

# Companies Agree to Address Vapors and Contamination

**Hartford Area Hydrocarbon Plume Site**  
Hartford, Illinois

March 2004

## Public comment period

EPA will accept written comments on the legal agreement until Wednesday, April 7. This fact sheet includes a pre-addressed comment form.

Copies of the full legal agreement can be found at the village hall and in the library.

## Open house

EPA and representatives of state agencies will be available to explain and answer questions one-on-one about the legal agreement as well as the ongoing activities to deal with the contamination under Hartford. Written comments on the legal agreement will be accepted at the session.

**Date:** March 25

**Time:** 1 p.m. - 3 p.m.

**Place:** Community Center  
715 N. Delmar Ave.  
Hartford

## Public meeting

EPA will also hold a public meeting on the same day to explain and answer questions about the legal agreement as well as the ongoing activities. We will also accept oral and written comments at this meeting.

**Date:** March 25

**Time:** 7 p.m.

**Place:** Community Center  
715 N. Delmar Ave.  
Hartford

If you need special accommodations in order to attend this meeting, please contact Mike Joyce toll-free at: (800) 621-8431, ext. 35546, weekdays 9 a.m. - 4:30 p.m.

Three oil companies have agreed to study ways to permanently clean up a large pool of refined petroleum products that has contaminated the ground underneath much of northern Hartford. The companies have also agreed to find ways to protect homes and other buildings from dangerous fumes while they design a permanent cleanup.

On March 17, U.S. Environmental Protection Agency signed a legal agreement with Atlantic Richfield Co., Shell Oil Products US, and Premcor Refining Group. These companies are considered potentially responsible for the contamination. In this legally enforceable settlement, the companies agreed to complete a thorough investigation of the pollution by the end of 2004 under EPA supervision. Once the investigation is complete, the companies will design a way to permanently clean up the contamination in the ground with the oversight of EPA.

## If you suspect vapors in your home ...

If you smell or suspect you have fumes in your home:

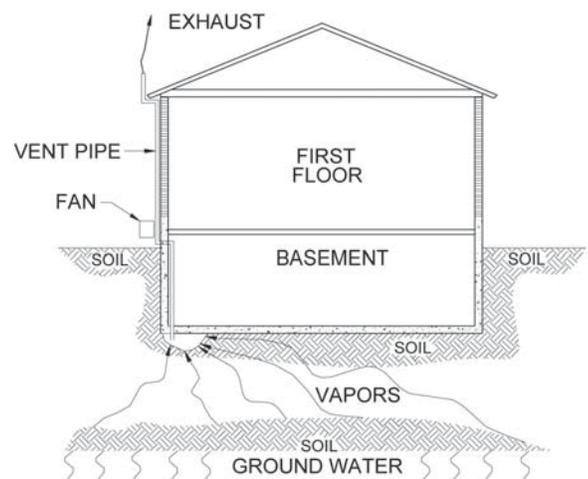
**Call the Hartford Fire Department by dialing 911.**

As part of the agreement signed by the companies, EPA has required they develop a plan for responding to complaints of vapors in homes. The companies have agreed to provide temporary housing and money for incidental expenses if residents need to be evacuated from their home. EPA will notify residents of further details of this plan once they are available.

## Two kinds of home vapor removal systems being studied

Until the contamination can be removed, the companies have agreed to find ways to protect people from possible vapor exposure in their homes. At the end of February, a study was started to see if fumes can effectively be stopped from getting into houses. The study is being done at two residences in north Hartford.

At one home, a pipe was put into a small hole drilled in the basement floor and was routed through the wall and up the side of the house to the roof. A fan draws the vapors up through the pipe. The sketch to the right shows how this system works.



*This drawing shows the type of vapor removal system installed in a basement.*

The second system is similar. The vapors are drawn up through pipes placed at four spots outside the home. These four pipes—all of which are underground—are linked by another underground pipe that encircles the home and comes out of the ground along the side of the home, reaching to the roof. A fan draws the vapors into this vent pipe expelling them at roof level as in the diagram on Page 1.



*This photo shows what a vent pipe might look like at a home with a vapor extraction system installed.*

Once this study is complete, EPA will determine if either of these systems will work in homes where vapors are a problem. This study is expected to be completed by May 1. However, if EPA determines that these systems are not working, it will require the companies to find other ways to protect people from dangerous fumes.

### **Investigating other ways vapors get into homes**

Another study the companies will be doing is looking at other ways—such as through the sewer lines—that vapors may be getting into houses. EPA expects a report on the results of this investigation by June 2004.

### **1990s vapor removal system also studied**

The companies are currently evaluating the effectiveness of a system of extraction wells (put in to remove the vapors) that were installed in the 1990s. Those wells allow vapors to rise from the soil through pipes. The vapors are collected and sent to be treated on the Premcor property. The treated air is then released. If EPA finds that all or some of these wells are still in good shape and are in good locations, they may be used for a new vapor removal system. The companies, at the request of EPA, have installed a newer type of vapor extraction well and are testing it to see how effectively it works. (See map on Page 3 for the locations of the vapor extraction wells.) The treatment system on the Premcor property is also being examined for its effectiveness. Although still operating, the wells and treatment system installed in the 1990s are not as effective now as they once were.

### **Protecting the water supply**

Five monitoring wells have been installed between the area affected by the contamination and where the village water wells are located. These “sentinel” wells are being monitored to ensure that the underground contamination does not reach the village water supply. The results of the samples taken from the sentinel wells so far have shown no contamination. The map on Page 3 shows the locations of these wells.

### **Designing a permanent cleanup**

In the legal agreement, the companies potentially responsible for the contamination have agreed to design a long-term solution. The specifics of the cleanup will depend on the investigations that are under way.

