

ANALYSIS OF SOLID WASTE MANAGEMENT OF SUGAR INDUSTRY (Studies at The Sugar Industry X In East Java)

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Abstract

Sugar industry activities produce large quantities of organic solid waste and by-products (e.g. leaves from cane, molasses from the final crystallization, bagasse fiber from the cane, and filter cake), fly ash, and bottom ash. Solid waste has potential to pollute the environment and negative impact to public health. The study aim to analyze management of solid waste from sugar industry. This research design was descriptive observation approach. Filter cake is usually used by nearby farmers as organic fertilizer although in some cases its application as organic fertilizer is preceded by biocomposting. Bagasse is used as fuel for boilers. It is estimated that 70% of the power requirements of sugar mills is fulfilled in this way. Bagasse is also used for chip-board and paper manufacture.

Keywords : *management, solid waste, sugar industry.*

Introduction

Sugar industry have an important role in supporting the development and economic growth. The main product of sugar industry are sugar and molasses by-product that is the material to produce alcohol, spirits, and food flavoring. However, the activity of a sugar industry also produces gas, solid, and liquid waste that may have an impact on the environment and public health. Solid waste generated by the Sugar Industry X has a fairly large volume every day. Solid waste generated by the Sugar Industry X are sugar bagasse, filter cake, litter, boiler ash, and sludge. Problems encountered due to the generation of solid waste of Sugar Industry X is the accumulating volume of solid waste if not managed properly. Solid waste associated with the safety, health and environmental protection. Solid waste greatly influence the ecology of surface water, air, and farmland. Lack of policy and implementation of solid waste management system causing a variety of negative impacts on human health and long-term pollution of surface water, air and parasitic and bacterial infections. Solid waste is a substrate and media for the growth of the sources of human diseases derived from flies, rats and other germs [1].

Waste management is the responsibility of the Sugar Industry X so as not to cause negative impacts on the environment and public health. Solid waste management of Sugar

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