SKRIPSI

JEMIKAN

PENGARUH PENAMBAHAN LIMBAH INDUSTRI *PRECIPITATED CALCIUM CARBONAT* (PCC) TERHADAP KESADAHAN TOTAL PADA PROSES PENJERNIHAN AIR

FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
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S K R I P S I

Dibuat untuk memenuhi syarat mencapai gelar

Sarjana Sains pada Fakultas Farmasi

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SUMMARY

It has examination of influence addition PCC waste industry with water total hardness of the process water purification. We compare of the total hardness and turbidity of water before and after addition with PCC waste industry. This examination also concludes optimal waste concentration for gets water with lowest total hardness and turbidity.

As an examination model used turbid river's water based on visual inspection. First, 3 kinds of sample is selected based on before total hardness, that is : low, medium and high before total hardness. But at this examination only two kinds of sample that used. Those are medium and high before total hardness. After sample selection, it has preface treatment. It has by balancing PCC waste industry with appointed number. Then water is added until appointed concentration (concentration 10, 20, 30 %). After that it has stirred as long as 15 minutes and then be precipitated approximately 1 hour. Total hardness and turbidity of water is measured. From the preface treatment it is gotten that the optimal concentration of PCC waste industry for lowest water total hardness and turbidity is 10 % concentration. After that, sample is been treatment by PCC waste industry 10 % concentration. Take waste and mix it with sample. Then it is entered into model instrument. The treatment result is being taken over at interval (1, 2, 3, 4 hours, etc.). Then, total hardness and turbidity of water is measured.

It is used "paired t test", that is have by compared total hardness and turbidity of water before and after treatment. For turbid river's water samples is gotten that addition of PCC waste industry makes water total hardness increase (± 10 times for medium and 3 times for high water total hardness). But for turbidity, it is decreased depend on the time of precipitation.