

HIGHER TECHNICAL INSTITUTE	PROJECT NO
	3829

DESIGN OF A WATER TREATMENT SYSTEM FOR
DOMESTIC USE

BY

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SUMMARY

The design of a water treatment system for domestic use is a section of mechanical engineering, nowadays with all these technological improvements and inventions the treatment of domestic waste water has upgraded to a point that satisfies all the proposed standards for human health and environmental protection.

INTRODUCTION

ABOUT THE PROJECT

The objective of the project is to study the usage of grey water and carry out a survey of existing grey water treatment plants.

Countries with shortage of water are continuously investing on research for new sources of water.

Grey water is the waste water from showers, baths, spas, hand wash basins and washing machines. Waste water from toilets or bidets, kitchen sinks and dishwashers is not considered as grey water. Grey water is approximately 55% of the total waste of each household. This waste, if treated properly and reused can save a large quantities of water each day.

Grey water can be used for irrigating gardens, trees or lawns and if treated further, can be recycled to toilets, used for cleaning and washing cars and pavements.

As the population is increasing and the water sources are decreasing the water quantity and quality becomes a serious problem. Today it is estimated that Worldwide, polluted water affects the health of 1.2 billion people and contributes to the death of 1.5 million children under five years old every year. Nearly one in five people or 1.1 billion men, women and children have no access to fresh water, according to the U.N

Therefore to save as much water as possible is not a luxury but a necessity for human life. Many companies are investing billions in research for developing new technologies, new processes such as collecting rainwater and use it for irrigation, biological waste treatment for sewage, and grey water treatment for recirculation usage.