Ground Water Cleanup Plan
Enters New Phase
Chevron Cincinnati Facility
Hooven, Ohio
March 2007

Work to clean up ground water under the Chevron USA Inc. facility and Hooven has entered a new phase. A final cleanup plan calls for seasonally pumping out even more ground water (underground water supplies) polluted by gasoline and diesel fuel. The new plan was approved in August after EPA evaluated dozens of comments from the community, Chevron and others. In November, Chevron agreed to perform the $26 million cleanup under EPA’s supervision. Already in this pumping season, an additional 14,500 gallons of gasoline and diesel fuel has been removed. In addition to the pumping, the final cleanup plan includes:

- testing ground water and soil vapor (gas) to ensure residents are safe from petroleum vapors deep below the surface and to make certain contamination doesn’t spread
- gradual shut-down of pumping wells once pollution has been reduced
- relying on natural processes to break down contaminants
- not allowing basement construction or drilling of drinking water wells on the former refinery property
- future use of the property for industrial and recreational purposes
- barriers to keep petroleum out of the Great Miami River
- backup plans if these steps don’t reduce contamination as expected

The complete plan (including EPA’s responses to public comments) and agreement with Chevron are available at the library and on EPA’s Web page.

EPA tests for vapors
Last June, EPA project staff collected vapor samples at various depths from vapor well #96, which is located in Hooven above the polluted ground water. Although EPA requires Chevron to do most vapor- and ground-water testing, EPA took samples as part of its oversight responsibility and in response to concerns from area residents. Chevron collected its own samples at the same time. The results of the testing confirm conclusions from previous studies that vapor levels from the Chevron plume decrease before reaching the surface. Importantly, the testing results support previous studies that show residents are not currently exposed to chemicals from the plume.

Also, EPA and Chevron collected soil samples from several areas on the former refinery property, including where soil was dug up as required by a 2004 EPA cleanup plan. As a check on the testing procedures, the EPA and Chevron samples were sent to different laboratories for analysis. The results were similar from both sets of samples. This provides one indication that Chevron followed proper sampling and analytical procedures as required in the EPA-approved work plan.
**About the ground-water contamination**

Prior to the refinery’s closure in 1986, refined petroleum products leaked and soaked into the ground. A floating layer of mostly gasoline formed on top of the ground water and spread beneath the site and to a commercial area southwest of the facility (called the southwest quadrant) and portions of Hooven to the west of the Chevron property. The mass — or plume — of hydrocarbons lies approximately 15 to 35 feet below the surface at the site, and 37 to 65 feet under Hooven.

Sixteen wells on Chevron’s property have pumped out and treated more than 1 billion gallons of ground water a year and recovered 3.5 million gallons of hydrocarbon product since the initial pumps began operating in 1985. To keep contaminated vapors from moving into residential areas at the surface, a soil vapor extraction system operates under the site and portions of Hooven.

In April 2006, EPA issued a plan describing the Agency’s proposal for ground-water cleanup. After considering dozens of comments from the public, EPA decided to move forward with this plan.

**Information for homeowners, lenders, real estate agents**

If you are trying to sell property near the site, EPA will answer questions from real estate agents or potential buyers about the contamination. EPA will also write letters to lending institutions that have concern about the property. Such letters can help expedite loans or sales by clarifying exposure and liability issues. Please contact Chris Black or Bri Bill to begin this process.