

ABSTRAK

PT. Sriwijaya Mandiri Sumsel (SRIMAS) merupakan perusahaan yang bergerak di bidang pengelolaan limbah B3 medis. Dalam proses operasionalnya, pengelolaan data limbah masih menggunakan Microsoft Excel dan penyampaian informasi melalui WhatsApp sehingga proses pengelolaan data, pencarian data, dan penyusunan laporan belum berjalan secara optimal. Penelitian ini bertujuan untuk merancang dan membangun aplikasi pelaporan dan pengelolaan data limbah B3 medis berbasis website yang dapat membantu proses pengelolaan data serta menghasilkan laporan limbah B3 medis secara lebih cepat, terstruktur, dan mudah diakses. Metode pengembangan sistem yang digunakan adalah System Development Life Cycle (SDLC) dengan model Waterfall yang terdiri atas tahapan *requirement analysis*, *system design*, *implementation*, *testing*, dan *maintenance*. Aplikasi dikembangkan menggunakan framework Laravel dan database MySQL. Pengujian sistem dilakukan menggunakan metode *Black Box Testing* untuk memastikan setiap fungsi berjalan sesuai dengan kebutuhan pengguna. Hasil penelitian menunjukkan bahwa aplikasi yang dibangun mampu membantu pengelolaan data fasilitas pelayanan kesehatan, data limbah masuk, data hasil insinerasi, serta menghasilkan rekapitulasi dan laporan limbah B3 medis secara lebih cepat, terstruktur, dan mudah diakses. Dengan adanya aplikasi ini, proses pelaporan dan pengelolaan data limbah B3 medis di PT. Sriwijaya Mandiri Sumsel menjadi lebih efektif, terstruktur, dan mudah diakses.

Kata Kunci: Limbah B3 Medis, Pelaporan, Pengelolaan Data, Website, Laravel, Waterfall.

ABSTRACT

PT. Sriwijaya Mandiri Sumsel (SRIMAS) is a company engaged in the management of hazardous medical waste. In its operations, the company still relies on Microsoft Excel for waste data management and uses WhatsApp to share information; as a result, data management, data retrieval, and report generation are not yet functioning optimally. This study aims to design and develop a web-based medical hazardous waste data management and reporting application that can assist in the data management process and generate medical hazardous waste reports more quickly, in a structured manner, and with greater accessibility. The system development method used is the System Development Life Cycle (SDLC) with the Waterfall model, which consists of the stages of requirement analysis, system design, implementation, testing, and maintenance. The application was developed using the Laravel framework and a MySQL database. System testing was conducted using the Black Box Testing method to ensure that every function operates in accordance with user requirements. The research results show that the developed application is capable of assisting in the management of healthcare facility data, incoming waste data, and incineration results, as well as generating summaries and reports on medical hazardous waste more quickly, in a structured manner, and with greater accessibility. With this application, the process of reporting and managing medical hazardous waste data at PT. Sriwijaya Mandiri Sumsel has become more effective, structured, and accessible.

Keywords: Hazardous Medical Waste, Reporting, Data Management, Website, Laravel, Waterfall.