

# PERKIRAAN BEBAN PENCEMARAN LIMBAH INDUSTRI DAN DOMESTIK PADA SUNGAI CITARUM

**Karimuddin**  
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Telah dipertahankan di depan Dewan Penguji  
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## ABSTRACT

Citarum watershed with coverage area of 6,540 km<sup>2</sup> reaches about 300 km. The upstream is Wayang Mountain has 2,182 m msl and the downstream river flow reaches to the Java Sea, in Karawang Regency, West Java Province. Citarum River provides water supply for Saguling Dam, Cirata Dam, and Ir. H. Djuanda Jatiluhur Dam. Those dams are laid in West Java Province. Various activities which potentially have dominant effect on the contamination of Citarum River are grouped into domestic, industrial, agriculture, fish farm and cattle farm activities.

Estimation of domestic waste produced by each region of Citarum watershed can be predicted from the amount of residents water consumption, which around 60% - 90% of it becomes waste (Metcalf and Eddy, 2003). Estimation of industrial contamination load can be predicted by composite measurement on the industrial outlet in certain time. The potential of the catchments area contamination load can be calculated from the number of individual polluter multiplied by its emission volume.

River carrying capacity in accommodating contamination load at Citarum-Batujajar section is categorized as very bad (minus), as the over capacity of BOD level of (-) 366,591,744 tons BOD/day, while the contamination load is 399,717,504 tons BOD/day. Allowance of contamination load is 33,125,760 tons BOD/day and dam purification capability is 399,160,396.8 tons BOD/day.

The result of this analysis is expected to become a reference or information on the (dam) environmental carrying capability in eliminating contamination.

**Key words:** *Citarum, Contamination, Domestic, Industrial.*