COMMUNITY INVOLVEMENT PLAN

CABOT CARBON/KOPPERS SUPERFUND SITE GAINESVILLE, FLORIDA

NOVEMBER 2017



U. S. ENVIRONMENTAL PROTECTION AGENCY REGION IV

Approved by: abena ajanate

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THE U. S. ENVIRONMENTAL PROTECTION AGENCY'S (EPA)

SUPERFUND COMMUNITY INVOLVEMENT PROGRAM IS COMMITTED

TO PROMOTING COMMUNICATION BETWEEN CITIZENS AND THE AGENCY.

ACTIVE PUBLIC INVOLVEMENT IS CRUCIAL TO THE SUCCESS OF ANY PUBLIC PROJECT.

EPA'S COMMUNITY INVOLVEMENT ACTIVITIES AT THE

CABOT CARBON/KOPPERS SUPERFUND SITE

ARE DESIGNED TO

INFORM THE PUBLIC OF THE NATURE OF THE ENVIRONMENTAL ISSUES ASSOCIATED WITH THE SITE,

INVOLVE THE PUBLIC IN THE DECISION-MAKING PROCESS THAT WILL AFFECT THEM,

INVOLVE THE PUBLIC IN THE RESPONSES UNDER CONSIDERATION TO REMEDY THESE ISSUES, AND

INFORM THE PUBLIC OF THE PROGRESS BEING MADE TO IMPLEMENT THE REMEDY.

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Section 1.0 Overview of the Community Involvement Plan

The United States Environmental Protection Agency (EPA) developed the Community Involvement Plan (CIP) to serve as a framework for community involvement and outreach efforts associated with the Cabot Carbon Koppers Superfund Site (the Site). The CIP addresses the relationship between the Site, the community, and EPA; provides a background of the community; presents EPA's community involvement program; and provides a listing of resources. The goals of the CIP are to inform the public of planned and ongoing Site activities; maintain open communication about Site remediation; ensure that concerns are acknowledged and addressed; provide interested parties with useful information; provide citizens with opportunities to comment on and be involved in technical decisions; and encourage and assist local citizens in providing input to agency decisions that will have long-term effects on the community. Information discussed during community interviews and Site documents are both essential elements in developing the CIP.

The CIP is revised as community concern warrants or at minimum, every three years until Site activities have been concluded. The revision process includes conducting additional community interviews, updating mailing lists, investigating the designated repository, and updating the contacts and resources provided in the Appendices of the CIP. The purpose of the revision process is to ensure that both previous and current needs and expectations specified by the community are acknowledged.

Section 2.0 Capsule Site Description

2.1 Site History

In 1916, a carbon and wood-treating facility began operation at the Site. The Site is located at Main Street and 23rd Avenue in Gainesville, a town in Alachua County, Florida. Soil and groundwater contamination at the Site was discovered in the mid-1980's by the Florida Department of Environmental Protection. An initial remedial investigation feasibility study was conducted by Cabot Carbon and Beazer East, the Koppers Site responsible party. The initial Record of Decision was issued in 1990.

The Site is made up of two properties, the Cabot Carbon property and the Koppers property. The Koppers property includes the area where a wood-treating facility operated between 1916 and 2009. The Cabot Carbon property includes the area where a charcoal and resin production facility operated. The EPA placed the Site on the Superfund Program's National Priorities List (NPL) in 1984 because of contaminated soil and groundwater.

In 1990, the EPA issued a cleanup plan for the Site. This plan included digging up and treating contaminated soil from the Koppers area of the Site. It also included placing institutional controls on the Cabot area of the Site. Lastly, the plan included treating groundwater and sampling groundwater and surface water.

In 1994, Cabot Carbon dug up and removed contaminated soil and sediment from the Cabot Carbon area of the Site. Later in 1994, Cabot Carbon built a groundwater interceptor trench system on the Cabot Carbon area of the Site on North Main Street and intercepts contaminated groundwater from the shallow aquifer and discharges it to the local publicly owned treatment plant. This groundwater interceptor trench has removed over 500 million gallons of groundwater since installation. In 2011, Cabot Carbon removed 116 tons of contaminated sediment from Hogtown and Springstead Creeks impacted by waste discharge from operations on the Cabot Carbon area of the Site.

In 1995, Beazer East constructed and operated a groundwater pump and treat system that extracted groundwater from the Surficial aquifer initially and later was upgraded to extract contaminated groundwater from the Upper Floridian aquifer as well. This groundwater pumpand-treat system has pumped and treated 392 million gallons of water from the Surficial and Upper Floridian aquifer. A portion of the treated groundwater is used to irrigate the Site vegetation. Beazer East installed and sampled two sentinel wells between the Koppers area of the Site and the Gainesville Regional Utility (GRU) Murphee Wellfield. GRU sampling of groundwater at the Murphee Wellfield has shown no detections of Site contaminants there at the Murphee Wellfield. In 2011, PRPs finished tearing down and removing all former facility structures from the Cabot Carbon area of the Site. Beazer East also completed storm water system improvements, added crushed rock to roads at the Site and planted grass over a large portion of the Site to control dust. In February 2011, the EPA issued the Record of Decision Summary of Remedial Alternative Selection, a second cleanup plan for the Site. This plan finalized cleanup activities for both the Koppers and Cabot Carbon areas of the Site and revised requirements in the 1990 ROD.

In May 2011, Beazer East submitted a work plan for carrying out a full-scale in-place geochemical stabilization (ISGS) demonstration in the former Process Area in the Upper Hawthorn aquifer. ISGS injections took place in March 2014 with promising initial results. The EPA anticipates submittal of a solidification stabilization pilot test work plan in the near future to address source area contamination in the former North Lagoon and Drip Track source areas. Cabot Carbon submitted a work plan for outlining possible Site-related contaminants in groundwater of the Hawthorn Group in early 2011. The EPA approved this work plan. Cabot implemented the plan in September 2011. Results showed contamination of Hawthorn Group standards included in the 2011 ROD. Cabot is required to remediate the contaminated groundwater using in-place treatment technology.

The EPA and Beazer East entered into an agreement in July 2013, requiring Beazer East to design and implement the selected remedy at the Koppers portion of the Site. These activities have already begun at both the Koppers and Cabot Carbon portions of the Site. Beazer East completed the offsite soils remediation in November 2014. 103 residential structures and seven commercial buildings, four vacant lots, and the Genesis Preparatory School had contaminated soils removed and replaced with clean soils, as well as new landscaping installed. The treatment of contaminated groundwater using in-situ geochemical stabilization (ISGS) injections has begun at the Koppers Process Area in both the Surficial and Hawthorn aquifers.

