

## INTISARI

Instalasi Pengolahan Air Limbah (IPAL) Komunal merupakan suatu solusi yang digunakan dalam pengelolaan serta pengolahan limbah domestik. Kapanewon Mlati Kabupaten Sleman merupakan wilayah yang memiliki 8 unit IPAL Komunal aktif yang tersebar di 4 (empat) desa yaitu Desa Sumberadi, Sinduadi, Sendangadi dan Tirtoadi. Pengelolaan oleh masyarakat setempat hingga jenis teknologi yang digunakan pada setiap wilayah tentu memiliki perbedaan. Pengelolaan ini kemudian menjadi tolok ukur efektivitas perkembangan salah satu dimensi *smart city* yaitu, *smart environment* di Kabupaten Sleman, sehingga dilakukan analisis evaluasi pengelolaan IPAL Komunal dalam turut mewujudkan *smart environment* di Kabupaten Sleman.

Penelitian ini dilakukan dengan menggunakan metode penelitian kualitatif, dengan pengolahan serta penyajian data dilakukan secara deskriptif. Data sekunder diperoleh dari dokumen perencanaan, data statistik (BPS), data spasial (ina geoportal), dan dokumen pendukung dari Dinas Lingkungan Hidup dan Badan Perencanaan Pembangunan Daerah Kabupaten Sleman. Data primer diperoleh melalui wawancara mendalam dan observasi lapangan pada Kantor Dinas Lingkungan Hidup Kabupaten Sleman, pengelola IPAL-IPAL terkait, dan lokasi IPAL Komunal di Kapanewon Mlati Kabupaten Sleman.

Hasil penelitian menunjukkan bahwa pengelolaan IPAL Komunal di Kapanewon Mlati sudah berjalan dengan baik dengan resiko kerusakan serta kendala yang minim. IPAL Komunal menjadi infrastruktur utama dalam pengolahan limbah domestik yang membawa perubahan signifikan bagi wilayah dan masyarakat. Adanya unit instalasi pengolahan air limbah dinilai dapat memenuhi kebutuhan masyarakat terhadap penanganan limbah, meskipun pengolahan limbah tidak dibahas secara signifikan dalam elemen pembangunan *smart city*, pengolahan limbah domestik secara terpusat di Kapanewon Mlati terbukti berperan dalam mendukung terwujudnya *smart environment* di wilayah tersebut.

Kata Kunci: Limbah domestik, IPAL Komunal, Pengelolaan, *Smart Environment*

## **ABSTRACT**

*Communal Wastewater Treatment Plant (IPAL) is a solution used in the management and treatment of domestic waste. Kapanewon Mlati Sleman Regency is an area that has 8 active Communal WWTP units spread across 4 (four) villages namely Sumberadi, Sinduadi, Sendangadi and Tirtoadi Villages. Management by the local community to the type of technology used in each region certainly has differences. This management then becomes a benchmark for the effectiveness of the development of one of the dimensions of a smart city, namely, the smart environment in Sleman Regency, thus an evaluation analysis of the management of the Communal WWTP is carried out in helping to create a smart environment in Sleman Regency.*

*This research was conducted using qualitative research methods, with data processing and presentation carried out descriptively. Secondary data was obtained from planning documents, statistical data (BPS), spatial data (ina geoportal), and supporting documents from the Environment Agency and the Sleman Regency Regional Development Planning Agency. Primary data were obtained through in-depth interviews and field observations at the Sleman Regency Environmental Service Office, related WWTP managers, and Communal WWTP locations in Kapanewon Mlati, Sleman Regency.*

*The results of the study show that the management of the Communal WWTP in Kapanewon Mlati has been going well with minimal risk of damage and obstacles. Communal WWTP is the main infrastructure in domestic waste processing which brings significant changes to the region and society. The existence of a waste water treatment installation unit is considered to be able to meet the community's needs for waste handling, although waste treatment is not discussed significantly in the elements of smart city development, centralized domestic waste management in Kapanewon Mlati has proven to play a role in supporting the realization of a smart environment in the region.*

**Keywords:** Domestic waste, Communal WWTP, Management, Smart Environment