

Project 20/2004 – Water Conservation through Enhanced Biological Wastewater Treatment and UV Disinfection

Purpose

This paper seeks Members' advice in funding the captioned application for ECF made by the University of Hong Kong.

Background

2. The funding requested by this project is \$149,500.00 for the staff cost of employing one Research Assistant (\$62,000.00); the expenses for doing water analysis (\$19,000.00); equipment (\$18,750.00); installation (\$25,000.00); aquatic plants and deliverables (\$5,250.00) and overhead administrative costs (\$19,500.00). The project is expected to last for 9 months.
3. This project explores the biological treatment of sewage to meet the standards and criteria for irrigation purposes. The study uses the existing waste treatment process at the Swire Institute of Marine Science (biological filtration plus chlorination) and compares its effectiveness with an enhanced biological treatment using aquatic plants and UV disinfection. A comparison of the process costs will be made.
4. The proposal was examined by EPD and Drainage Services Department (DSD). EPD considered the project has some practical values and worthy of support. DSD opined that it would be interesting and worthwhile to conduct the trial to evaluate the effectiveness of the mentioned plants for enhanced biological treatment. If the proposed treatment technology is successful, it should have practical application for the small capacity sewage treatment plants at remote locations. To enable the project to be more fruitful, the Secretariat has also suggested the PI to make reference to the recent "Guidelines for Water Reuse" published by the USEPA.
5. In respect of the budget breakdown for the proposal, the "Guide to Application for ECF/WWGF" stipulated that funding for general administrative costs incurred by the recipient organization in undertaking the project will not normally be given.

Advice sought

6. Members are invited to advise whether the application for ECF should be supported as detailed in paragraphs 2 to 3 above and if supported, the exact amount of fund to be approved.

Secretariat, ECF Research Projects Vetting Subcommittee
January 2005