

Thesis Title A Feasibility Study of Lignite Ash Removal of
Lead in Water

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ABSTRACT

Industrial wastewater from some factories result in lead contamination in natural water resources. This might be due to the discharge of lead contaminated wastewater without any treatment, or the discharge of treated effluent containing lead levels over the standard set by the Department of Industrial works. This is because of the purpose of the owner or lack of appropriate technology.

In this study, the investigation is about the feasibility of using Lignite Ash, from the Mae Moh Electrical Power Plant, Lampang province, in the removal of synthetic solution of lead from water at the concentration of 20 mg/l. Some factors associated with the decrease of lead levels in the water that were studied include:

- 1) the comparison of the relative efficiency of lead removal using various ratios of Lignite Ash in the solution by weight (1:1,000, 1:500, 1:250, 1:125, 1:62.50 and 1:31.25);
- 2) the comparison of the