METRO



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Memorandum

DATE November 9, 1992

To: Berit Stevenson, Senior Management Analyst

FROM: Andy Sloop, Associate Solid Waste Planner A⁵

RE: Use of glass cullet in construction aggregate applications

As I mentioned during the last Resourceful Renovation Committee meeting, some concerns have been raised about the potential environmental impacts associated with using waste glass as a construction aggregate. This memo is intended to clarify the nature of these concerns and to note efforts underway to address them.

Glass is inert, so research into secondary uses for waste glass has assumed that clean runoff passing through waste glass also is clean. Recent tests in Washington State, however, revealed the presence of lead in runoff from two piles of waste glass. One of the test piles was composed of green glass collected in Skagit County and the other was composed of green, brown and clear glass collected in the Seattle area.

These tests did not show a consistent level of lead contamination in all samples analyzed, but rather "spikes" of contamination in a handful of the samples. Recycling analysts believe the lead foil found on the neck of many wine bottles may be the source of lead contamination, but the exact source has not been isolated. These findings raise questions about the environmental impacts of using waste glass in certain secondary applications, but do not provide conclusive evidence against the use of this material in non-container secondary applications such as construction aggregate.

The Washington Department of Ecology and the Clean Washington Center will be conducting additional tests during the next several months to evaluate the safety of using waste glass in various secondary applications. Until these tests have been completed, it is impossible to specify what, if any, environmental impacts may be associated with using waste glass in construction applications.

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cc: Cade Lawrence, Hoffman Construction Don Nail, Hoffman Construction Ron Klienschmidt, City of Portland Glenn Taylor, Construction Project Manager, Metro Leigh Zimmerman, Market Development Manager, Metro Jim Goddard, Senior Solid Waste PlannerMetro Pat Merkle, Construction Coordinator, Metro