The EPA is basing the groundwater cleanup on EPA FDEP drinking water Maximum Contaminant Levels (MCLs) and has selected default Florida risk-based corrective action soil cleanup levels and default EPA FDEP sediment levels adjusted for background for sediment cleanups.

The treatment of contaminated groundwater using in-situ geochemical stabilization (ISGS) injections was completed in September 2015 in the Koppers Process Area in both the Surficial and Hawthorn aquifers. ISGS injections are scheduled to begin in the Koppers South Lagoon Area in 2017 in the same aquifers. Vertical barrier wall installation is also scheduled to take place in 2017 as well as sediment removal from a drainage ditch leading to Springstead Creek.

EPA completed the last Five-Year Review in March 2016. EPA plans to complete the next Five-Year Review in 2021.

2.2 Site Description/Location

The 136-acre Site is located at Main Street & 23rd Avenue, Gainesville, Florida 32601. Gainesville is located within Alachua County. The Site is about one mile east of U.S Highway 441. The Koppers area covers 86 acres on the western side of the Site, and the Cabot Carbon area covers 50 acres on the eastern side of the Site.

Specific by-products detected on the Koppers portion of the Site include creosote, pentachlorphenol, and copper-chromium-arsenic (CCA). Two wastewater ponds, a former cooling pond process area, and a drip track area were identified in this portion of the Site. Investigations performed at Koppers in the 1980s revealed soil and groundwater contamination on-Site.

Single family and multiple family residential properties are located to the immediate west of the Site and commercial facilities border the southern and eastern portions of the Site along Northwest 23rd Avenue and North Main Street. The Stephen Foster Neighborhood is the closest neighborhood to the Site.

Businesses and apartments border the Site to the north and south. Undeveloped land borders the Site to the east and single-family homes border the Site to the west. The City of Gainesville's Public Works Compound and Springstead Creek are located northwest of the Site. A shopping mall, car dealerships and several other businesses also currently operate on the Cabot Carbon portion of the Site.

The Suwannee River Water Management District listed the Site and nearby surrounding area as a groundwater delineation area. This means all wells put in the area need the District's approval. The Site is also located within the Alachua County Murphee Wellfield Protection Zone, which restricts installation of groundwater wells. A portion of the Cabot Koppers Site is currently in commercial reuse.





Figure 2: Detailed Site Map



Figure 3: Institutional Control Base Map

Figure 4: State Map



2.3 Site Inspections and Cleanup Activities

Beazer East, Inc. and Cabot Carbon Corporation are the Site's potentially responsible parties (PRPs) and are responsible for cleanup activities. The EPA and FDEP provide oversight. Both responsible parties have investigated Site conditions and have taken steps to clean up the Site, in order to protect people and the environment from contamination. Residences and businesses are connected to the public water supply by a waterline.

Risks and pathways addressed by the cleanup include health risks from people ingesting or touching contamination in groundwater, soil, and sediment. Contamination resulted from waste handling practices at the Site. The contaminants identified as Site-related include arsenic polycyclic aromatic hydrocarbons (PAHs), dioxin, and creosote compounds. For a complete list of the contaminants of concern at the Site please see Table A.

Table A: Identified Site Contaminants of Concern

CONTAMINANT	IDENTIFIED MEDIA	CONTAMINANT	IDENTIFIED MEDIA	
1-METHYLNAPHTHALENE	GW*	COPPER	SOIL	
2,4-DIMETHYLPHENOL	GW, SOIL, SW**	DIBENZO(A,H) ANTHRACENE	SOIL	
2,4-DINITROTOLUENE	SOIL	DIBENZOFURAN	GW	
2-CHLORONAPHTHALENE	SOIL	ETHANOL	GW	
ACENAPHTHENE	GW, SOIL, SW	ETHYLBENZENE	GW	
ACENAPHTHYLENE	GW, SOIL	FLUORANTHENE	GW, SOIL	
ANTHRACENE	GW, SOIL	FLUORENE	GW, SOIL, SW	
ARSENIC	GW, SOIL	INDENE	GW, SW	
BENZENE	GW	INDENO(1,2,3-CD)PYRENE	SOIL	
BENZO(B)FLUORANTHENE	GW, SOIL	NAPHTHALENE	GW, SOIL, SW	
BENZO(GHI)PERYLENE	SOIL	PAH	SOIL	
BENZO(K)FLUORANTHENE	GW, SOIL	PAHs (POLYCYCLIC AROMATIC HYDROCARBONS)	GW, SOIL	
BENZO[A]ANTHRACENE	GW, SOIL	PENTACHLOROPHENOL	GW, SOIL	
BENZO[A]FLUORANTHENE	GW	PHENANTHRENE	GW, SOIL	
BENZO[A]PYRENE	SOIL	PHENOL	GW, SOIL, SW	
BIS(2- ETHYLHEXYL)PHTHALATE	GW, SOIL, SW	PYRENE	GW, SOIL	
CAMPHOR	GW, SOIL, SW	VOC	GW, SW	
CARBAZOLE	GW			
CHROMIUM	GW, SOIL, SW	**SW represents Surface Water		
CHRYSENE	SOIL			

Groundwater monitoring by Cabot Carbon and Beazer East is on-going to address the required remedial design and remedial action in the Surficial, Hawthorn, and Upper Floridian aquifers. The EPA negotiated legal agreements with the Site's PRPs to investigate and clean up the Site. The PRPs continue to fund Site cleanup, monitoring and oversight activities.

The parties responsible for Site contamination performed the Site cleanup. Cleanup activities included removal and treatment of contaminated soil, groundwater treatment and removal of contaminated soil from homes. The EPA, state and local government, responsible parties and local developers are working together to successfully clean up the Site. This collaboration also led to beneficial reuse of the Site.

The EPA. FDEP and PRPs continue to protect people and the environment from Site contamination by treating groundwater, testing soil, conducting cleanup activities and undertaking Five-Year Reviews.

The EPA is engaging the impacted community to build relationships and to assess concerns of stakeholders. Information from the community and stakeholders is required for the development of the Community Involvement Plan (CIP). The EPA community involvement personnel will establish a timeline for future interactions and coordinate with stakeholders to help build their capacity.

The EPA has directed the responsible parties Beazer East (Koppers) and Cabot Carbon to treat contaminated soils, sediments, groundwater, and surface water through the 1990 Record of Decision (ROD) and through an updated ROD in 2011. The Site is currently undergoing remedial design and remedial action.

