College of Environment. Thesis Advisor: Assistant Professor Surat Bualert, Ph.D. 167 pages.

Study of ventilation rates and hydrogen sulfide concentration in the living area nearby Songtetevada canal, Charan Sanit sWong 23, Bangkoknoi District, Bangkok.They had a problem with the smell of rotten water. The accumulation of sediment in the canal had been generated hydrogen sulfide. These gas was considered as an air pollution. It interferes to the people who lived nearby the canal. Effects of ventilation on the concentration of hydrogen gas inside the building. The air samples were collected from the living area 37 collection points. Found that the ventilation in the living area, wood structures were more likely than concrete structure. The concentration of hydrogen sulfide in living area, concrete structures are more likely than wood structures. The ventilation of the 1<sup>st</sup> floor were more likely than the 2<sup>nd</sup> floor. The concentration of hydrogen sulfide on the 1<sup>st</sup> floor were more likely than the 2<sup>nd</sup> floor. The concentration of hydrogen sulfide in living area of pollutant.

Thesis Advisor's signature