

Modest Filter Socialization for Wastewater Discharge Resulted From Laundry Activity in Palangka Raya

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ABSTRACT

The increase of laundry service for clothes in Palangka Raya will affect the amount of waste generated from the service. The waste is discharged directly without undergoing the necessary process. Therefore, it has the potential to cause environmental pollution, in particular, water. The community service program aims at socializing the filtering of laundry wastewater to the laundry services. The filtering process is by absorption and filtration methods of the surfactant in the waste not to exceed the standard. The community service program's outcome target is to socialize the filter of laundry waste towards the laundry service owners at Palangka Raya city. The research finding proves that there has not been any filtering system to minimize environmental pollution, mostly water, due to the detergent material. Laundry services usually use detergent for the washing to consider its cleaning characteristics that are more effective than ordinary washing soap. The detergent's main content is an ionic compound tripolyphosphate functioning as a builder and surfactant. The socialization towards laundry services is by directing them to not discharge the wastewater directly into drainage; therefore, the wastewater can settle and deposited.

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1. Introduction

The increase of laundry service in Palangka Raya increased wastewater due to the washing activity. The waste usually is discharged directly to the environment without undergoing a further process. This situation has the potential to cause environmental pollution, especially water pollution.

Laundry wastewater contains surfactant as the primary raw material of detergent used in the washing process. Laundry service usually uses detergent for its activity because it contains more effective cleaning ability than general washing soap. Detergent contains ionic natrium tripolyphosphate as the primary substance functioning as a builder and surfactant.

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2. Methods

The increasing amount of laundry wastewater in Palangka Raya becomes the basis of the service program to provide direct guidance as a laundry service partner to conduct wastewater filtering using absorption and filtration on the surfactant content aiming for not exceeding the standard. The attempt is to ensure the laundry wastewater is not discharged directly to the water body or drainage, resulting in environmental pollution.

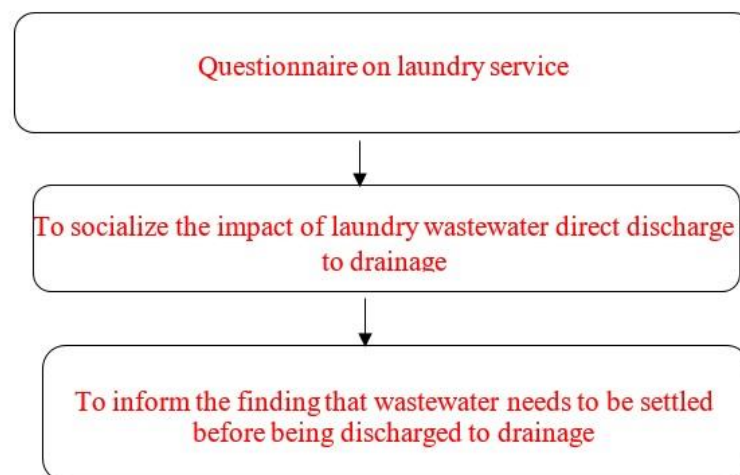


Fig. 1. Service Program Flowchart

The community service is provided for laundry service providers in Palangka Raya. The program invited thirty laundry services in Palangka Raya city to receive laundry wastewater filtering socialization before the discharge.





Fig. 2. Questionnaire distribution to laundry services in Palangka Raya

3. Results and Discussion

The research found a lack of knowledge from the laundry service owners on the side effect of excessive use of detergent. They did not fully understand the impact of direct discharge of laundry wastewater to the river, where the river is significantly on demand for clean and drinking water.

There is a need to proceed a further study to find the proper filter method and tools to minimize the detergent wastewater resulting from laundry services in all Palangka Raya; therefore, the program is suggested to propose and socialize the planning the local people and laundry services.

4. Conclusion

The research finding proves that there has not been any filtering system to minimize environmental pollution, mostly water, due to the detergent material. Laundry services usually use detergent for the washing to consider its cleaning characteristics that are more effective than ordinary washing soap. The detergent's main content is an ionic compound tripolyphosphate functioning as a builder and surfactant. The socialization towards laundry services is by directing them to not discharge the wastewater directly into drainage; therefore, the wastewater can settle and deposited.

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