The Design and Implementation of Software Testing Water Quality

Toban Tiku Pairunan¹, Sulastri Eksan², Yohanis S. Rompon³, Ottopianus Mellolo⁴

^{1,2,3,4} Electrical Engineering, Manado State Polytechnic, INDONESIA

One of the important human needs is the need for clean water. Clean water is very important because we need it every day for drinking, cooking, bathing, washing and so on. With clean water would make us avoid the disease. Drinking water must be managed using any public health standard that is used to avoid the disease. Water wells in meeting the needs of society should pay attention to the health standard set by the government. The third standard commonly used is standard parameter Physics, chemistry and microbiology. Measurement of quality parameters of drinking water is one of the key criteria for the business management of drinking water pelore use by the public. Aims to design and build a software quality testing well water and water quality refillable packaging. Testing of the software is built using data parameter measurement results of physics, chemistry and microbiology and location data sampling area. The software is already built, and then tested using the parameter data of physics, chemistry, and microbiology of water wells and water refill depot that has been filtered through drinking water depot. Information system application can be show at the below diagram:



Figure. Information system of application software

Testing of the samples showed results of application software can be used as tools to process data testing water quality and drinking water refill. The software can provide reports on the results of water quality testing of wells and water wells refill by region and location of water treatment. The software can compare the parameters that do not meet quality standards or meet quality standards in accordance

with the provisions of the standard according to Permenkes RI.No492 / Menkes / PER / IV / 2010, Permenkes RI.No416 / Menkes / Per / IX / 1990. and KLH Decree 115 of 2003.

REFERENCES

- [1] Deputi MENLH Bidang Pembinaan Sarana Teknis dan Peningkatan Kapasitas,2009" *Indeks Kualitas Lingkungan Hidup*" Kementrian Lingkungan Hidup (KLH).
- [2] Ramakrishnan R dan G Johannes, 2003, Database Management System, Third Edition, Mc graw hill.
- [3] Sommerville IAN, 2003, Software Engineering (Rekayasa Perangkat Lunak) edisi 6 jilid 1 Penerbit erlangga.
- [4] Pressman Roger S ,1997 *Rekayasa Perangkat Lunak Pendekatan Praktisi (buku satu)* Mc Graw Hill Book Co. diterjemahkan oleh Penerbit Andi Offset.
- [5] Jamaluddin Alba ,2012 Analisa desain system informasi, Graha Ilmu
- [6] Kadir A, 2013, From zero to a pro Delphi, Andi offset.