Table B: Superfund Cleanup Process

Event	Complete?	Description
PA/SI		Preliminary Assessment/Site Inspection Investigations of site conditions. If the release of hazardous substances requires immediate or short-term response actions, these are addressed under the Emergency Response program of Superfund.
NPL Listing		National Priority List (NPL) Site Listing Process A list of the most serious sites identified for possible long-term cleanup.
RI/FS		Remedial Investigation/Feasibility Study (RI/FS) Determines the nature and extent of contamination. Assesses the treatability of site contamination and evaluates the potential performance and cost of treatment technologies.
ROD		ROD Explains which cleanup alternatives will be used at NPL sites. When remedies exceed 25 million, they are reviewed by the National Remedy Review Board.
RD/RA	18	Remedial Design/Remedial Action (RD/RA) Preparation and implementation of plans and specifications for applying site remedies. The bulk of the cleanup usually occurs during this phase. All new fund-financed remedies are reviewed by the National Priorities Panel.
Construction Completion		Construction Completion Identifies completion of physical cleanup construction, although this does not necessarily indicate whether final cleanup levels have been achieved.
Post Construction Completion		Post Construction Completion Ensures that Superfund response actions provide for the long- term protection of human health and the environment. Included here are Long-Term Response Actions (LTRA), Operation and Maintenance, Institutional Controls, Five-Year Reviews, Remedy Optimization.
NPL Delete		NPL Deletion Removes a site from the NPL once all response actions are complete and all cleanup goals have been achieved.
Reuse		Site Reuse/Redevelopment Information on how the Superfund program is working with communities and other partners to return hazardous waste sites to safe and productive use without adversely affecting the remedy.

Section 3.0 Community Background

3.1 Community Profile

Gainesville is the largest city and the county seat of Alachua County, Florida. The Koppers and Cabot Carbon properties cover approximately 136 acres together. The Site is located in the northern portion of the city of Gainesville.

Gainesville serves as the cultural, educational, and commercial center for the North Central Florida Region. Gainesville is home to Florida's largest and oldest university. The University of Florida and Shands Hospital at the University of Florida are the leading employers in Gainesville.

Gainesville has a Council Manager form of government which means the Mayor and City Commission make policy decisions; and the staff, led by the City Manager, implements these decisions.

The local Site repository is located at the Alachua County Library. Meeting locations in the area include Stephen Foster Elementary School, Santa Fe College Board Room, and Eastside Community Center.

Demographics and information: Gainesville, FL via 2015 City-Data Census

Population: 128.460

Gainesville median age: 26 years

Florida median age: 41.8 years

Gainesville estimated median household income in 2015: \$34,313

Gainesville estimated per capita income in 2015: \$19.870

Race/Ethnic Background:

White: 56.6% | Black: 22.7% | Hispanic: 9.4% | Asian: 8.6% | Two or more races: 3.7% | Native American: 0.4%

Education:

High school graduate or higher: 91.9%

Bachelor's degree or higher: 44.6%

Graduate degree or higher: 21.2%

EJSCREEN Report (Version 2017) 1-mile Ring Centered FLORIDA, EPA Region 4 Approximate Population: 8,617 Input Area (sq. miles): 3.14 Cabot/Koppers Site

Figure 5: EJ Screen Map



Selected Variables	Value	State Average	Percentile in State	EPA Region Average	Percentile in EPA Region	USA Average	Percentile in USA
Demographic Indicators							
Demographic Index	54%	41%	71	38%	75	36%	76
Minority Population	48%	44%	59	37%	67	38%	66
Low Income Population	59%	38%	83	39%	82	34%	85
Linguistically Isolated Population	5%	7%	61	3%	78	5%	71
Population with Less Than High School Education	5%	13%	24	14%	21	13%	27
Population under Age 5	5%	6%	52	6%	46	6%	43
Population over Age 64	7%	19%	14	15%	15	14%	19

3.2 History of Community Involvement

The EPA has led many community involvement activities to engage the community input. The activities also ensure the public remains informed about Site actions throughout the cleanup process. Outreach efforts have included public notices, community interviews and information meetings. (Ongoing) The EPA initially awarded a Technical Assistance Grant (TAG) to the Protect Gainesville's Citizens (PGC). Inc. organization to help the community participate in the Site decision-making process. The group worked with advisors to interpret and help the community understand technical information about the Site. PGC, Inc. chose not to pursue an additional TAG in 2015. EPA is now working with the Stephen Foster Neighborhood Association as a Community Advisory Group (CAG) and awarded a contract to the Water and Air Research to conduct community involvement, technical evaluations, and outreach efforts on behalf of the community

The City of Gainesville (COG), Gainesville Regional Utilities (GRU), Alachua County Environmental Protection Department (ACEPD), and Water and Air Research provide technical representatives to participate in the Local Intergovernmental Team with EPA and FDEP in evaluating and making recommendations on the Site remedial design and action work plans. EPA conducts monthly conference calls with technical representatives of GRU, ACEPD, COG, FDEP, and the Site responsible parties Beazer East and Cabot Carbon. Below is a list of some of the outreach activities that have been conducted to date:

- October 1988: EPA issued a fact sheet that provided a brief background and history of the Site and described the Remedial Investigation Feasibility Study process.
- March 1989: EPA issued a Community Relations Plan.
- August 1990: EPA sent out a fact sheet to the community announcing the Proposed Plan. The fact sheet explained the purpose of the Proposed Plan and it announced the August 14th public meeting to discuss the Proposed Plan.
- April 1994: EPA issued a fact sheet announcing the completion of the Site Remedial Design.
- March 2001: EPA completed the First FYR which included notifying the community through a newspaper public notice and community interviews.
- April 2001: EPA issued a Proposed Plan fact sheet announcing a ROD Amendment. It provided an opportunity for the public to attend a public meeting and to comment on the proposed amendment.
- April 2006: EPA completed the Second FYR which included notifying the community through a newspaper public notice and community interviews.
- June 2010: EPA issued a fact sheet which provided an update on the cleanup of the Site (See attached).
- September 2010: EPA issued a Proposed Plan Follow-up Preferred Remedy fact sheet. It provided a brief Site summary, addressed specific components of the preferred remedy, discussed community concerns related to remedial activities and announced an upcoming Availability Session that was held October 2010 (See attached).
- October 2010: Koppers Community Involvement Plan.
- March 2011: EPA completed the Third FYR which included notifying the community through a newspaper public notice and community interviews.

