

Thesis Title The Study of Cassava Starch as Coagulation
Aid with Aluminum Sulfate in Turbidity Removal
Name Supeera Laddachayaporn
Degree Master of Science in Public Health (Environmental
Health)
Thesis Supervisory Comitty
Chaovayut Phornpimolthape, B.Eng., M.Eng.(San),
M.S.IE.
Krisana Teankaprasith, B.Sc., M.S.(Env.H.)
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ABSTRACT

Cassava starch as coagulation aid with aluminum sulfate in turbidity removal of surface-water at Sam-Saen treatment plant by was studied. The turbidity of raw water was 51.53 - 68.57 NTU. The alum was trial at various concentration; 30 mg/l, 25 mg/l, 20 mg/l and 15 mg/l. The concentration of cassava starch as coagulation aid at each concentration of alum is 0, 1, 2, 3, 4, 5, 6, 7 and 8 mg/l. The duration time at each treatment is 10, 20 and 30 minutes. The results showed that cassava starch, alum and settling time had an effect on turbidity removal (P -value < 0.001) and the concentration of 1-2 mg/l of starch with 30 mg/l of alum or 2 mg/l of starch with 25 mg/l of alum were the optimum doses for turbidity removal which were more efficiency than using alum as coagulant alone.