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NEWS RELEASE

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The Hughes Aircraft facility at Tucson International Airport has been identified as the probable source of trichloroethylene (TCE) contamination of groundwater in southwest Tucson, according to a report issued today by the Arizona Department of Health Services. Uncontained wastewater that drained onto the northwest corner of the plant in the mid-to-late 1950's is cited as the chief cause of groundwater contamination.

The three-volume report identifies Tucson Airport Authority hangars and the landfill located to the south of those hangars as probable secondary sources of chemical contamination that includes dichloroethylene (1,1-DCE), chromium, chloroform, benzene and xylene in addition to TCE.

The report is based on two years of remedial investigation activities aimed at defining the character of the local groundwater system, determining the extent and severity of groundwater contamination near the airport, and identifying probable sources of pollution. The investigation was managed by the Arizona Department of Health Services under contract to the Environmental Protection Agency. Members of the investigation team also included the Arizona Department of Water Resources, Tucson Water Department, and K. D. Schmidt, a Phoenix groundwater consultant.

In addition, investigation into suspected adverse health effects and mortality related to TCE was begun in May 1985 by ADHS, in conjunction with the Pima County Health Department. While

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the study is not part of the remedial investigation process, health officials feel it is important to determine what affect TCE may have had on area residents. Results of some areas of investigation are expected near the end of this year. Health investigators are looking at mortality data from the area, reviewing records of students in the homebound program and may survey high school students in the area, as well as propose a study of Hughes Aircraft Company workers.

According to to the remedial investigation report, groundwater exists in three major aquifers, or water bearing zones, near Tucson Airport. In the southeasterly part of the study area (near Hughes Aircraft and the large hangars on the west side of the airport), two of these aquifers overlie one another, separated by a bed of impermeable clay. The two aquifers merge to the northwest, forming the third aquifer. Groundwater flow is to the north-northwest of each of these aquifers. The rate of flow is estimated to be 700 feet per year in some places.

Among the methods used to define the extent and severity of groundwater contamination were a series of monitoring wells, drilled and tested by the City of Tucson. More than 700 samples were taken from these, as well as from monitoring wells drilled by EPA and Hughes Aircraft Company, and from private wells in the area. The Department of Water Resources developed a groundwater flow and contaminant transport model and ADHS combined research and personal interviews to characterize potential sources of pollution. K. D. Schmidt, who

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prepared the summary report, collected and interpreted information gathered from the investigation, and provided technical guidance.

The remedial investigation report includes a summary of the investigation's results; the results of ADWR's computerized model; and a discussion of potential sources of groundwater pollution near the airport prepared by ADHS. Release of the 750 page report marks the end of the remedial investigation which was initiated under EPA's Superfund program in October 1983.

Some significant findings from the report are:

- As of late 1984, TCE contamination in the groundwater extended from the Hughes Aircraft Company facility northwest to Irvington Road. The contaminated area was found to be 3,000 to 4,000 feet wide and more than four miles long. The most highly contaminated groundwater occurred in the upper of the two aquifers located in the southeastern portion of the study area. Off the Hughes property, TCE concentrations were generally 300 ppb or less.

- Chromium, dichloroethylene (1,1-DCE) and other contaminants were found in groundwater near the airport. Chromium concentrations never exceeded the state drinking water limit of 50 ppb but exhibited the same geographic patterns as did TCE. The compound 1, 1-DCE showed the same geographic trends as TCE and chromium, and did exceed the state action limit of 1 ppb in wells in the southeastern portion of the study area. Chloroform, benzene and xylene were found locally in some wells in the vicinity of the west side of the airport.

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- Two small plumes of TCE-contaminated water occurred east of the main plume. These are near the Arizona Air National Guard facility and the Burr Brown/West-Cap Arizona area. These plumes contain low levels of TCE and appear to be moving relatively slowly.

Copies of the full, three-volume report will be available for public review and comment in the main Tucson Public Library, at most of the city's branch libraries, as well as at the University of Arizona Library beginning November 19, 1985.

This date marks the beginning of the 30-day public comment period. Citizens are encouraged to review the report and send their written comments to the Arizona Department of Health Services. Comments should be addressed to the Remedial Projects Unit, Division of Environmental Health, 2005 North Central Avenue, Phoenix, Arizona 85004, no later than December 19, 1985.

The department will prepare a response summary and each party commenting on the report will receive a copy of the agency's response to their comments. The response summary will then be incorporated into the final report.

For more information, contact Chuck Anders, Assistant Director, Environmental Health Services at 257-2300, or the ADHS Public Information Office at 255-1001.