SEWAGE TREATMENT PLANT PERFORMANCE EFFECTIVENESS EVALUATION IN THE GKM GREEN TOWER BUILDING

ABSTRACT

Waste water or waste water is the remaining water that is disposed of originating from households, industries, offices, and other public places. Sewage Treatment Plant (STP) is a process of reuse of wastewater, a process to remove contaminants from wastewater. This study evaluates the Sewage Treatment Plant system in the GKM Green Tower Building. The purpose of this study is to analyze the performance of the Sewage Treatment Plant (STP) in the GKM Green Tower building and to determine the effectiveness of the performance of the Sewage Treatment Plant (STP) in the GKM Green Tower building. The parameters used in this study were pH (acidity), COD, BOD, TSS, oil and grease, Total Coliform, Ammonia which complies with Domestic Wastewater Quality Standards Based on the Regulation of the Minister of Environment and Forestry of the Republic of Indonesia Number: P.68/Menlhk-Setjen/2016. Recycle water in the GKM Green Tower building is used for flushing closed, urinal, and is also used to water plants in the building. It was found that the results of clean wastewater management in the GKM Green Tower building still look cloudy and smelly. Based on the results of domestic wastewater monitoring tests at GKM Green Tower in August / prior to analysis, there were several parameters that exceeded the quality standards, namely TSS and Total Coliform. The Maintenance carried out so far on the Sewage Treatment Plant (STP) system in the GKM Green Tower Building is still not good, so this is the cause of the ineffectiveness of the wastewater that has been managed so far. The results of the second test conducted in November showed a decrease in the number among the TSS parameters, namely as many as 13, so that it became 23. In addition, the Total Coliform was 38,000, so that the Total coliform became 3,000. So that it is in accordance with the quality standards set government ministry of environment.

Keywords: Wastewater, Sewage Treatment Plant (STP), GKM Green Tower Building, Domestic wastewater quality standard

DAFTAR ISI

HALAMAN PENGESAHAN	i
HALAMAN PERNYATAAN	ii
PENGHARGAAN	iii
ABSTRAK	iv
ABSTRACT	v
DAFTAR ISI	vi
DAFTAR GAMBAR	viii
DAFTAR TABEL	X
DAFTAR SINGKATAN	xi
DAFTAR SIMBOL	xii
BAB I PENDAHULUAN	1
1.1. LATAR BELAKANG	1
1.2. RUMUSAN MASALAH	3
1.3. TUJUAN	3
1.4. MANFAAT	3
1.5. RUANG LINGKUP DAN BATASAN MASALAH	3
1.6. SISTEMATIKA PENULISAN	4
BAB II TINJAUAN PUSTAKA	5
2.1. PENELITIAN TERDAHULU	5
2.2. KAJIAN TEORI	10
2.2.1. Air Limbah	10
2.2.2. Standar Baku Mutu Limbah Domestik	23
2.2.3 Penghitungan Baku Mutu Air Limbah Domestik	29
2.2.4 Sewage Treatment Plant (STP)	29