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IOT Based Wastewater Management in Smart Cities

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Abstract: *The process of extracting and refining contaminants from drainage or wastewater so they can be recycled back into the water supply with the least amount of negative environmental impact is known as wastewater management. The current declining environmental condition necessitates the development of new strategies and tactics to guarantee safe and intelligent wastewater management systems in smart cities. The Internet of Things (IoT) and wireless sensor networks are potential technologies for treating wastewater. The comprehensive literature review develops a conceptual framework utilizing blockchain technology for an Internet of Things (IoT)- based wastewater management system in smart cities (IoT-WMS). Information is now being stored using blockchain technology to create an incentive scheme that promotes the reuse of waste water. In smart cities, tokens related to the quantity and quality of recovered wastewater are distributed to homes and businesses. However, this frequently promotes manipulating the data used to award these tokens in order to incorporate particular benefits. To determine whether there is evidence of altered IoT sensor data, anomaly detector techniques are employed. In order to facilitate the most efficient distribution of water depending on user usage at the plot holding level, this study suggests a water distribution and integrated management system based on the Internet of Things (IoT) and data analytics (DA). In addition to preventing water waste, the suggested approach would assist in gathering consumption statistics for macro-level research and town planning*

Keywords: Internet of Things