## **Press Release: The Hopi Tribe**

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## **Contamination Threatens Moenkopi Water Source**

**Moenkopi, Arizona--** A report released on May 11, 1999 by the Hopi Tribe disclosed the existence of high levels of groundwater contamination within the Moenkopi area. The Tuba City Landfill site investigation, conducted by Daniel B. Stephens and Associates of Albuquerque, NM, determined that the dumpsite poses considerable risk to the quality of groundwater used by the Hopi villages of Upper and Lower Moenkopi.

According to the investigation, contaminants, including uranium and redium, exceed the U.S. Environmental Protection Agency maximum contaminant levels. The water contaminants were detected in shallow monitoring wells located along the edge of the landfill. Measurable contaminants were also detected in the deeper aquifer zone, which is part of the extended water system that serves the drinking water needs of the villages.

Geologically, the Navajo aquifer (N-Aquifer) in the Moenkopi area is unconfined due to lack of a bounded bed or aquifer between the Navajo sandstone and Kayenta formations. Being unconfined makes the aquifer vulnerable to contamination since surface spills can migrate directly into the aquifer.

"I am alarmed that the contaminants have been found in such close proximity to our village water supplies. Such high levels of contamination place individuals and communities at risk in terms of their health and economics. The villages of Upper and Lower Moenkopi rely solely on the N-aquifer for drinking water. The dependence on the N-aquifer for safe drinking water makes its protection of crucial importance. In addition, without a safe source of drinking water, community economic development initiatives are jeopardized," stated Wayne Taylor, Jr., Chairman of the Hopi Tribe.

The 50-year old Tuba City Landfill was set aside by the BIA for solid waste disposal to serve Tuba City and to a lesser extent, the Moenkopi villages. Once located on the Navajo Reservation, the landfill was transferred in 1992 to Hopi ownership as a result of the 1934 Navajo-Hopi Land Case. Over its lifetime, waste from other sources also was disposed of at the uncontrolled landfill, which is located along a major highway in northeastern Arizona. In 1997, the landfill was closed when Coconino County opened a new waste transfer station in Tuba City.

While the groundwater exceeds standards for radioactive materials, it is unclear, based upon existing data, whether these elevated concentrations resulted entirely from the Tuba City Landfill. Groundwater contamination has also occurred at the uranium mill tailings site located 5 miles northeast of the Moenkopi villages on the Navajo reservation. Since the processing plant was still closed, precipitation falling on the old mill tailings pile has dissolved some of the radioactive material, which has migrated into the Navajo sandstone creating an area of contamination migration downstream toward the villages through surface and subsurface flows in nearby washes.

Contamination problems at the landfill only adds to the water quality problems facing the villages of Moenkopi. For a number of years, the village has been concerned about petro-chemical contamination stemming from the long term release of gasoline leakage from underground storage tanks across the Hopi boundary in Tuba City, despite the replacement of leakage talks as required by federal law. The gasoline previously released continues to move underground toward the Hopi villages at Moenkopi, where Petro-chemical contaminants have been detected in the springs at the lower village. These springs have long been depended on as a drinking water source for the Hopi people.

Due to the multiple contamination problems facing Upper and Lower Moenkopi, well siting for future village water supplies has become problematic.

The report recommends ways to clean up the landfill contamination problem and to prevent ultimate impact to the domestic water supply. Preparation of a closure plan for the dumpsite will be developed once the Hopi Tribe has reviewed and identified the preferred closure approach. Based on the final closure approach selected, a closure plan for the landfill will be prepared. The closure plan will then be submitted to the EPA for review and comment. Final closure construction activities will be implemented once project funding is established.



