

## **KAJIAN KERUSAKAN LINGKUNGAN AIRTANAH AKIBAT PEMBUANGAN SAMPAH DI TEMPAT PEMBUANGAN AKHIR (TPA) AIR SEBAKUL DI SUKARAMI, SELEBAR, BENGKULU**

Oleh:

Novri Medyo Belli<sup>1</sup>, Totok Gunawan<sup>2</sup>, Tjahyo Nugroho Adji<sup>3</sup>

### **INTISARI**

TPA Air Sebakul merupakan tempat pengolahan sampah di Kota Bengkulu dengan luas lahan 6,8 hektar. Tumpukan sampah di TPA Air Sebakul menghasilkan cairan dari sampah yang disebut air lindi. Air lindi akan merembes ke dalam tanah menuju airtanah sehingga terjadi pencemaran termasuk sumur masyarakat sekitar TPA Air Sebakul. Tujuan penelitian ini untuk mengetahui jenis-jenis dan tingkat kerusakan lingkungan airtanah akibat air lindi, serta merumuskan strategi dan kebijakan pengelolaan lingkungan TPA Air Sebakul untuk pelestarian lingkungan.

Metode penelitian ini menggunakan metode survei. Metode survei adalah pengamatan atau observasi di lapangan, pengambilan sampel air sumur dan air lindi serta sampel air tersebut akan dianalisis di laboratorium. Penentuan titik pengambilan sampel air sumur menggunakan pendekatan *flownets* airtanah dengan tujuan untuk memprediksi arah aliran airtanah serta mengetahui arah sebaran air lindi. Selain itu, pengambilan sampel kultural dilakukan dengan wawancara kepada masyarakat sekitar TPA Air Sebakul.

Hasil analisis tingkat kerusakan lingkungan airtanah akibat air lindi termasuk kategori tercemar ringan, tercemar sedang dan memenuhi baku mutu. Sumur yang tercemar ringan dan memenuhi baku mutu meliputi sumur yang jauh dengan sumber pencemar, sedangkan sumur yang tercemar sedang meliputi sumur yang berdekatan dengan sumber pencemar. Strategi pengelolaan lingkungan di TPA Air Sebakul menggunakan pendekatan teknologi, pendekatan sosial, dan pendekatan institusi. Penerapan kebijakan pengelolaan lingkungan yaitu melakukan perubahan terhadap rancangan desain pengolahan air lindi, perubahan sistem pengelolaan TPA Air Sebakul, memberikan sanksi tegas kepada supir pengangkut sampah, serta melengkapi administrasi lingkungan yaitu dokumen Analisis Mengenai Dampak Lingkungan (AMDAL).

**Kata kunci:** Airtanah, Air Lindi, Kerusakan Lingkungan, Sampah, TPA Air Sebakul

# **THE STUDY OF GROUNDWATER DEGRADATION DUE TO WASTE DISPOSAL IN AIR SEBAKUL LANDFILL IN SUKARAMI, SELEBAR, BENGKULU**

By:

Novri Medyo Belli<sup>1</sup>, Totok Gunawan<sup>2</sup>, Tjahyo Nugroho Adji<sup>3</sup>

## **ABSTRACT**

The Air Sebakul Landfill is a waste processing facility in Bengkulu City with an area of 6.8 hectares. The pile of garbage at Air Sebakul Landfill produces a liquid from waste called leachate. Leachate seeps into the ground toward groundwater, causing pollution, including community wells around Air Sebakul Landfill. The purpose of this study was to determine the types and levels of environmental degradation to groundwater due to leachate; and to formulate environmental management strategies and policies of Air Sebakul Landfill for environmental preservation.

This research method used a survey method. The survey method conducted by observation, taking samples and laboratory analyzing of groundwater in community wells and leachate. Determination of sampling points was using the groundwater flownets approach. It aimed to predict the direction of groundwater flow and to know the direction of leachate distribution. Besides, cultural sampling was carried out by interviewing the community around Air Sebakul Landfill.

The results of the analysis of the level of environmental degradation to groundwater due to leachate are classified as lightly polluted, moderately polluted, and meet quality standards. Wells that are lightly polluted and meet quality standards include wells that are distant from polluting sources, while wells that are moderately polluted include wells that are close to polluting sources. The environmental management strategy at Air Sebakul Landfill uses a technological approach, a social approach, and an institutional approach. The application of environmental management policies are making changes to the leachate treatment design; changing the management system of the Air Sebakul Landfill, imposing strict sanctions on waste transporters; and completing environmental administration, namely the Environmental Impact Analysis (EIA) document.

**Keywords:** Groundwater, Leachate, Environmental Degradation, Garbage, Air Sebakul Landfill