

Army Recommends Land Use Controls at Two Polychlorinated Biphenyl Spill Areas (FLW-035) at Fort Leonard Wood, Missouri

August 12, 2010



U.S. Army Corps of Engineers
Kansas City District



Fort Leonard Wood
Directorate of Public Works -
Environmental Division

Introduction

The U.S. Department of Defense created the Installation Restoration Program to identify, assess, and clean up or control contamination from past hazardous waste disposal operations and hazardous material spills at Department of Defense facilities. The Installation Restoration Program is carried out in compliance with federal, state, and local laws and regulations.

As part of the Program, the Army, in partnership with the Missouri Department of Natural Resources, has performed an investigation. This investigation took place at the Directorate of Engineering and Housing Used Transformer Area 2222, 2221 and a second area adjacent to Building 2224 (FLW-035) at Fort Leonard Wood, Missouri.

FLW-035 consists of two separate locations. One area is a loading dock located between Buildings 2221 and 2222, and the second area is behind Building 2224 (Figure 1). Both areas are inside the Directorate of Public Works yard, in the northeastern part of Fort Leonard Wood.

History

The transformer storage area, located on the loading dock between Buildings 2221 and 2222, is a 100- by 75-foot concrete pad. Transformers were stored in this area while waiting on testing to determine the presence of polychlorinated biphenyls (PCBs). This continued until the mid-1980s, when Building 2398, the PCB storage building, was put into use. During the time the area was used for transformer storage, a spill occurred at the warehouse dock. The exact location was not clearly described in historical documentation.

The second area, behind Building 2224, had a spill that occurred in October 1983. The spill was from the transformer used there. The transformer was located on a concrete pad, roughly 4 feet square, surrounded by a grassy area. The pad is still present.

In October 1983, the affected areas from the two documented oil spills were cleaned with soap and water, and contaminated soil was remediated. Concrete blocks affected by the spill at the warehouse dock were also removed. There is no information available as to the depth

or volume of soil removed during remediation activities. Soil samples and wipe samples were collected at both spill locations during the remedial action in October 1983. Samples were analyzed for PCBs.

Results

Based on the results of the 1983 investigation, further sampling was deemed necessary at FLW-035 to establish the land use control boundaries around each spill area. In 2008, soil samples were collected around both spill areas and analyzed for PCBs.

Results from the 1983 and 2008 investigations were used to evaluate potential risks that the contaminants pose to human health and the environment. The results indicated that the contaminants pose unacceptable risks to future residents, assuming that the site would be used for residential purposes in the future. All identified risks were deemed acceptable for workers and construction workers. In addition, unacceptable ecological risks were not identified.

Because of potential risk to residents, the Army intends to establish land use controls prohibiting future residential land use within the northern and southern spill areas of FLW-035. LUC boundaries are shown in Figure 2. Following public review, concurrence with the Missouri Department of Natural Resources, and Army signature on the decision document, the Army will prepare a land use control implementation plan for FLW-035. The plan will define the LUC boundaries and explain how the LUCs will be implemented and monitored.

For Additional Information

Questions regarding FLW-035 may be addressed to the Fort Leonard Wood Public Affairs Office at 573-563-4015 or to Mark Lenox, Fort Leonard Wood Installation Restoration Manager, at 573-596-0882 or mark.lenox@us.army.mil. Additional information is also available at <http://dnr.mo.gov/env/hwp/fedfac/ffs-dod.htm#ftwood>.

