EVALUASI DAN DESAIN INSTALASI PENGOLAH LINDI TPA JERUKLEGI KOTA CILACAP JAWA TENGAH

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ABSTRACT

Expansion zone of Jeruklegi landfill (TPA) and effort applying of sanitary landfill from open dumping system is being used this time, surely need goodness management of leachate treatment. At this time Jeruklegi landfill have a unit leachate treatments drying at summer and overflow at rain season. Expansion zone of Jeruklegi landfill project, leachate installation would be evaluated, if that could be redesign or not. This TPA still operate open dumping system and doesn't have an ideal leachate treatment unit, therefore need to be planed a good leachate treatment unit and to produce effluent to fulfill standart quality appropriate with the Central Java Province Regulation 10/ 2004 about standart quality of stream water and standart criteria of wastewater quality for industrial activity or for another activity. From the laboratory analysis, parameters which exceed wastewater standart quality is TDS (11140 mg/L), TSS (981 mg/L), Fe (31 mg/L), Mn (5,41 mg/L), BOD (4600 mg/L), and COD (7820 mg/L). Steps planning of leachate treatment are : 1) analyse leachate quality and evaluation leachate treatment existing, 2) analyse new zones flowrate, 3) determination and election alternative processing of new leachate treatment, 4) calculation of leachate treatment dimension that chosen, 5) calculate cost budget plan to build new leachate treatment plant. New leachate treatment are : collected pond, anaerobic biofilter pond, aerobic pond, and sedimentation pond. Budget plan to build leachate treatment amount 437.584.000,00 rupiah.

Keyword : Leachate, Sanitary landfill, Jeruklegi Final Disposal, Leachate Treatment Unit