FEDERAL COORDINATING OFFICE
federal emergency management agency

MOUNT ST. HELENS
TECHNICAL INFORMATION NETWORK

Thursday, June 26, 1980

LETIN #26 - "Volcanic Ash Effects on Municipal Water Supply and Sewage Treatment Plants"

WATER TREATMENT SYSTEMS

Ashfall associated with the eruptive events at Mount St. Helens has affected surface drinking water supplies in the states of Washington, Oregon, and Idaho. Fortunately, the ash appears to be relatively inert with no chemical toxicity apparent to date. A comparison of laboratory analyses indicates approximately the same distribution of elements in the volcanic ash as would normally be found in the earth's crust. A number of laboratories have also performed leaching tests on a variety of ash samples and none have indicated soluble chemical contaminants at concentrations great enough to exceed the MCL (Maximum Contaminant Level) for public water supplies.

However, the ashfall has caused physical problems in uncovered surface water systems. Some community and non-community systems have experienced periodic high turbidities although these have returned to normal in a few days. During periods when turbidities in water distributed to customers was over 10 Jackson Turbidity Units, "boil water advisories" were issued. Boiling the water is a prudent measure whenever turbidity which may interfere with the disinfection process occurs. Perhaps the most critical problem was that of water quantity. Many systems experienced exceptionally high demand as property owners and municipalities used water to clean up the ash and control dust. In fact, several

-MORE-