

Sunida Thongtho 2008: Adsorption of Sulfide Ion in Wastewater by Sludge in the Lagoon Treatment System from Suphanburi and Phetchaburi Municipal. Master of Science (Environmental Science), Major Field: Environmental Science, College of Environment. Thesis Advisor: Associate Professor Nipon Tungkananuruk, Ph.D. 106 pages.

The remained sulfide ion after its adsorptive extraction from Suphanburi and Phetchaburi Municipality treatment plants sludges powder can be determined by measurement with a Silver Sulfide Ion-Selective Combination Electrode. The effects of pH, shaking time or digestion time, contact time, concentration of sulfide ion and amount of adsorbent are reported. In addition, the adsorption process of Suphanburi and Phetchaburi sludges powder are conformed with Langmuir and Freundlich behavior respectively. The system has been applied to the determination of Sulfide Ion in wastewater from Phetchaburi sewage system.

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