"Pengaruh Kepadatan Permukiman Terhadap Kualitas Air Tanah Dangkal Akibat Rembesan Air Dari Tangki Septik, Ditinjau Dari Parameter Bakteri Coli" (Studi Kasus di Kecamatan Semarang Tengah)

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ABSTRACT

The increase of clean water requirement push greater exploiting of ground water as public water source. The aim of this research were to know the influence of well and septic tank distance in high density settlement toward Coli bacteria concentration in ground water well as the effect of liquid seepage from water septic tank. This research also try to find out the quality of ground water well in high density settlement as the household water source from parameter pH, turbidity, salinity and temperature.

Result of this research showed that 21 sample checked entirely have contaminated by Coli bacteria (fecal coli) in concentration exceeding maximum number which allowed in drinking water (Kepmenkes No.907 Tahun 2002) and clean water (Permenkes No.416 Tahun 1990). Statistical analysis showed that there are correlation between density level with number of MPN Coli in ground water well equal to 97,6%; and correlation between distance of septic tank and well with number of MPN Coli equal to 98,7%. From equation obtained recommended distance between ground water well and septic tank should be minimal 15 metre to avoid fecal contamination.

Keywords: Ground water; Coli Bacteria; Septic Tank.