- May 2011: EPA revised the Community Involvement Plan.
- July 2015: EPA contractors performed community interviews to get their concerns and answer their questions about the Site.
- March 2016: EPA completed the Fourth FYR which included notifying the community through a newspaper public notice and community interviews.
- January 2017: EPA representatives attended the Stephen Foster Neighborhood Association public meeting and provided an update of remediation of the Site and an overview of the College Underserved Community Partnership Program (CUPP). See Appendix J for a description of CUPP.

The community has played an active role in presenting their concerns regarding the remedial action to the public. The local media has played an integral part in educating the community on the Site-related activities.

3.3 Key Community Concerns

In 2015, six Alachua County residents were interviewed to document any perceived problems or successes with the remedies that have and continue to be implemented at the Site. The results of these interviews are summarized below.

- 1. Most residents expressed that the Site's remedy in effect was efficient.
- 2. Continue to ensure that residents receive more EPA based information such as monthly phone calls, face-to-face contact, and PRP-based information, as most residents are still requesting information from the EPA.
- 3. Continue to ensure that Koppers and Cabot Carbon have a similar cleanup process, as residents expressed that the Cabot Carbon cleanup process was slower, and residents expressed that they were not comfortable with the reuse of Cabot Carbon.
- 4. Ensure that odors emanating from the lift station cease as an industrial hygiene worker was exposed to the odor. An ambient air quality assessment was performed and indicated that the levels were below Occupational Safety and Health Administration (OSHA) standards as well as the EPA ambient air quality standards.
- 5. Continue to allow residents to express interest in participating in strategies to help with redevelopment options for Koppers.
- 6. Continue to keep residents aware of any remediation during cleanup on the Site.
- 7. Ensure that the EPA continues to always include city and county officials in discussion and review of documents, and continue to recommend members of the community to become more involved with a focus on the Superfund process.

- 8. Ensure that the percentage of human health and ecological impacts of contamination caused by the Site, regarding dioxins and PAH compounds, remain monitored.
- 9. Ensure that attention is placed on preventing downward migration of Non Aqueous Phase Liquid (NAPL) and or dissolve phase contamination, since there's a possibility of it leaking into Floridian aquifer.

3.4 Response to Community Concerns

The EPA is adding a barrier to surround the Koppers area. The vertical barrier wall will contain the four former source areas at the former Koppers Site, and is being done with a planned construction date of mid-2018. In-Situ Geochemical Stabilization (ISGS) injections will occur in the former South Lagoon during the 2018 timeframe.

3.5 Summary of Communication Needs

Based on the community interviews, most residents would like to receive more information directly from the EPA via phone calls, face-to face contact, and PRP-based information.

Section 4.0 EPA's Community Involvement Program

The overall goal of the EPA's community involvement program is to promote two-way communication between citizens and the EPA and to provide opportunities for meaningful and active involvement by the community in the cleanup process. The EPA will implement the community involvement activities described below. The following plan is based on the results of the community interviews described earlier. The plan addresses each issue that was identified as important to the community.

4.1 The Plan

Issue 1: Keeping the public informed and up to date.

Activity 1A: Designate an EPA Community Involvement Coordinator (CIC).

- Objective: To provide a primary liaison between the community and the EPA, and to ensure prompt, accurate, and consistent responses and information dissemination about the Site. In those instances, where the EPA's CIC may be unable to provide adequate information (such as on technical issues), inquiries will be directed to the appropriate EPA contact.
- Method: The EPA will designate an EPA CIC to handle Site inquiries and serve as a point of contact for community members. The CIC is appointed by the EPA Region 4. Abena Ajanaku is the EPA CIC assigned to the Cabot Carbon Koppers Site. She will work closely with Scott Miller, the EPA's Remedial Project Manager for the Site.
- Timing: The CIC, Abena Ajanaku, became actively involved in 2016.

Activity 1B: Prepare and distribute Site fact sheets and technical summaries.

- Objective: To provide citizens with current, accurate, easy-to-read, easy-to-understand information about the Site.
- Method: Fact sheets will be mailed to all parties on the Site mailing list. In addition, copies will be available at the information repositories (See Appendix H) and other locations as identified by the community.
- Timing: The EPA will prepare and distribute fact sheets on an as needed basis.

Activity 1C: Provide a toll-free "800 number" for the community to contact EPA.

- Objective: To enable citizens to obtain the latest information available whenever they want, rather than having to wait for a meeting or a fact sheet, and without incurring any cost.
- Method: The EPA will activate the 800 number and publish the number periodically in the local papers and in all fact sheets.
- Timing: The toll free number is currently operational (1-877-718-3752).

Activity 1D: Maintain a mailing list for the Site.

- Objective: To facilitate the distribution of Site specific information to everyone who needs or wants to be kept informed about the Site.
- Method: The EPA will create a mailing list that includes all residences adjacent to the Site, in known or suspected paths of migration, or those otherwise affected by the Site. The EPA will also solicit interested parties via fact sheets, newspaper articles, public meetings, public availabilities, etc.
- Timing: The EPA has developed a Site Mailing List and an e-mail list, which will be updated as needed.

Activity 1E: Establish and maintain Information Repositories.

- Objective: To provide a convenient location where residents can go to read and copy official documents and other pertinent information about the Site and EPA activities.
- Method: The repository is a reference collection of Site information containing the Administrative Record file, other Site-specific information, the Community Involvement Plan, information about the Technical Assistance Grant program, and the general Superfund process. The designated repositories are accessible to the physically challenged, will have copier facilities, and will be available to residents during normal business hours and at least some evening and or weekend hours. Additional repositories may also be established, including one at the EPA Region 4 offices located in Atlanta, Georgia.
- Timing: The EPA established the local repositories at the Alachua County Library, 401 E. University Avenue Gainesville, FL 32601 and the Region 4 EPA, 61 Forsyth Street, SW, Atlanta, Georgia 30303. The EPA adds new documents as they become available.

Activity 1F: Provide Site information on the Internet.

- Objective: To provide key resources for searching and listing both general and specific information pertaining to Superfund and hazardous waste issues.
- Method: A Site Status Summary for this https://www.epa.gov/superfund/cabot-koppers
 - EPA Headquarters: <u>http://www.epa.gov</u>
 - EPA Region 4: <u>https://www.epa.gov/aboutepa/about-epa-region-4-southeast</u>
 - EPA Region 4: 61 Forsyth Street Atlanta, GA 30303
- Timing: Site Status summaries are periodically updated.

Activity 1G: Provide Technical Assistance Grant (TAG) information.

