Chapter 7 CONCLUSION AND SUGGESTION

7.1 Conclusion:

A. Through the evaluation of the production process which includes chemical substances and raw materials, the study calculates the wastewater disposal in 2018 were 455.764.180 liters. The total waste could be appropriately accommodated as the capacity of three (3) ponds is 587.810.000 liters/year. The factory has been mixing wastewater with freshwater channels using a suction generator for such a long time, resulting in the degradation of quality water as seen through its physiochemical features.

B. From the physiochemical analysis, the wastewater has problems upon water quality, turbidity, TSS, TDS, color, concentrated odor, and most of the samples are below the standard guidelines recommended by SSMO. Chemically, most of the parameters do meet SSMO standards, except pH, BOD, COD, and PO4. For this reason, the study area has only three types of water index are; MWQ , FWQ and PWQ.

C. The IDW interpolation of spatial analysis succeeded in identifying the density and distribution of hazard without recorded data by using known parameter at nearby stations.

D. Water in the study area is indicated to be hazardous to human health. Several diseases such as diarrhea, stones, kidney failure, bilharzia, allergies, inflammation of malaria, and urine are quickly spread. Due to economic constraints, residents find it difficult to treat water in the right way.

7.2 Suggestions

Some recommendations that can recover wastewater management problems in the concerned study area are as follows:

A. Promoting biological treatment in three ponds exclusively. The first pond must be treated ideally, later drain the water into the second and third ponds using an aerobic engine to supply oxygen and reduce pollutants. The factory should use treated wastewater for further projects. In light of the above, the factory promotes the sustainability principle by using the output as a further production input, and the study suggests that its better if the factory implement the optimal system of wastewater management as in Sragi sugarcane which includes equalization, neutralization, sedimentation, an anaerobic and aerobic treatment which using in the process of the evaporator the condensation

B. Affirming the environmental water policy and management around the river by the government. Factories must proceed to support transformation such as Green Environment and Green Economy; and must also be familiar with the sustainability concept towards the social, economic, and ecological sectors.

C. Government authorities must find concrete solutions for the community in the affected area. The factory must have social responsibility by providing clean water, closing the waste canal, and promoting the concept of sustainability. Communities who live in danger zones should be relocated to a safe shelter.

D. The factory should perform the principle of humanity in health assistance by providing medications, hospital services, and be responsible for hosting clean water management facilities.