

INTISARI

ANALISIS DISTRIBUSI AIRTANAH BEBAS TERCEMAR AIR LINDI PADA MUSIM HUJAN DI DAERAH SEKITAR TPA BANTAR GEBANG KECAMATAN BANTAR GEBANG KOTAMADYA BEKASI JAWA BARAT

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Penelitian yang berjudul : “Analisis Distribusi Airtanah Bebas Tercemar Air lindi Pada Musim hujan di Daerah Sekitar TPA Bantar Gebang Kecamatan Bantar Gebang Kotamadya Bekasi Jawa Barat” ini dilakukan di sekitar Tempat Pembuangan Akhir Bantar Gebang. Penelitian ini menitikberatkan pada persebaran unsur-unsur lindi yang masuk ke dalam sumur warga seperti unsur mayor (HCO_3^- , Cl^- , SO_4^{2-} , Ca^{2+} , Mg^+ , Na^+ , K^+) serta unsur minor (S^{2-} , NH_4^+) yang merupakan indikator adanya air lindi. Tujuan penelitian dari ini adalah. 1). Mengetahui sebaran airtanah di daerah Bantar Gebang. 2). Mengetahui konsentrasi unsur mayor (HCO_3^- , Cl^- , SO_4^{2-} , Ca^{2+} , Mg^+ , Na^+ , K^+) serta unsur minor (S^{2-} , NH_4^+) yang merupakan indikator air lindi dalam tanah, temperature, pH, serta DHI. airtanah. 3). Mengetahui pola persebaran airtanah bebas tercemar air lindi.

Metode yang digunakan dalam pengambilan sampel penelitian ini adalah metode *Purposive Sampling*, yaitu pengambilan sampel berdasarkan pertimbangan arah aliran airtanah. Pengambilan sampel dilakukan pada sumur airtanah warga, sampel air lindi TPA dan sampel airtanah kontrol yaitu airtanah yang tidak dilewati aliran airtanah.

Hasil analisis laboratorium menunjukkan bahwa semua unsur yang ada ternyata memiliki nilai di bawah Baku Mutu Air meskipun beberapa unsur hampir mencapai batas ambang nilai. Hal tersebut terjadi dikarenakan penelitian ini dilakukan pada musim hujan sehingga banyak unsur yang telah mengalami pengenceran. Namun pada musim kemarau air sumur di sana menurut warga akan berwarna kehitaman dan berbau tidak sedap, karena itu diharapkan akan ada penelitian serupa namun dilakukan pada musim kemarau agar hasilnya dapat dibandingkan dengan penelitian yang dilakukan pada saat musim hujan.

Kata Kunci : Airtanah, Sampah, Musim Hujan, Air lindi

ABSTRACT

THE ANALYSIS OF FREE GROUNDWATER DISTRIBUTION POLUTED BY LEACHATE ON THE RAINY SEASON IN THE AROUND OF BANTAR GEBANG FINAL DISPOSAL AREA BANTAR GEBANG DISTRICT BEKASI REGENCY WEST JAVA

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The research's title is "The Analysis Of Free Groundwater Distribution Poluted By Leachate On The Rainy Season In The Around Of Bantar Gebang Final Disposal Area Bantar Gebang District Bekasi Regency West Java", it were done in around of Bantar Gebang Final Disposal Area (FDA). This research based on the distribution of leachate elements which has been in to the people well, such as major elements (HCO_3^- , Cl^- , SO_4^{2-} , Ca^{2+} , Mg^+ , Na^+ , K^+) and also minor elements (S^{2-} , NH_4^+) as apart of leachate indicator. This research aim to : (1). Knowing the ground water distribution in Bantar Gebang area, (2). Knowing the major elements concentration (HCO_3^- , Cl^- , SO_4^{2-} , Ca^{2+} , Mg^+ , Na^+ , K^+) and also minor elements (S^{2-} , NH_4^+) as apart of leachate indicator on the ground, temperature, pH, ground water EC. , (3). Knowing the distribution pattern of the free ground water poluted by leachate.

The method had been used in the withdrawal of physical samples on this research is based on Purposive Sampling. It is withdrawal of physical samples which is considered of groundwater's flow direction. The samples withdrawal had been taken from people's well, the FDA leachate samples, and the samples of groundwater's control is a groundwater which is not passed by groundwater flows.

The results of laboratorium analysis has been indicated that all of the existing elements have a values under the Water Standard Quality, eventhough some of the elements are almost reached the threshold value limit. It happened because this research were done in the rainy season, it caused a lot of elements going to be thinning. But on the dry season, well's water as according to the local people would change into a black colour and badly smell. Therefore it hopes more research on the similar field but it should do on the dry season, so does the result could be compare with the research's result on the rainy season.

Key word: Groundwater, Rubbish, Rainy Season, Leachate.