ABSTRACT

Population density in Bandung has significantly increased the amount of waste, both households waste and industrial waste. So that PDAM (Drinking Water Regional Company) as regarding institution has come to a decision to run such control technique of waste planning and processing. The author would determine the exact location of IPAL (Waste Processing Facility) in the first place which would occupy the whole amount of waste across Bandung. The causal factor from this reality is due to the ineffectiveness of PSR (Residential Connection Installation) planning process and the location determination of new IPAL within existing waste processing system.

GIS (Geographic Information System) is used to determine new location of IPAL, it is a computer-based system which was designed to gather, save, and analyze objects and phenomenon where geographical sites become crucial to critize and analyze. In this case we combine data both spatial and non-spatial in order to get analyzed using database processing system. These data may be maps or charts, so that those data which inputted into GIS would be easier to be manipulated and analyzed. Big size of data volume will be very insufficient if we handle it manually. Besides, it costs much and wastes more time in manually.

We begin the process of determining new location of IPAL with analyzing needs which consists of existing system, information needs, input and output side, users, and hardware and software specifications. The next step we do designing which including information flow design and database. In the last stage we analyze the implementation of regarding application to figure out what the weaknesses are and then make the improvements. In this application we use MapInfo Professional 7.5 and Visual Basic Programming Language 6.0 softwares.

We may take advantage in this application such as tools in determining new location of IPAL in order to handle waste from Bandung area better. So it makes PDAM become easier in planning and taking decision to build IPAL itself and new tunnel of waste.

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