CHAPTER 31

A PRELIMINARY ENVIRONMENTAL SITE INVESTIGATION FOR A BRIDGE OVER THE MISSISSIPPI RIVER AT MOLINE, ILLINOIS

C. Brian Trask
Illinois State Geological Survey, Environmental Site Assessments Section, 615 East Peabody Drive, Champaign, IL 61820

Abstract: A preliminary environmental site assessment along the alignment of I-74 and its bridge over the Mississippi River was completed by the Illinois State Geological Survey for the Illinois Department of Transportation in 2002. The purpose of the survey was to determine the presence of any environmental concerns, both natural and man-made, that the Illinois DOT might encounter during activities to build a new bridge to carry I-74 over the Mississippi River between Moline, IL, and Bettendorf and Davenport, IA. A preliminary investigation of the project area from 27th Street in Moline to 67th Street in Davenport, using government databases, Sanborn Fire Insurance Maps, city directories, and a drive-through of the project area, identified a total of 127 sites that were believed to constitute a possible risk to the project. Following reduction of the project to just the Illinois side of the river, further investigation was conducted of 37 sites in Moline. The location of the project in part of downtown Moline and long-time development along the Moline riverfront by industrial and commercial operations offered a variety of parcels for investigation, ranging from corner gasoline stations to railroads and foundry sites. The dominant sites comprised current or former underground storage tank and leaking underground storage tank sites, automotive repair sites, and foundries and other sites where metals were handled. Railroads, junk yards, cleaners, and spills made up the remainder of the sites investigated. During a limited subsurface investigation, heavy metals and volatile organic compounds indicative of petroleum were detected at several sites. Examples of some of these sites will be presented.

Key words: Environmental assessment; corridor assessment; transportation.
1. INTRODUCTION

This project, completed in 2002 by the Illinois State Geological Survey (ISGS) for the Illinois Department of Transportation (IDOT), consisted of a Preliminary Environmental Site Assessment (PESA) investigation of possible environmental problems at sites along the right-of-way (ROW) of a corridor for reconstruction of Interstate 74 (I-74) and construction of new bridges over the Mississippi River from Moline, IL, to Bettendorf and Davenport, IA. One of the bridges currently in place had been constructed prior to 1938 to carry U.S. Route 6 over the river, and the second was built in the 1960s during completion of I-74. The bridges are old and narrow and the sites of numerous accidents. The focus of this project was to identify all parcels along the Illinois side of the alignment for the highway (Fig.1) and approaches to the bridges that might contain environmental hazards of concern to the Illinois Department of Transportation. The objective of the study was to determine if any of the parcels proposed for acquisition or on which soil excavation was intended were sufficiently contaminated to require additional investigation by a commercial environmental consultant under contract to IDOT and to identify potential natural hazards that might have an impact on the proposed construction project.