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A COMPARISON BETWEEN LEAD AND MERCURY
CONCENTRATIONS IN LEACHATE IMPACTED
GROUND WATER AFTER PRECIPITATION
AT THE MUNICIPAL LANDFILL OF
DANBURY, CONNECTICUT

ABSTRACT

BY

ROGER L. YOUNG

A geochemical analysis of the groundwaters within the Danbury Municipal Landfill reveals a negative correlation between precipitation and the concentrations of lead and mercury there. A stabilizing effect is present due to the alkaline processes of the soils in facilitating the immobilization of specific metal cations. Groundwaters also exhibit an alkaline pH even though most precipitation in the area has acidic values. Lead and mercury parameters remained constant while a significant range of precipitation occurred seven days prior to each well sampling. The chemical processes within the landfill and its waters include many parameters presently unknown and untested, but results of this study indicate an independent relationship between precipitation of any form and groundwater lead and mercury concentrations.