



## Region 7

Iowa  
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## Fact Sheet

April 2003

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# Investigation Completed at Front Street Site (Operable Unit 1)

Riverfront Superfund Site, New Haven, Missouri

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### INTRODUCTION

The U.S. Environmental Protection Agency (EPA) Region 7 has completed the investigation at two of six Operable Units (OUs) at the Riverfront Superfund Site in New Haven, Missouri. We have completed the investigations at the Front Street Site (OU1) and the Old City Dump Site (OU3).

This fact sheet presents an overview of the Remedial Investigation/Feasibility Study (RI/FS) for the Front Street Site. The RI is a detailed study which identifies the cause and extent of the contamination, and the possible threats to the environment and the people nearby. The FS details the options for cleaning up the site.

### SITE BACKGROUND

A metalworking business, a metal tent pole fabricator, a nursing home furniture manufacturer, and automotive fabrication and repair shops have all operated at the Front Street Building since the 1950s. Local accounts document that tetrachloroethylene (PCE) was repeatedly washed out through the south doors of the building.

### REMEDIAL INVESTIGATION (RI)

The RI activities included tree-core sampling, ground water sampling, soil sampling and bed-sediment/surface water

sampling in the Missouri River. Sampling results indicate that PCE is the major contaminant. Several other contaminants were found in addition to PCE. In particular, trichloroethylene, cis-1,2 dichloroethylene, and vinyl chloride were also detected. These three contaminants are the chemical breakdown products of PCE.

### RISK ASSESSMENT

The Missouri Department of Health and Senior Services conducted a Human Health Risk Assessment at the Front Street Site. The assessment evaluated the amount and types of human health risks that are present at this site. The risk assessment found that there are unacceptable health risks to people if they use the ground water at Front Street for drinking, cooking or bathing.

PCE contaminated soil was found to have health risks from future exposures.

An ecological risk assessment at the site found no increased risk to wildlife in the area from contamination.

### FEASIBILITY STUDY

The following cleanup options or remedial alternatives combine technologies to address both ground water and soil contamination at the Front Street Site. Alternatives are listed below. The first option addresses the ground water,

followed by the second option which addresses the soil.

Alternative 1-No Action/No Action. No remedial actions. The site would remain in its present condition. This alternative is a baseline alternative against which the effectiveness of the other alternatives can be compared and is required by federal regulation.

Alternative 2-Limited Action/Limited Action. Institutional controls would be used to address potential health risks associated with both the contaminated ground water and soils. Institutional controls may consist of deed and zoning restrictions, permits, and public education.

Alternative 3-Monitoring/Limited Action. Ground water monitoring and institutional controls would be used to address the potential health risks associated with the contaminated ground water. Ground water would be periodically tested to monitor contaminant levels. Institutional controls would be used to address contaminated soils.

Alternative 4-Monitoring/Limited Soil Excavation. Ground water monitoring, and institutional controls would be used to address the potential health risks associated with contaminated ground water. A limited amount of soil would be excavated. The contaminated soil would be taken off-site to an approved landfill. The excavated areas would be backfilled with clean soil.

Alternative 5-Hydraulic Containment and Monitored Natural Attenuation/Capping and Sheet Piling. Hydraulic containment, surface ground water treatment, monitored natural attenuation, and institutional controls would be used to address the potential health risks associated with contaminated ground water. Contaminated soils would be contained inside sheet piling and capped with asphalt.

Alternative 6-Ground water Extraction/Excavation and Off-site Disposal. Extraction wells, surface

ground waste treatment, and institutional controls would be used to address the potential health risks associated with contaminated ground water. Contaminated soils would be excavated and shipped to an approved landfill. The excavated areas would be backfilled with clean soil.

Alternative 7-In Situ Bioremediation/Excavation and On-Site Treatment. In situ bioremediation and institutional controls would be used to address the potential health risks associated with contaminated ground water. Contaminated soils would be excavated and treated on-site. After successful treatment of the contamination, treated soils would be used as clean backfill for the excavation.

Alternative 8-In Situ Physical Treatment/In Situ Treatment. Soil vapor extraction, air sparging technologies, and institutional controls would be used to address the potential health risks associated with the contaminated ground water and soils.

#### ADDITIONAL INFORMATION

EPA encourages community members to review the Remedial Investigation/Feasibility Study for the Front Street Site/OU 1 and the Old City Dump Site/OU3. This detailed information can be found in the Administrative Record File (a single file of all documents about the remedial action) for the Riverfront Superfund site. The Administrative Record File is available for public review at the following information repositories, during normal business hours:

New Haven Scenic Regional Library  
109 Maupin  
New Haven, Missouri

EPA Region 7 Records Center  
901 N. 5<sup>th</sup> Street  
Kansas City, Kansas

Riverfront Superfund Site website:  
<http://missouri.usgs.gov/epa/nh>

If you have questions about this fact sheet or need additional information, please contact:

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