- Objective: To provide resources for community groups to hire technical advisors to assist them in interpreting technical information about the Site
- Method: The EPA will provide information about the TAG program at public meetings and in fact sheets. The EPA will also provide briefing sessions to interested groups if requested. The EPA will provide TAG applications to qualified groups.
- EPA awarded TAG to Protect Gainesville's Citizens, Incorporated in June 2010. It is presently inactive.

Activity 1H: Establish and maintain the Administrative Record.

- Objective: To provide residents with a paper trail of all documents, resources, etc. used by the Remedial Project Manager and Site Team to make decisions about the Site and its cleanup.
- Method: The EPA will provide at least two sets of the Administrative Record for the Site; one in the EPA Region 4 offices located at 61 Forsyth Street SW Atlanta, GA 30303 and one located in the local Information Repository, the Alachua County Library.
- Timing: After the last ROD has been signed. It was signed in 2011.

Issue 2: Provide adequate and meaningful opportunities for community involvement.

Activity 2A: Hold public meetings.

- Objective: To update the community on Site developments and address community questions, concerns, ideas and comments.
- Method: Refer to Appendix G for suggested meeting locations. The EPA will schedule, prepare for, and attend all announced meetings. The EPA will provide at least two weeks^{*} prior notice of the scheduled meeting. The Regional Project Manager, Community Involvement Coordinator, and other appropriate EPA staff will attend.
- Timing: EPA will hold public meetings as appropriate.

Activity 2B: Encourage formation of a Community Advisory Group (CAG).

- Objective: To provide citizens with a meaningful way to become actively involved, and to provide the Site Team with a viable means of learning citizen concerns and attitudes.
- Method: The EPA will encourage the formation of a CAG and provide support as appropriate to facilitate its formation. If a CAG is formed, the EPA will provide administrative support but will not be an active member.
- Timing: The Stephen Foster Neighborhood Association is a CAG.

Activity 2C: Make informal visits to community.

- Objective: To help keep community members informed about the Site, while providing the EPA with feedback about Site activities and the community's opinions.
- Method: The EPA will establish a presence in the community through informal, often unscheduled visits to talk spontaneously with local residents.
- Timing: Throughout the entire cleanup process.

Activity 2D: Solicit comments during a Public Comment Period.

• Objective: To give community members an opportunity to review and comment on various EPA documents. This provides the citizens with meaningful involvement in the process and also provides the Site Team with valuable information for use in making decisions.

- Method: The EPA will announce each comment period separately. Announcements will appear in local newspapers and EPA fact sheets; they will include particulars on duration, how to make comments, where to submit comments, etc. The EPA may solicit comments pertaining to public documents such as the CIP, preliminary findings, etc.
- Timing: Comment periods will be announced as appropriate.

Activity 2E: Revise the Community Involvement Plan (CIP).

- Objective: To identify and address community needs, issues, or concerns regarding the Site or the cleanup remedy that are not currently addressed in this CIP.
- Method: The Revised CIP will update the information presented in the previous version of the CIP.
- Timing: The EPA will revise the CIP as community concern warrants or at least every three years until the Site is closed out. It has been decided that this CIP will be reviewed and considered for revision every six months from the release date(s).

4.2 Time Frame Summary for Community Involvement Activities

ACTIVITY	TIME FRAME
Designate an EPA Community Involvement Coordinator (CIC)	Designated; Abena Ajanaku
Prepare and distribute Site fact sheets and technical summaries	As needed
Provide a toll-free "800 number" for the community to contact EPA	Currently in operation
Maintain a mailing list for the Site	Ongoing
Establish and maintain Information Repositories	Established, update as needed
Provide Site information on the Internet	Currently available; update as needed
Provide Technical Assistance Grant (TAG) information	As needed
Establish and maintain the Administrative Record	Established, update as needed
Hold public meetings	As needed
Encourage formation of a Community Advisory Group (CAG)	Ongoing
Make informal visits to community	As needed
Solicit comments during a Public Comment Period	As needed and required
Revise the Community Involvement Plan (CIP)	As needed, at least every 3 years

Appendix A EPA Regional Contacts

Scott Miller Remedial Project Manager U.S. EPA, Region 4 61 Forsyth Street SW Atlanta, GA 30303 (404) 562-8819 <u>Miller.scott@epa.gov</u> Abena Ajanaku Community Involvement Coordinator U.S. EPA, Region 4 61 Forsyth Street SW Atlanta, GA 30303 (404) 562-8819 Ajanaku.abena@epa.gov

Appendix B Local Officials

<u>Mayor</u>

Lauren Poe 200 East University Avenue Gainesville, FL 32601 (352) 334-5000 Poelb@cityofgainesville.org

City Commissioners

Helen Warren (Commissioner at-large) 200 East University Avenue Gainesville, FL 32601 (352) 334-5000 Warrenhk@cityofgainesville.org

Harvey Budd (Commissioner at-large) 200 East University Avenue Gainesville, FL 32601 (352) 334-5000 Buddhm@cityofgainesville.org

Charles Goston (District I) 200 East University Avenue Gainesville, FL 32601 (352) 334-5000 GostonCE@cityofgainesville.org Harvey Ward (District II) 200 East University Avenue Gainesville, FL 32601 (352) 334-5000 Wardhl@cityofgainesville.org

David Arreola (District III) 200 East University Avenue Gainesville, FL 32601 (352) 334-5000 <u>Areolladi@cityofgainesville.org</u>

Adrian Hayes-Santos (District IV) 200 East University Avenue Gainesville, FL 32601 (352) 334-5000 Hayessantosa@cityofgainesville.org

Appendix C State Officials

State Governor

Rick Scott 400 South Monroe Street Tallahassee, FL 32399 (850) 488-7146 http://www.flgov.com/

Lieutenant Governor

Carlos Lopez-Cantera 400 South Monroe Street Tallahassee, FL 32399 (805) 717-9331 http://www.flgov.com/

State Senators

District 8 Keith Perry 4650 NW 39th Place Suite C Gainesville, FL 32606 (352) 264-4040 Keith@votekeithperry.com

Appendix D Federal Elected Officials

U.S. Senate

Mr. Bill Nelson United States Senate 716 Senate Hart Office Building Washington, DC 20510 (202) 224-5274 https://www.billnelson.senate.gov/

Broward Office 3416 South University Drive Fort Lauderdale, FL 33328 (954) 693-3041

Mr. Marco Rubio 284 Russell Senate Office Building Washington, DC 20510 (202) 224-3041 http://www.rubio.senate.gov/public/

