

# Site Review And Update

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CABOT/KOPPERS

(a/k/a CABOT CARBON)

GAINESVILLE, ALACHUA COUNTY, FLORIDA

CERCLIS NO. FLD980709356

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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

Agency for Toxic Substances and Disease Registry

Division of Health Assessment and Consultation

Atlanta, Georgia 30333

## **Site Review and Update: A Note of Explanation**

The purpose of the Site Review and Update is to discuss the current status of a hazardous waste site and to identify future ATSDR activities planned for the site. The SRU is generally reserved to update activities for those sites for which public health assessments have been previously prepared (it is not intended to be an addendum to a public health assessment). The SRU, in conjunction with the ATSDR Site Ranking Scheme, will be used to determine relative priorities for future ATSDR public health actions.

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Prepared by:

The Office of Toxicology and Hazard Assessment  
Florida Department of Health and Rehabilitative Services  
Under Cooperative Agreement With  
The Agency for Toxic Substances and Disease Registry

## SUMMARY OF BACKGROUND AND HISTORY

The Cabot Carbon/Koppers Superfund site is located near the intersection of Northwest 23rd Avenue and North Main Street, Gainesville, Alachua County, Florida (Figure 1). This site consists of two portions: the Cabot Carbon Corporation which made naval stores and charcoal from pine stumps, on 49 acres on the east part of the site, and the Koppers Company, Inc. (now Beazer East, Inc.), which still conducts a wood treatment operation on 82 acres on the west part of the site.

Between 1945 and 1965, the Cabot Carbon Corporation (Cabot) distilled about 6000 gallons per day of crude wood oil and pine tar from pine tree stumps. Cabot discharged the pine tar containing wastewater to unlined surface impoundments. In 1967, Cabot sold the property to a local developer who drained the impoundments into an adjacent 50-acre wetland that drains into Springstead and Hogtown Creeks. Resulting environmental damage was detectable five miles downstream.

In the mid-1970s the property was sold to another developer who spread the remaining pine tar sludge over the site and built a shopping center. This developer constructed a stormwater retention pond in the location of one of the former surface impoundments. In 1977, the Florida Department of Environmental Regulation (now the Florida Department of Environmental Protection or DEP) surveyed Springstead and Hogtown Creeks and found them devoid of any life within 1.1 miles of the site.

In the late 1970s the ground water discharge into the ditch along North Main Street turned dark and had a phenolic smell. In 1985, Florida DEP diverted the contaminated water in this ditch to a wastewater treatment plant.

The Koppers Company, Inc. (Koppers) is an active wood treating facility that used creosote, pentachlorophenol, and copper-chromium-arsenic (CCA) to treat wooden utility poles. In the past, Koppers discharged wastewater to two unlined surface impoundments.

In 1983, the Environmental Protection Agency (EPA) listed both of these facilities together on the Superfund National Priorities List. The 1987 remedial investigation found contaminated soils at Koppers, contaminated ground water in the surficial aquifer, and contaminated surface water and sediments in the North Main Street ditch and Springstead Creek. These media contained elevated levels of arsenic, chromium, phenol, pentachlorophenol, naphthalene, polynuclear aromatic hydrocarbons, and benzene. In the 1990 Record of Decision (ROD), EPA and Florida DEP selected a combination of washing, bioremediation, and solidification/stabilization to remediate the soil. They also selected pretreatment with discharge to a wastewater treatment plant to remediate the ground water. Cabot and Beazer are now in the process of designing the soil and

ground water remediation systems.

In the 1960s and 1970s, area residents were concerned by the look and smell of Springstead and Hogtown Creeks. Nearby residents also complained of "toxic fumes" from the Koppers facility which reportedly caused reoccurring headaches, sore throats, nausea, burning eyes, and other illnesses. They were also concerned that the Florida Department of Transportation proposal to widen North Main Street would expose them to more site-related contaminants. They held meetings with government officials on June 28, 1984, and again on May 1, 1986.

In 1989, under a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR), the Florida Department of Health and Rehabilitative Services (HRS) prepared a health assessment (HA) report for this site. This report identified the following potential human exposure pathways:

1. Incidental ingestion of contaminated soil by trespassers.
2. Dermal absorption of contaminants in soil by trespassers.
3. Inhalation of contaminated dust by nearby residents.
4. Ingestion of contaminated ground water by nearby residents.
5. Dermal absorption of contaminants by nearby residents using contaminated ground water for bathing.
6. Incidental ingestion of contaminated surface water by nearby residents.
7. Dermal absorption of contaminants by nearby residents who come in contact with contaminated surface water.

This report identified arsenic, chromium, benzene, 2,4-dimethylphenol, and 4,6-dinitro-o-creosote as contaminants of concern. ATSDR and Florida HRS concluded that "This site is a potential health concern because of the potential risk to human health resulting from possible exposure to hazardous substances at concentrations that may result in adverse health effects." ATSDR and Florida HRS recommended:

1. Workers and shoppers be warned not to come in contact with contaminated soil or ground water.
2. The stormwater retention pond be posted and access restricted and additional warning signs be posted along the North Main Street ditch.
3. Background levels of contaminants in area soil and ground water be determined.
4. Additional samples of the surface water drainage from the Koppers facility be collected and analyzed.
5. Access to the Koppers facility be restricted.
6. Creosote waste drums at the Koppers facility be kept in the drum storage shed.
7. The potential for uptake and accumulation of site-related contaminants by plants and animals be investigated.
8. Soil, surface water, and ground water should be tested for

dichlorophenol, trichlorophenol, dioxins, and furans.

