AN ASSESSMENT OF THE WASTE MINIMIZATION PROGRAM OF SUGAR CENTRALS IN SAGAY CITY, NEGROS OCCIDENTAL: PROPOSED WASTE GENERATION REDUCTION SYSTEM

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INTRODUCTION

The products of goods and services generate wastes, which create environmental problems and limit our ability to develop in a sustainable way. They mean losses of valuable materials, some which cannot recover. If the trend for generating waste will continue in the sugar central the development of the city will seriously curtailed.

The traditional solution to waste is to adopt so called “end of the pipe” solution which consume materials and often require costly anti-pollution equipment. In recent years the need to introduce waste reducing, minimizing, or preventive measures has been apparent. Companies that have adopted them have gained significant benefits, including improved profitability. Thus assessments to reduce waste and to evaluate

other aspects of company’s environmental performance have now become part of a company’s evaluation and control system. Improvements identified in such assessment, which can make an organization environmentally sound, have gained incrasing appreciation in the business community.

STATEMENT OF THE PROBLEM

The purpose of this study is to evaluate the waste management system in the review of reducing waste.

Specifically, this study is to answer the following sub-question.

1. What technologies and techniques have the sugar centrals developed and adopted to control waste production?

2. Based on the Department of Environment and Natural Resources (DENR) recommendation, how have these technologies and techniques:

2.1. minimized waste generation;

2.2. spearheaded recycling waste;

2.3. treated waste to render it non-hazardous; and

2.4.initiated landfilling inert waste and residues?

3. What are the causes of failure of the waste minimization and the pollution control management program of the sugar centrals?

4. What waste reduction system can be proposed for these sugar centrals?

METHODOLOGY

The study made use of descriptive survey method of research with the questionnaires as the principal tools of gathering the data. However, for clarification purposes an interviews serve as follow up technique.

FINDINGS

Of the ten technologies the use of bagasse and cane trash as a boiler fuels and giving mud cake or filter cake to the farmers who use it as a soil conditioner are the most applicable and practical ways to control solid waste production.

In liquid waste, the most common technology and technique practiced is to screen the scrubber water to collect wet ash.

Repair of steam leaks to reduce steam emmission is the most preferable technology and techniques adopted to control gaseous waste.

As the result of the tabulation gathered from the respondents in waste minimization activities, the researcher finds out that the average weighted points is 1.30 with descriptive equivalents as “to certain extent “.

By this figure appraised by the respondents, it is good enough so that the DENR will give them the permit to continue their operations. In short they pass the requirements set by the DENR and no hazards will threaten the people’s health.

The reason why there is a failure in the program are “resistance to change by the management”, insistence on utilizing out model facility and equipment, too much expenses entails the process, luke warm attitude of the management to changes,and they have not seen the ill effects of environmental degradation.

Proposed Waste Generation Reduction System

Technology/Practice	Proposed Mitigating Measures
1. Use baggase and cane trash as a bolier fuel	1, Utilization of bagasse and cane trash as material for cement-bounded board

2. Use baggase to clean-up spills	2. Recover spill by bringing it back to operation
3. Mix spent oil with baggase and use it as boiler fuel	3. Filtered spent oil and lubricant for future purposes

4. Reduce wash water consumption by using grip controlled nozzles on cleaning hoses	4. Reduce wash water consumption by eliminating the use of pressurized hoses and replace it by ordinary hoses
5. Repair steams leaks to reduce steam emissions	5. Replace old pipes with new pipes to minimize maintenance and reduce steam emmission

CONCLUSION

Based on the data gathered, analyzed and tabulated plus the reality that the researcher is a native of Sagay City where the topic of his studies is found, he believes that the waste production of the two sugar centrals are properly and carefully managed in accordance to the DENR guidelines.

As observed by the researcher the sugar centrals have been using the conventional method which are very applicable and less expensive but it serves the purpose. But inspite of that, these sugar centrals must have to improve their waste generation reduction system for better result, especially with these rapid growth of population everywhere.

RECOMMENDATION

The researcher recommends the following to the management of the sugar centrals:

1. Hire only personnel who have technical expertise on this matter and committed to their duties

2. Give ample support needed by the staff doing the research on environment preservation

3. Implement waste minimization techniques properly to achieve the most efficient techniques of controlling waste

4. Have a round the clock check-up of their personnel on duties

5. Expose their technicians on seminars and workshop given by the DENR

THANK YOU