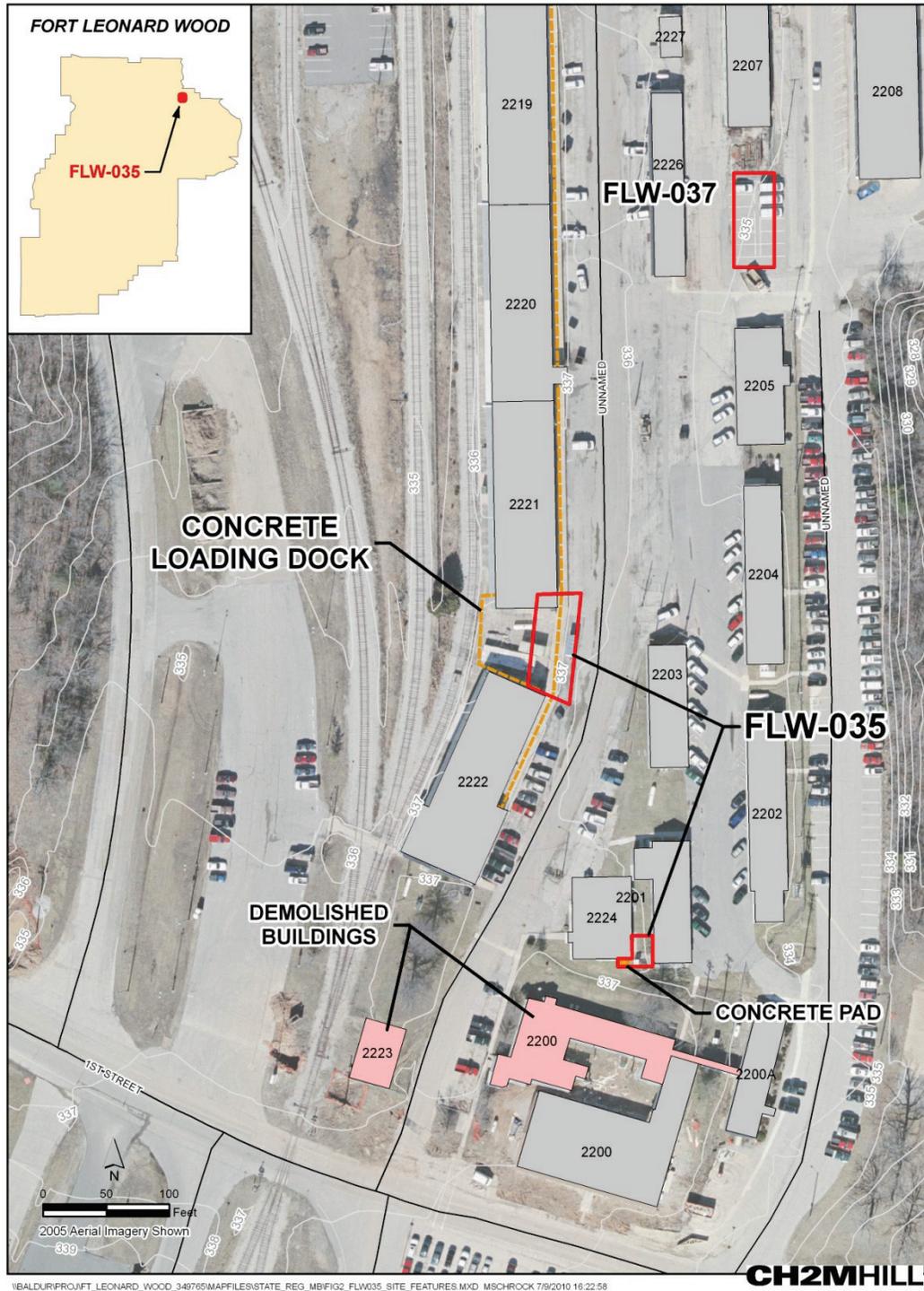


Figure 1. FLW-035, Directorate of Engineering and Housing Used Transformer Area 2222, 2221 and a Second Area Adjacent to Building 2224

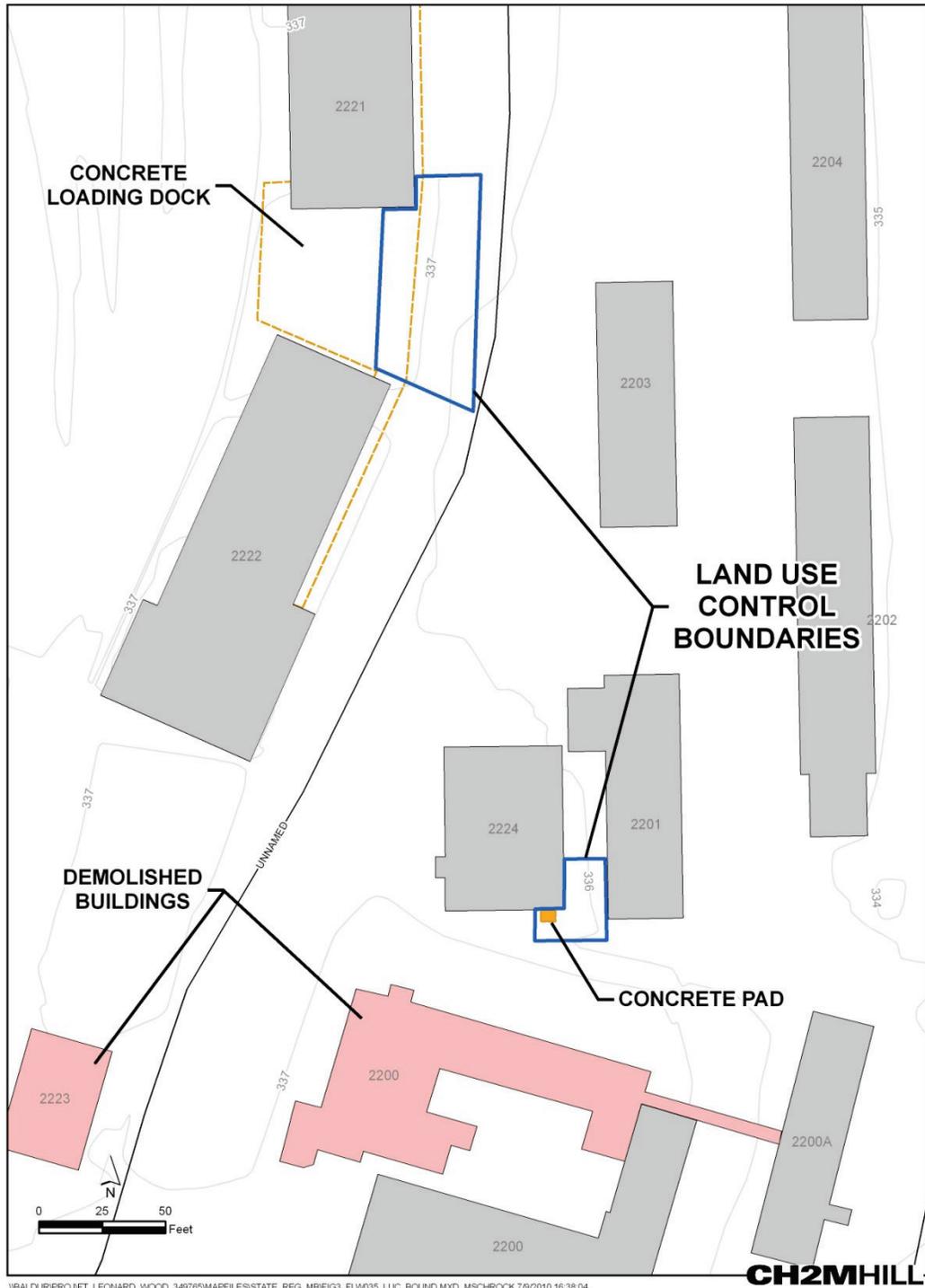


Figure 2. Proposed Land Use Controls at FLW-035