

LANCE DENNEE/The Sun Property owners from the Heath area watch a Department of Energy presentation at Heath High School on Tuesday.

DOE: Land around plant could cost up to \$54 million

By **Joe Walker** jwalker@paducahsun.com--270.575.8656 Wednesday, March 21, 2007

A new Department of Energy study shows it would cost taxpayers at least \$30 million to buy land affected or threatened by groundwater contamination from the Paducah Gaseous Diffusion Plant.

The cost would rise to about \$54 million if commercial-development value of farmland were considered rather than market value.

Although DOE hasn't offered to buy land, Alice Dick would gladly sell. Her well on Boldry School Road north of the plant was the first to be found contaminated in 1988 with trichloroethylene (TCE), a degreaser heavily used at the factory for decades.

She now has cancer and believes drinking the water was a factor. If the government doesn't buy it, the land will be hard to sell because of the pollution, she said.

"I'd give anything if they would buy me out because I'm right in the middle of the contamination," Dick said.

She was among about 50 people who attended a public meeting Tuesday night at Heath High School to hear the results of the study, mandated by 2006 legislation sponsored by Sen. Mitch McConnell, R-Louisville. Instead of offering to buy land, DOE is accepting public comments until April 3 to go into a final report to Congress due April 16.

DOE officials called the findings a tool for future cleanup decisions and said individual land appraisals would be done if the department decides to buy land. Bill Murphie, head of the DOE project office including Paducah, said \$120 million is being spent annually in cleanup work, "but there is no silver bullet" to cleanse the groundwater.

The study found that:

101 residential parcels covering 271 acres and 64 parcels of farmland spanning 5,783 acres are or could be above about 10 billion gallons of contaminated groundwater flowing northeasterly from the plant to the Ohio River.

It would cost an average of around \$130,000 to buy 3-acre residential parcels. Acquisition costs of farmland range from \$2,800 to \$3,100 per acre based on fair market value and from \$6,500 to \$7,600 per acre based on commercial-development value. Averaging the low and high ranges, it would cost about \$13 million to buy residential land and between \$17 million to \$41 million to buy farmland, depending on whether fair market or development value is used.

Limited-scope easements, restricting groundwater or surface water use, range from \$472 to \$872 per acre for farms and from \$4,000 to \$17,300 for residential parcels. Expanded-scope easements — including water-use restrictions and a possible ban on building in-ground swimming pools, septic systems and ponds — range from \$2,600 to \$2,800 per acre for farms and from \$16,500 to \$38,400 for residential parcels.

DOE currently spends about \$78,000 a year to provide free municipal water to about 100 homes and businesses north of the plant that are above or near the contamination. Buying land is "significantly more expensive" than the combined cost of providing the water with a limited or expanded easement, the report said.

The study estimated the cost and potential effectiveness of 12 methods to reduce the toxicity, volume and mobility of groundwater contamination. The study then estimated how much land would be needed using four combinations of those methods to cleanup the water.

DOE modeled the potential spread of contamination over periods of 30 and 100 years and determined the cleanup cost ranged from \$9.6 million to \$151.4 million, depending on the extent of the work. In all cases the spread was projected to be only slightly outside the free-water area, bounded by Metropolis Lake Road, the Ohio River and Bethel Church Road. The property-acquisition area was determined by adding a 1,000-foot buffer around the fringe of the contaminated groundwater.

Gary Mattingly, who lives at 8455 Shawnee Lane east of the plant, said he worries that the groundwater eventually will reach his land. He has wells on his property, which is 1,000 to 1,200 feet east of Metropolis Lake Road in an area that modeling shows could eventually be affected by the pollution.

"I'm just concerned about the health risks for my family," he said, adding that he will pass the property on to his children. "I'm not necessarily interested in selling, but I need to know how much more value I should put into my home."

Among the cleanup methods considered in the study were continued pumping and treating of groundwater as well as using in-ground electrodes to evaporate TCE from beneath a cleaning building in the center of the plant. Pumping and treating is ongoing, and use of the electrodes is expected to start within a year.

The building is considered the primary source of TCE. Another pollutant, radioactive technetium, is present in groundwater but in much less quantity than the degreaser.

All staff photographs are available for purchase. Please call 270-575-8682 or 270-575-8683.