



ENVIRONMENTAL SUSTAINABILITY *Report* 2022



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Design and Visual Development by Ts Madeleine Elna Perreau

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Portable Water Treatment Plant Project

Construction of a conventional water treatment plant is costly and requires high maintenance; therefore, developing a portable and simple treated and water treatment for the community is crucial. The project aims to produce and provide an alternative portable treated water pond treatment plant, where the quality is as good as the conventional method. The project was led by Associate Professor Dr. Juferi Idris from the Chemical Engineering Department in UiTM Cawangan Sarawak. The pilot plant was built at a pond in

UiTM Cawangan Sarawak, Samarahan campus. The treatment plant consists of a coagulation tank, mixing chamber, two clarifier tanks, aeration tank, sand filter, activated carbon and chlorination treatment and this ran for 24 hours continuously. The three main parameters were monitored for 7 days, measuring the water pH, turbidity, and Chemical Oxygen Demand (COD). The pilot plant was successfully carried out with less cost involved, easy to assemble and dismantle, making it a portable simple water treatment.



Figure 5.10 Water Treatment Pilot Plant At The Pond In Samarahan Campus



Figure 5.11 Water Quality Test In Laboratory

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