Orlando Office 201 South Orange Avenue Suite 350 Orlando, FL 32801 (407) 254-2573

Ted Yoho 511 Canon House Office Building Washington, DC 20515 (202) 22-5744 https://yoho.house.gov/

U.S. House of Representatives

Clovis Watson Jr. 200 House Office Building 402 South Monroe Street Tallahassee, FL 32399 (850) 717-5020 http://www.myfloridahouse.gov/Sections/Re presentatives/details.aspx?MemberId=4541

Elizabeth Porter 313 House Office Building 402 South Monroe Street Tallahassee, FL 32399 (850) 717-5010 http://www.myfloridahouse.gov/Sections/Re presentatives/details.aspx?MemberId=4494 &LegislativeTermId=86

Charles Wesley Clemons 1301 The Capitol 402 South Monroe Street Tallahassee, FL 32399 (850) 717-5021 https://www.myfloridahouse.gov/Sections/R epresentatives/details.aspx?MemberId=4655 &LegislativeTermId=87

Appendix E Potentially Responsible Parties

Beazer East, Inc. (Location HQ) 1 Oxford Center Pittsburg, PA 15201 (412) 208-8801 <u>https://www.bloomberg.com/research/stocks</u> /private/snapshot.asp?privcapid=7938672

Cabot Corporation (Location HQ) 4400 North Point Parkway Suite 200 Alpharetta, GA 30022 (678) 297-1300 http://www.cabotcorp.com/

Appendix F Media Contacts

Television Stations:

WCJB TV20 6220 NW 43rd Street Gainesville, FL 32653 (352) 377-2020 http://www.wcjb.com/

MyCBS4 1703 NW 80th Boulevard Gainesville, FL 32606 (352) 332-1128 http://mycbs4.com/news/local

First Coast News 1070 E. Adams Street Jacksonville, FL 32202 (228) 832-2525 http://www.firstcoastnews.com/

News 4 JAX 4 Broadcast Place Jacksonville, FL 32207 (904) 393-9844 https://www.news4jax.com/

FOX 51 WOGX-FOX 51 4727 NW 53rd Avenue, Ste A Gainesville, FL 32653 1 (866) 553-6935 http://www.wogx.com//

Radio Stations:

WUFT 89.1 FM: Public Radio P.O. Box 118405 Gainesville, FL 32611 (352) 392-5551 https://www.wuft.org/ WMBT 90.1 FM: Hip-Hop S Main Street Gainesville, FL 32601 (352) 331-9600 http://wmbt901.com/

WIND-FM 92.5: Classic Rock 3602 NE 20th Place Ocala, FL 34470 (352) 622-9500 http://www.windfm.com/the-station/contactus/

WMFQ 92 FM: Top 40 3357 SW 7th Street Ocala, FL 34474 (352) 732-9877 http://radio92q.com/contact/station-info

WOGK 93.7 FM: Country 3602 N.E. 20th Place Ocala, FL 34470 (352) 622-5600 http://www.937kcountry.com/

WRUF 98.1 FM: Sports 1200 Weimer Hall P.O. Box 118405 Gainesville, FL 32611 (352) 392-5551 http://www.wruf.com/

WSKY 97.3 FM: Talk 3600 N.W. 43rd Street, Building B Gainesville, FL 32606 (352) 377-0985 <u>http://www.thesky973.com/sky-insidersclub#/</u>

Newspapers:

The Gainesville Sun 2700 SW 13th Street Gainesville, FL 32608 (352) 378-1411 http://www.gainesville.com/

Alachua Today 14804 Main Street Alachua, FL 32615 (386) 462-3355 http://www.alachuatoday.com/

The Alligator 2700 SW 13th Street Gainesville, FL 32608 (352) 376-4458 http://www.alligator.org/

Digital Media:

Gainesville City Website http://m.cityofgainesville.org/

City of Gainesville Facebook https://www.facebook.com/places/Thingsto-do-in-Gainesville-Florida/105630226138026/

Appendix G Meeting Locations

Stephen Foster Elementary School 3800 NW 6th Street Gainesville, FL 32609 (352) 955-6706

Santa Fe College Board Room 3000 NW 83rd Street Gainesville, FL 32606 (352) 395-5000

Alachua County Library District Headquarters 401 E. University Avenue Gainesville, FL 32601 (352) 334-3900

Eastside Community Center 2841 East University Avenue Gainesville, FL 32601 (352) 334-2714

Appendix H Repository Locations

Local Repository:

Alachua County Library 401 East University Avenue Gainesville, FL 32601 (352) 334-3900 https://www.aclib.us/

EPA Region 4 Repository:

U.S. Environmental Protection Agency 61 Forsyth Street, SW Sam Nunn Atlanta Federal Center, 9th Floor Atlanta, GA 30303 (404) 562-8190 <u>R4-library@epa.gov</u> 8:00AM-4:30PM Monday-Friday

Appendix I Other Local Resources

Florida Department of Environmental Protection 3900 Commonwealth Boulevard Tallahassee, FL 32399 (850) 245-2128 http://www.dep.state.fl.us/mainpage/default.htm

The City of Gainesville (COG) 200 East University Ave Gainesville, FL 32601 (352) 334-5000 http://m.cityofgainesville.org/

Gainesville Regional Utilities (GRU) 301 E SE 4th Avenue Gainesville, FL 32601 (352) 334-3434 https://www.gru.com/

Alachua County EPD (ACEPD) Suite 106 Gainesville, FL 32601 (352) 374-5275 http://www.alachuacounty.us/Depts/EPD/Pages/EPD.aspx

Appendix J The College Underserved Community Partnership Program

The College Underserved Community Partnership Program (CUPP) was started at EPA to help address community concerns that fall outside the scope of Superfund cleanup efforts but are very real barriers to the sustained health and growth of surrounding neighborhoods.

CUPP provides assistance to these communities to help improve their economic viability, health, and overall quality of life. CUPP enlists colleges and universities to provide vital technical support through student internships and capstone projects. Communities benefit from the schools' investment of technical assistance and innovative approaches; students gain practical experience in their areas of academic study and the opportunity to make meaningful contributions to nearby communities.

