

March 13, 1975

State of
Washington
Department
of Ecology



Memo To: Mark Premo and John Conroy

From: Ron Pine

Subject: Kent Highlands

Mark Premo, John Conroy, Lew Kittle and I visited the Kent Highland landfill site on March 5, 1975. We visually inspected the site, the leachette collection and treatment system, and the Green-Duwamish River in the area effected by the leachette discharge.

Lew and I collected samples of some growth from the Green/Duwamish River at the 212th Street Bridge, and from above its confluence with the small creek which drains the landfill site, above the landfill discharge, and from the various pipes and drains which collect the leachette. There was no visible slime observed in the Green/Duwamish River above the landfill discharge. Analysis of the slime samples collected indicate that the growths found in the river and in the landfill drainage system was Sphaerotilus natans, a common bacterial slime that grows in polluted waters.

There is little question that leachette discharged from the Kent Highlands landfill is polluting the Green/Duwamish River in that it is affecting at least one other water use, fishing. Flows of slime were noted floating in the river which means that it is growing on the bottom, sloughing off, floating down the river and attaching to weeds, branches and fishing lines. The discharge may also be toxic due to leaching of zinc from old tires. Concentrations of 0.15 mg/l Zn is toxic to salmon fry, and 0.01 to 0.4 mg/l is toxic to rainbow trout. Analysis of the Kent Highlands leachette by Stevens, Thompson and Runyan in 1972 showed zinc levels of 0.017 mg/l.

REP:ee

cc: Lew Kittle