

LEAD AND ZINC CONTAMINATION  
OF GROUND AND SURFACE WATERS  
AT THE MUNICIPAL LANDFILL  
OF DANBURY, CONNECTICUT

AN ABSTRACT  
FOR A THESIS  
PRESENTED TO THE GRADUATE FACULTY  
OF WESTERN CONNECTICUT STATE COLLEGE  
by  
LOUIS S. HALL III

IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE DEGREE  
MASTER OF ARTS

MAY 1982

ABSTRACT

Recent laboratory and field studies have demonstrated that lead and zinc mobility within aqueous and sedimentary environments is determined by pH, ions present in the system, and complexing and adsorbing agents present. In this study, ground water and surface water flow at the Danbury, Connecticut municipal landfill is examined for lead and zinc. The conditions at the landfill are compared to the published work concerning speciation and mobility of lead and zinc in natural systems. Complexing and adsorption play a major role in keeping lead and zinc immobile in the ground water system at the landfill. Under present conditions, the landfill does not contribute lead and zinc to ground water or surface water to any significant extent beyond the landfill. As long as the landfill remains undisturbed, the lead and zinc ions should remain immobile.