

TCE removal due in 1987, Air Force says

By Jane Kay

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A Pentagon-backed \$25 million draft plan to clean up the southern end of Tucson's TCE-tainted aquifer will be released today, Air Force officials said yesterday.

The full-scale effort to cleanse the ground water will not begin at least until the first quarter of 1987, Robert Morrison, manager of Hughes Aircraft Co.'s environmental programs, said yesterday at a meeting of local water experts.

The actual pumping and cleaning of ground water in 1987 will be the first step in slowing the flow of chemicals moving in the ground water to the north and northwest at an estimated speed of 300 to 1,000 feet a year.

The Environmental Protection Agency discovered the ground-water pollution at Hughes in 1981, but, Morrison said, "Unfortunately, studies take a good deal of time."

"The plume is moving, and we're

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tracking it," he said.

Only low concentrations of TCE have moved from the site of the Air Force-owned, Hughes-operated missile plant, Morrison said.

Asked about the sampling results of the northernmost monitoring well in the study area, he said that one well has shown TCE concentrations of about 200 parts per billion near Los Reales Road. The state health guideline is 5 parts per billion. The highest level found on-site was 10,000 parts per billion.

State hydrologists believe that the plume from Hughes merges with polluted ground water farther north near the Tucson International Airport. That site is being investigated with money from the Superfund, the nation's cleanup program for abandoned toxic dump sites.

Col. Gary E. Hagen, senior Air Force officer at the missile plant, was host at Hughes yesterday for a briefing about the proposed cleanup plan to members of the Water Resources Coordinating Committee, an informal group formed to examine water issues, and the Pima Association of Governments' environmental committee.

After evaluating more than a dozen alternatives, the Air Force wants to pump up contaminated ground water, remove the pollutants at a treatment plant built on the 2,106-acre military property, and reinject it into the aquifer.

That would allow Hughes — which is performing the cleanup with taxpayer money — to withdraw the bad water at a faster rate and minimize the effects of water loss on local water users, a summary of the plan said.

The treatment plant will be able to handle 5,000 gallons a minute. The contaminated water will be

pumped to the treatment plant from 19 extraction wells drilled over a large area stretching from Hughes on the south to the vicinity of Los Reales Road on the north.

At the plant, the water will be forced through "air-stripping towers," where air will be blown through the water to evaporate three volatile organic chemicals — trichloroethylene (TCE); 1,1,1-trichloroethane (TCA); and 1,1-dichloroethylene (DCE).

These chemicals leached into the ground water beneath the plant from former disposal sites that were begun in the early 1950s, according to the Air Force.

The toxic metal chromium, which was discharged into the soil as an electroplating waste, will be removed from the water by a state-of-the-art ion-exchange process, Morrison said.

The cost of the cleanup could exceed the \$25 million figure if the two methods don't succeed, Morrison said.

The Air Force has pledged that it will continue to clean up for 20 to 30 years, or however long it takes to bring the TCE concentrations in the aquifer down from thousands of parts per billion to 5 parts per billion.

Other options evaluated by the Air Force include reusing the treated water for industrial uses at Hughes or Asarco Inc.; irrigation on the Papago Indian Reservation; domestic uses in Tucson; recreational uses at Santa Cruz Park; and recharge in the Santa Cruz River.

Comments from the public received before Oct. 25 will be reviewed by the Air Force. They should be sent to Arthur Schacter, RAP Community Relations Officer, AFPRO, Hughes Missile Systems Group, P.O. Box 11337, Tucson 85734.