



TECHNOLOGY ENTERPRENEURSHIP (ENT600): CASE STUDY

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PROJECT TITLE: ORANGE PEEL POWDER ADSORBENT

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EXECUTIVE SUMMARY

Techkem Water Sdn Bhd is a company based in Malaysia that provide the waste water solution to the society by dedicated a treatment of waste water as part of their service. Considering that all of their service is in aspect of waste water treatment, the company analysis will be focusing on the company service and how the reputation, credibility and productivity of the company affected the service in the term of good or bad. When conducted the SWOT analysis, two problems are detected from the company service that is the coagulant that were used in waste water treatment was not fully green chemistry and usually the waste water treatment plant was prone to produced water pollution from their effluent discharge. Because of this, an orange peel powder product was offered as solution because it has great adsorption capacity to adsorb what coagulant could adsorb in waste water treatment. Not only that, the usage of orange peel powder considered green chemistry as the materials is from biomass waste and reduce the possibility of water pollution due to the less dosage of coagulant used in the process.

2.3 Product/ Services

Table 2.1 Product / Service Provided by Techkem Water Sdn Bhd

Type of product/service	Classification of product/services	Description
Potable water treatment	 Next Generation Ultrafiltration G-Techfier & G- Techfilter SMART System Carocell:Solar Distillation Panel ModularWater Treatment 	TECHKEM specializes in providing new and innovative water treatment solution with a "state-of-the-art" dynamic technical approach. We design treatment system with full compliance to client needs and also cost-effective. This comprehensive approach optimizes the achievement of treatment end results, while minimizing water, chemical and energy usage.
2.Waste water treatment	Package Wastewater Treatment Plant	Techkem provides on-site wastewater treatment management, operation and maintenance services. With expertise in all fields of water treatment application, Techkem offers solutions to meet the requirement of local communities and industries by providing design, supply, build operation and maintenance for municipal and industrial water and wastewater treatment system.
3. Chemicals	 Natural Organic Coagulant (NOC) I-PAC Hyperfloc (Flocculation Aid) Boiler Water Treatment Program 	TECHKEM has a complete range of water chemical products for boiler system, cooling tower system, wastewater treatment system and potable water system as well as chemical feed and control equipment.