### CURRENT SITE CONDITIONS

On August 25, 1993, Randy Merchant and Carolyn Voyles of Florida HRS visited this site. They drove through the residential and commercial areas surrounding the site in addition to the shopping area on the Cabot portion of the site. HRS representatives did not go on the active portion of the Koppers site. They observed the following:

1. Single and multi-family houses were within 50 feet of the Koppers facility on the western boundary of the site.
2. Truck traffic on the unpaved portions of the Koppers facility generated dust.
3. Site access to the Koppers portion of the site appeared to be restricted.
4. There were no unusual odors along the western site boundary, but there was very little wind at the time.
5. There were no unusual odors from the ditch along North Main Street.
6. Access to the Cabot portion of the site was unrestricted.
7. There were no hazardous waste warning signs on either the Cabot or Koppers portions of the site.
8. There were no signs of construction on North Main Street.

There has been no remediation since the 1989 ATSDR/Florida HRS HA. Since then, however, the remedial investigation/feasibility study has been completed and the ROD has been signed. EPA found the concentrations of metals and semivolatile organic compounds in the air at Koppers in 1988 were below OSHA standards. Additional soil and ground water investigations have further defined the extent of contamination. Cabot and Koppers are nearing completion of the design for the soil and ground water remediation systems.

### CURRENT ISSUES

Since Florida DEP diverted the contamination in the North Main Street ditch to a wastewater treatment plant in 1985, the water quality in the Springstead and Hogtown Creeks has improved. Nearby residents no longer complain about the smell or appearance of these creeks. Since 1989, nearby residents have occasionally complained of odors from the Koppers facility and health effects related to exposure from Cabot and/or Koppers. One former worker is concerned that his multiple sclerosis was caused by inhalation of gases and/or contaminated dust from Koppers during the six years he worked at the automobile dealership on the Cabot portion of the site. He is also concerned that gases and/or contaminated dust from Koppers caused burning and blistering of his nose and mouth,

nose bleeds, redness of his eyes, and swelling of his eyelids. This former worker also asserts that contamination from Koppers has caused similar eye, nose, and mouth irritation; respiratory irritation; heart problems; cancers of the pancreas and lymph system; and Hodgkin's disease in other workers and nearby residents.

Nearby residents are concerned that their private wells and the municipal supply wells may be contaminated in the future. They are also concerned that the planned widening of North Main Street will expose them to more contaminants.

Due to extensive soil and ground water contamination, close proximity of residents, existence of a on-site shopping center, former worker health concerns, and the controversial widening of North Main Street, further evaluation of the site is needed.

### CONCLUSIONS

The conclusion in the 1989 ATSDR/Florida HRS HA that "This site is a potential health concern because of the potential risk to human health resulting from possible exposure to hazardous substances at concentrations that may result in adverse health effects" is still valid. That risk, however, is only "potential" based on "possible" exposures at concentration that "may" result in adverse health effects. We need to analyze the site data in more detail in order to make a more definitive assessment.

As with most hazardous waste sites, there are little or no historical data on which to base predictions of adverse health effects. Inhalation of contaminated dust and gases was a likely route of exposure in the past for nearby residents. There were, however, no air quality measurements prior to 1988. It is not possible to accurately predict health effects without some estimate of past inhalation exposures. Consumption of contaminated ground water does not appear to be a past exposure since private or public drinking water wells were not contaminated.

It may be possible, based on current soil concentrations, to estimate future exposure to nearby workers and residents via skin absorption of contaminants and inhalation of contaminated dust. The existing soil and air data should be reassessed to determine if future health effects from these exposures are likely.

### RECOMMENDATIONS

Most of the recommendations in the 1989 ATSDR/Florida HRS HA for additional sampling have been followed. The following recommendation, however, was not followed and is still valid:

1. Post hazardous waste warning signs around the stormwater retention pond and the North Main Street ditch, as required by

Florida Statutes 403.704 and 403.7255, and Florida DEP Rule 17-736.

Due to extensive soil and ground water contamination, close proximity of residents, existence of a on-site shopping center, former worker health concerns, and the controversial widening of North Main Street, we recommend a full public health assessment at this site as resources become available.

Health Activities Recommendation Panel Recommendations:

The data and information developed in this Site Review and Update have been evaluated to determine if follow-up actions may be indicated. Further site evaluation is needed to determine appropriate public health actions.



## DOCUMENTS REVIEWED

Florida HRS reviewed the following documents for this update:

1. Environmental Protection Agency. Record of Decision, Summary of Remedial Alternative Selection for the Cabot Carbon/Koppers Superfund Site, Gainesville, Florida. October 1990.
2. Agency for Toxic Substances and Disease Registry. Health Assessment for the Cabot Carbon/Koppers Site. April 24, 1989.
3. Florida Department of Environmental Protection. Cabot Carbon/Koppers Corporation Site Status Report. February 2, 1993.
4. Environmental Protection Agency. Superfund: Progress at National Priority List Sites, Florida 1992 Update, December 1992. EPA/540/R-93/009.
5. Roy F. Weston, Inc. Risk Assessment, Northeast Lagoon, Cabot Carbon/Koppers Superfund Site. Prepared for Cabot Corporation, February 1993.
6. Roy F. Weston, Inc. Hydrogeological Investigation, Surface Water Body Area, Eastern Portion - Cabot Carbon/Koppers Superfund Site. March 31, 1993.
7. McLaren/Hart Environmental Engineering Corporation. Site Characterization Data Report for the Initial Soil and Ground Water Remedies, Cabot Carbon/Koppers Superfund Site. Prepared for Beazer East, Inc., April 1993.

Preparer of this report: E. Randall Merchant, M.S.  
Biological Administrator  
Toxicology and Hazard Assessment  
Florida HRS

# CABOT CARBON/ KOPPERS SITE LOCATION MAPS

FIGURE 1