As part of these investigations, the companies pushed an instrument into the ground at 66 different locations to find out if petroleum products exist at each of those locations. (See map on Page 3.) The technicians used a Rapid Optical Screening Tool, which uses a laser to detect a petroleum product. When the laser is pointed at a petroleum product in the ground, it reflects fluorescent light, confirming its presence.



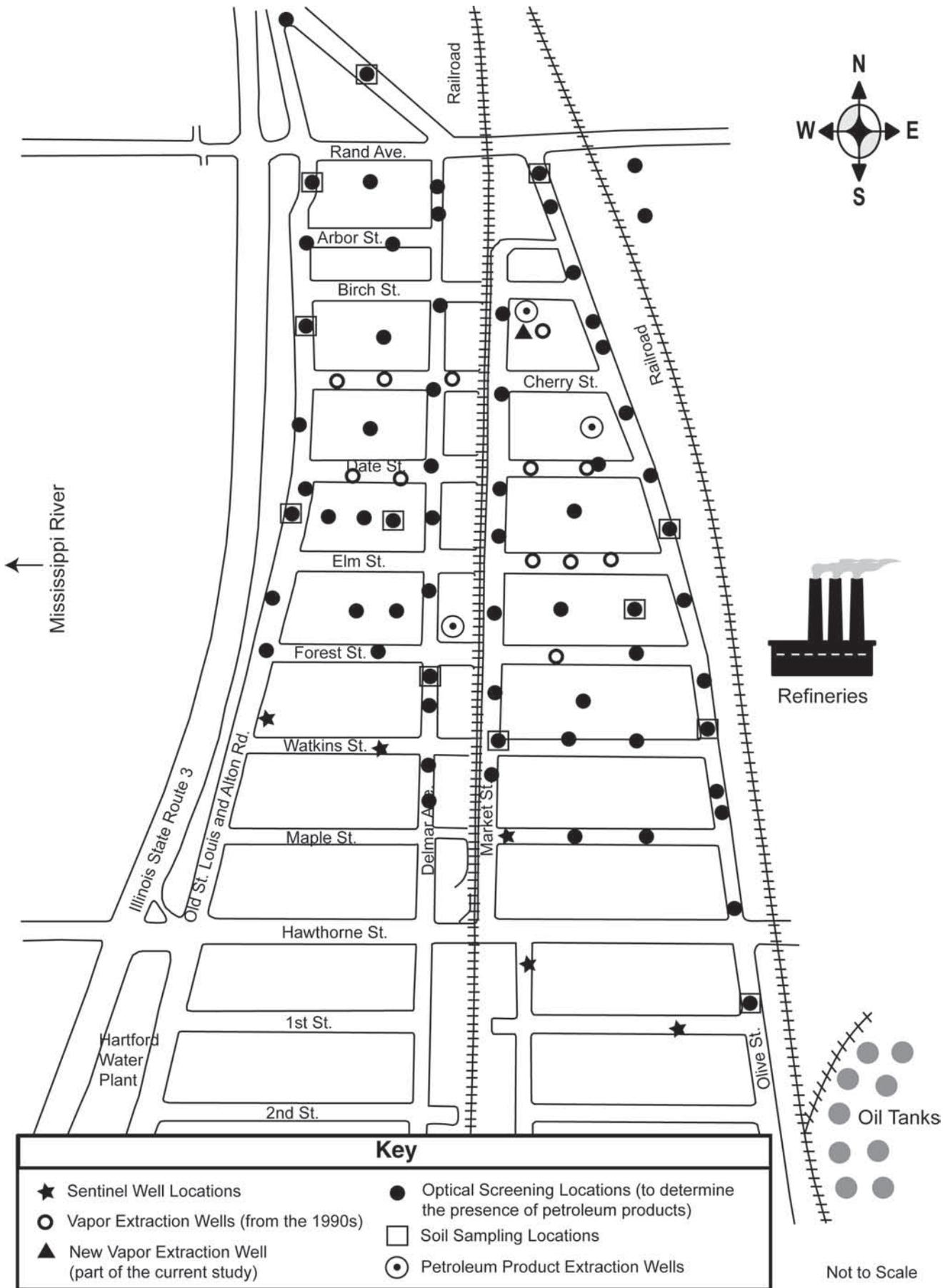
*ROST truck at work in Hartford.*

Soil samples were also taken at 12 of the locations to help EPA confirm the results of the optical screening. (See map on Page 3.) This investigation, including the optical screening and the soil sampling, will help EPA determine where and how widespread the contamination is. This will help the companies and EPA determine the best way to design a permanent cleanup.

### **Pumping out the petroleum products**

The companies are also studying how to pump the petroleum products out of the ground. Two of three existing wells are being used to see how quickly the pollution can be removed. (See map on Page 3.)

# Map of Sampling Locations and Wells



Key	
★	Sentinel Well Locations
○	Vapor Extraction Wells (from the 1990s)
▲	New Vapor Extraction Well (part of the current study)
●	Optical Screening Locations (to determine the presence of petroleum products)
□	Soil Sampling Locations
⊙	Petroleum Product Extraction Wells

Not to Scale

### For more information

For more information about the Hartford Area Hydrocarbon Plume site, please contact:

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Legal Agreement Signed**

United States  
Environmental Protection  
Agency  
Region 5  
Office of Public Affairs (P-19J)  
77 W. Jackson Blvd.  
Chicago, IL 60604-3590





# Hartford Area Hydrocarbon Plume Site Comment Sheet

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Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_  
Zip \_\_\_\_\_

Place  
Stamp  
Here

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