CUPP projects have addressed issues ranging from economic development to Site planning to improve community health. CUPP helps build relationships that endure long after the initial projects are finished, contributing to stable and sustainable community growth. CUPP works with communities on self-identified issues by meeting and listening to elected officials' and residents' concerns. Together they develop a list of possible projects and prioritize them according to community needs. CUPP identifies nearby academic institutions with appropriate areas of study who are willing to help. The schools assign academic leads who oversee the projects and guide the students; CUPP facilitates meetings and, if needed, engages other federal agencies and non-governmental organizations to support the project. CUPP has over 70 colleges currently committed to the program and is actively adding new schools and partners. There is no cost to the community to participate in CUPP. To engage CUPP, contact your Community Involvement Coordinator or Remedial Project Manager.

http://www2.epa.gov/communityhealth/collegeunderserved-community-partnership-program

Appendix K Fact Sheets



U.S. ENVIRONMENTAL PROTECTION AGENCY

PROPOSED PLAN FOLLOW-UP PREFERRED REMEDY FACT SHEET September 2010

Cabot Carbon/Koppers Superfund Site

Gainesville, Alachua County, Florida

Introduction

This fact sheet, issued by the U.S. Environmental Protection Agency (EPA) provides clarification and additional information about the preferred remedy in the Proposed Plan for the Cabot Carbon/Koppers Superfund Site (Site), Gainesville, Alachua County, Florida. EPA presented the preferred remedy for the Site during a public meeting held on August 5th, 2010. The EPA determined that it should provide more details and clarification of the preferred remedy in response to questions and concerns voiced by the community during that meeting. A separate fact sheet for off-Site soil cleanup activities is being prepared.

This fact sheet provides a brief Site summary, addresses specific components of the preferred remedy, and discusses community concerns relating to remedial activities. Off-site soil cleanup concerns are addressed in a separate fact sheet

Site Summary

The Cabot Carbon/Koppers Superfund Site is located in a commercial and residential area of the northern part of the Gainesville city limits, Alachua County, Florida. This Site was originally two Sites: Cabot Carbon in the southeast portion of the Site, and Koppers on the western portion of the Site (Figure 1). Cabot Carbon was a pine tar and charcoal generation facility, but is now commercial property. Koppers was an active wood-treating facility until December 2009. Although remedial investigations at the Cabot Carbon/Koppers Site began in 1983 and are now completed, EPA will Availability Session Date: October 6, 2010 Time: 6:00 PM to 9:00 PM

Location: Eastside Community Center 2841 East University Avenue Gainesville, Florida 32601

The community is invited to a public availability session regarding the Cabot Carbon/Koppers Site. Representatives from EPA, the Florida Department of Health (FDOH), and the Alachua County Environmental Protection Department (ACEPD) will be available to provide information and answer questions about upcoming activities at the Site.

The Administrative Record file for the Cabot Carbon/Koppers Site is available at the following location:

Alachua County Library 401 E. University Ave. Gainesville, FL 32601 (352) 334-3900 www.aclib.us/locations/heedguarters

continue to collect sampling data for groundwater, soil, sediment, and surface water to evaluate the effectiveness of the remedy over time.

From this point forward, the word "Site" will refer to the Koppers portion of the Cabot Carbon/Koppers Superfund Site, unless otherwise specified. The Site remedial action will also address off-Site areas contaminated



by Site-related activities, including residential and industrial areas surrounding the Site and Hogtown and Springstead creeks to the north and west of the Site. Site contamination is a result of releases of wood-treatment chemicals. Four potential source areas have been identified at the Site (Figure 2). Site contaminants are associated with the historical use of creosote for wood treating and include mobile and/or residual dense non-aqueous phase liquids (DNAPLs). DNAPLs are organic substances that do not mix with and are heavier than water. Site contaminants also include arsenic, polycyclic aromatic hydrocarbons (PAHs), and dioxins/furans in soil sediment and groundwater. The most predominant contaminant in groundwater is PAHs. The Feasibility Study (FS) and Proposed Plan provide for additional details.

Preferred Remedy Description

The selected alternative is the result of years of collaborative effort and thorough review on the part of many organizations, including input from local agencies and the public. The alternative is robust and protective of human health and the environment. Remedy selection is the final step in the Superfund process before cleanup design and action.

The preferred remedy will protect human health and the environment by containing, treating, and controlling contamination associated with the Site. This remedy was selected over other options evaluated because as a whole it was determined to provide the optimal solution based on Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) FS evaluation criteria. The selected remedy is compatible with the anticipated future use of the property, as described in more detail below.

The selected remedy has three parts that address three distinct media groups: on-site media (soil and groundwater above the Upper Floridan Aquifer [UFA]), groundwater in the UFA, and off-Site media (soil, sediment, and surface water). The major components of the three parts of the remedy are summarized on Table 1 of this fact sheet. Additional details on the preferred remedy components are presented below. Offsite soil cleanup concerns are addressed in a separate fact sheet.

Preferred Remedy Community Concerns

On-site Soll and Groundwater Cleanup

The public has expressed concern about the proposed on-site remedy. EPA is aware of the public's concerns and in an effort to provide additional information has prepared the following specific responses to community questions.

Why not dig up all DNAPL-impacted soil?

Excavation of source area soils containing DNAPL was evaluated in comparison with other options during the FS process. The preferred onsite remedy, summarized on Table 1, was determined to be the optimal alternative based on key criteria including remedy protectiveness.

Specific challenges associated with soil excavation at the Site are:

1. Excavation depths and large soil volume The two source area excavation alternatives considered during the remedy selection process (removal of soil within the Surficial Aquifer or removal of soil to the Hawthorn Group middle clay unit) would present significant challenges due to the excavation depths and the large amounts of soil that would be removed. The Surficial Aquifer soil removal would require digging to an approximate depth of 25 feet below ground and removing approximately 280,000 cubic yards (420,000 tons) of soil. The Hawthorn Group middle clay soil is deeper and removal would require digging to an approximate depth of 65 feet below ground and removing approximately 1,800,000 cubic yards (2,700,000 tons) of soil. Excavating soil to these depths would require shoring to keep the



