

# PERENCANAAN PENGOLAHAN AIR LINDI TPA BANYUURIP KOTA MAGELANG

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## **ABSTRACT**

*Leachate treatment is an alternative to accomplished the environmental friendly development in the integrated solid waste management. Banyuurip Final Disposal (TPA) in Magelang City was the TPA which haven't apply sanitary landfill system and doesn't have the adequate leachate treatment unit, therefore need to be planed a good leachate treatment unit with effluent to fulfill standard quality appropriate with the Central Java Province Regulation 2004/10 contents standard quality of stream water and standard criteria of wastewater quality for industrial activity. Because the Banyuurip TPA still operate open dumping system therefore the leachate water which produced infiltrate directly under ground, therefore to design a leachate treatment unit for TPA Banyuurip need to be analog with the leachate water from Jatibarang TPA in Semarang City. From the laboratory analysis, parameters which exceed wastewater standard quality is TSS (190 mg/L), TDS (5620 mg/L), BOD (1554 mg/L), and COD (3852 mg/L). Some stages in designing leachate treatment unit for Banyuurip TPA in Magelang City is: 1) Identifying flowrate of leachate water, 2) Identifying leachate water contents of Banyuurip TPA in Magelang City which analog with Jatibarang TPA in Semarang City, 3) plan and analyze alternatives leachate treatment unit, 4) Design leachate treatment unit, 5) calculate the cost to build leachate treatment unit. Leachate water which produced from the leachate treatment unit must fulfill standard quality appropriate with the Central Java Province Regulation 2004 No. 10 therefore expected not to pollute the environment.*

*Key Word : Leachate, TPA Banyuurip Magelang City, Effluent standard, Leachate treatment unit*