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EURBLARP SRIPHIROMYA: WASTEWATER MANAGEMENT OF TOURIST TOWN: A CASE STUDY OF PATTAYA CITY.

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The objectives of this study are as follows: (1) to study an expansion of Pattaya city in relation to water pollution and wastewater management; (2) to assess problem analysis and factors effecting wastewater management and control of water pollution; and (3) to suggest an approach to wastewater management through city planning and study of relationship among relevant factors. The analysis of study is based on data obtained from primary sources such as field survey and questionnaires responded by residents of Na Klua, Pattaya and Jomtien communities; the results of which were arranged through samplings of 293 samples.

The results of the study show that an expansion of tourism has resulted in an increase in water consumption and activities causing water pollution. Wastewater generated from tourists is of particular concern due to its high ratio to the total wastewater in the city. In the future, the ratio of wastewater generated by tourists tends to increase. Besides, the expansion of tourist activities also affects water pollution in the areas where those activities are concentrated especially along the beaches. Hotel business is considered the main tourist activity causing water pollution in the area since it releases the highest percentage of wastewater incurred from the buildings compared to population (1,061 litres per room per day) and the highest BOD dirtiness (123 grammes per room per day). In addition, the growth of tourists who generate wastewater 3 times as much of normal population is also a major cause of wastewater problem in the areas. According to the estimation of future water users, Pattaya tends to face with wastewater cause by tourism. The results has shown that the wastewater problem has affected tourism economy most. Other areas which are severely affected by wastewater problems are natural environment and sanitation of communities relying on water source.

The study of wastewater management of Pattaya City has indicated that the existing wastewater management system can absorbed only 33,000 cm. per day which is equal to 58% of the total wastewater occurred. The wastewater management of the areas along Pattaya beach, which are highly tourist concentration has the capacity to take in only 13,000 cm. per day. As for Na Klua which is heavily populated, there is a lack of central wastewater management system. Therefore, the quality of water in the said area is the poorest. The public opinion in those communities as shown in a survey has called for a regular check and standard control of existing wastewater management system and has also requested an increase in the wastewater management system to adequately serve the communities. Moreover, there is a need to tackle the problems of red tape, lacking of monitoring mechanism and inadequate law enforcement. The discrimination in law enforcement has resulted in the dumping of wastewater to public sources without going through any wastewater management or appropriate management procedure. The scarcity of personnel and financial resources of the city, and incongruity between environmental standard, with an emphasis given to the control of wastewater, and city planning, with an emphasis on the promotion of the growth of the city, and the lack of public conscious in preserving water resource have impeded the goal of wastewater management. In summary, wastewater management of Pattaya city needs to be improved, the efficiency of the local administrative authorities needs to be strengthened and the current laws and regulations need to adjust in compatible with future city development planning.

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