Study of Contamination Liquid Waste Textile and Snacks Industry to Groundwater Quality at Gedangan village, Grogol Sub-District, Sukoharjo District, Java Center Province.

ABSTRACT Singgih Adi Widya 114.110.053

Over than 500 families who lives in three vilages at Grogol District became victims of liquid waste pollution from printing and snacks company, PT Sandang Arti Guno. Therefore, most of people can't take advantage well water anymore because, that water so smelly and if touch the skin is feel gleasy.Purpose of this (1) Determine the direction of groundwater flow and distribution of groundwater pollution due to waste disposal textiles and snacks at the sites. (2) Determine the content of contaminants in groundwater as a result of waste disposal Groundwater research location in terms of the parameters color, odor, pH, TSS, BOD, COD, phenol, ammonia (NH3), Oils and Fats using contamination index (IP)

For the metode reseach use survey, mapping, There are used for know physical parameter like: (1) groundwater levels, (2) absorption groundwater, (3) gorundwater textures and rocks units. Analysist of laboratory Metode test i did to tell about Ammoniac, pH, BOD, COD, Phenol, Oil, Greaseand TTS on groundwater and industrial waste water sample. From the test, the result will used as comparation based on goverment rule of Indonesia No. 82/2001 and region rule of Central Java No. 5/2012 about quality of industrial waste water. Contamination index metode is used to determine the level of contamination in the study area.

On the For pollutant waste is spread from activity industry of textile and snacks known dispersion follow of groundwater flow from west to east and intent to Bengawan Solo river. Based on this result research in laboratory by 7 parameters: pH, TSS, BOD, COD, phenol, ammonia (NH3), Oils and Fats, parameter liquid waste from textiles and snacks is very take effect of quality groundwater which is Ammoniac, BOD, COD with ammonia values ranging from 3.754 to 3.826 mg / l, BOD values ranged from 37.3 to 45.5 mg / l and COD values ranged from 59.41 to 87.1 mg / l. Based on the calculation of pollution index research areas are being polluted.

Key word : groundwater quality, contamination index, waste industri cause textiles and snacks.