

The (Incomplete) History of Site Characterization and Remediation at the Cabot Carbon/Koppers Superfund Site, Gainesville, Florida

John Herbert

GeoHydro Consultants, 1204 NW 13th St., Gainesville, Florida 32605

ABSTRACT

The Cabot Carbon/Koppers Superfund site covers 140 acres in Gainesville, Florida and was the site of a wood retort/naval stores manufacturing facility and a wood treating facility, separated by a railroad track. The Cabot Carbon facility operated from the 1910s to the mid-1960s, while the Koppers facility operated from 1916 until 2009. dense non-aqueous phase liquid (DNAPL) is an issue at both sites.

The Environmental Protection Agency (EPA) placed the facilities on the NPL in 1984 and issued a single Record of Decision (ROD) for the two facilities in 1990. The 1990 conceptual model was a thin (20 ft thick) surficial aquifer overlying a massive, impermeable clay, with impacts at both sites being restricted to the surficial aquifer. Soil at the Cabot Carbon facility was remediated in 1994 by the potentially responsible party (PRP) to the satisfaction of the EPA. A groundwater interceptor drain began operation in 1995 and continues in operation today. Concentrations of dissolved constituents in the surficial aquifer declined dramatically. The remediated Cabot Carbon site was developed as a shopping center and was viewed as a poster child for how Superfund should work.

The site conceptual model was subsequently found to be deeply flawed with creosote DNAPL impacts being observed as deep as 120 ft below grade at the Koppers site. Dissolved impacts have been observed in the underlying Floridan Aquifer to depths of more than 200 ft at the Koppers site and more than 100 ft (the depth of investigation to date) at the Cabot site. EPA issued a new ROD in 2011 for the two sites.

This presentation will cover the history of characterization at this superfund site, the results of ongoing characterization at both sites, and the implementation of field-scale demonstration of permanganate injection slated to begin in the first quarter of 2014 at the former process area—a DNAPL source area—at the Koppers site.