Table 1: Preferred Remedial Alternative Summary

On-site Media

- Establishment of an on-site soil consolidation area that includes
 - A single, continuous vertical barrier wall (approximately 65 feet deep) encircling all four source areas from land-surface to the Hawthorn Group middle clay.
- Establishment of a low-permeability capleover over the consolidation area to protect against rain infiltration and contamination migration.
- In place (in-situ) solidification and stabilization (ISS/S) of contamination in the upper Hawthorn Group zone at all four source areas.
- In-situ biogeochemical stabilization (ISBS) of DNAPL in the valose-zone (the unsaturated zone above the water table) and in the Surficial Aquifer (less than 25 feet below ground surface) at all four source areas through injection of coolizing and stabilizing chemicals into the ground surface. This treatment is subject to acceptable performance demonstration during pilot tests or treatability studies). Pilot tests treatability studies are tests conducted with contaminated Site materials and stabilizers to determine if elenang goals will be met.
- In-situ injection of oxidizing chemicals or ISBS treatment in the Lower Hawthorn Group at all four source areas, and along the eastern property boundary.
- Excavation of soil posing a leachability concern outside of the consolidation area; placement of excavated soil in soil consolidation area.
- Surface grading and cap covers on approximately 83 of 86 acres on the Site property.
- Installation of storm water controls and improvements [e.g., retention/ detention pord).
- Continued operation of the northern perimeter wells of the Surficial Aquifer extraction and treatment system (outside of the consolidation area) until cleanup goals are attained.
- Continued operation of the horizontal collection drains of the Surficial Aquifer extraction and treatment system as needed to contain potential migration of ground water contamination (hydraulic control).
- Expansion of the Surficial Aquifer and Hawthorn Group monitoring network.
- Institutional controls such as deed restrictions to prevent future digging that would result in contact with contarrinsted media.

UFA Geoundwater

- Hydraulic containment of contaminated groundwater through extraction and treatment in areas where chemicals of concern (COCs) exceed cleanup goals.
- · Construction of additional extraction wells for the network, as necessary.
- Monitored natural attenuation (MNA) in areas where concentrations of COCs do not exceed cleanup goals (subject to demonstration of active natural attenuation processes).

Off-Site Media

For soil contamination, a range of options are proposed for use on individual subparcels with the consent of private property owners including:

- Excavation and removal of impacted soil that exceeds clearup goals based on present use of the land. Excavated soil will be transported and placed within consolidation area on-site.
- Engineered controls that prevent contact with impacted soil containing contamination that exceeds cleanup goals based on present use of the land use.
- Institutional controls to protect accessibility and use of land/properties.

For surface water and sediment in Hogtown and Springstead Creeks, proposed remodies include:

- Cn-site detention basin to mitigate on-going impacts to surface water and sediment.
- Excavation and removal of impacted sediment in excess of levels shown to likely cause an adverse effect when in direct contact (probable effects concentration). Excavated soil will be placed in the consolidation area on-site.
- Montored ratural recovery of remaining impacted sediment until concentrations reach threshold effects concentrations (contaminant concentrations above these levels could adversely effect a plant or animal) or background levels.

excavation walls from falling in on workers, and dewatering to remove groundwater that would flow into the excavation area during excavation.

Groundwater collected from the excavation area would require treatment and disposal. Construction of a staging/temporary storage area may be required. Excavated soil would require management as listed hazardous waste. All of these challenges, in turn, result in shortterm health and safety risks to remedial workers and the nearby community and significant additional costs to the remedial effort.

2. Off-Site disposal challenges

Finding one or more disposal facilities that will accept the large quantities of contaminated soil would present a challenge. Land Disposal Restriction (LDR) and Best Demonstrated Available Technology (BDAT) rules establishing treatment standards for land disposal may require that contaminated soils from the Site be sent to one of the few hazardous waste incinerators that accept woodtreatment listed waste. It may also be necessary to treat soils on-site prior to off-Site disposal. Transporting the contaminated soils to an off-Site facility would require either about 15,000 (Surficial Aquifer excavation) or 95,000 (Hawthorn Group middle clay excavation) truck loads. More than 100 dump truck loads per day of contaminated soil could be driven through the areas surrounding the Site resulting in significant transport-related safety and environmental risks, as well as a significant nuisance to the surrounding areas for over 2.5 vears.

3. On-site treatment challenges

If the material is treated on-site (by any method) and returned to the excavation, the risk reduction and volume treated is very similar to the in-situ treatment options, but with substantially greater short-term risk, engineering challenges, effort, time, and cost.

4. On-site construction of above ground landfill challenges

If the excavated soil is placed in an on-site constructed landfill instead of being returned to the excavation or transported off-Site, the resulting mound would be much larger than the mound considered for the gently sloped consolidation area. This would have serious technical and permitting challenges, would limit redevelopment opportunities, and would not be a welcome sight for the community.

5. Risk reduction not significantly different with excuration

Actual long-term human health and environmental risk reduction resulting from source area excavation would not be significantly different than in-situ treatment. Short-term risks would be significantly higher for soil excavation. Soil removal will not significantly reduce groundwater concentrations at potential receptors, including the Murphree Well Field. A long-term groundwater remedy would still be required. There is also a risk that residual DNAPL will move through the groundwater during excavation activities.

Why consolidate excavated soils onsite?

Because of the issues described above, containing soils on-site is the optimal solution for the community's needs. The soil consolidation area will be designed to contain the soil contamination and prevent human contact and migration in groundwater off-Site. The soil consolidation area is conceptually shown on Figure 2 and Figure 3. The most contaminated soil (principal threat waste [PTW]) will be treated within the consolidation area. There will be a gentle slope on the containment area to prevent surface water from accumulating. Other storm water management controls such as rerouting and detention basins will be used to reduce the likelihood of surface water contact with potentially contaminated soil.



Is the soil consolidation area in violation of Florida laws?

The soil consolidation area being created on-site at the Koppers property is not considered a landfill that is has to meet land disposal restrictions (LDRs). The soil will be consolidated within an Area of Contamination (AOC). The National Contingency Plan (NCP) policy (55 FR 8758-8760) allows EPA to designate an AOC as an existing area of continuous contamination of varying amounts and types. LDRs will not apply if material is moved within an AOC, treated in place, or consolidated within an AOC. Establishment of an AOC facilitates remediation of contaminated sites.

How will groundwater be protected?

Given that digging up all the soil in source areas is impracticable and ineffective as detailed above, containment of source area materials is required for protection of groundwater. Source area materials within the on-site soil consolidation area will be contained (Figure 3). PTW within the area will be treated by in-situ methods and a robust containment system will be put in place to prevent migration away from the area. This strategy has been used successfully at many other Superfund Sites. At the Koppers Site, the containmants will be contained by the following methods:

I. Continuous vertical barrier wall

The entire consolidation area will be surrounded by a continuous vertical subsurface barrier wall constructed of a cement/bentonite slurry (Figure 3). Slurry walls often are used in environmental remediation where contaminants that move through groundwater may pose a potential threat to a source of drinking water. They have been used for decades as long-term solutions for controlling scepage. Slurry walls are typically constructed of a soil, bentonite (clay), and water mixture. However, a cement/bentonite (such as proposed at the Koppers Site) or other mixture may be used for greater structural strength and to reduce degradation due to chemical interactions. The barrier wall will be joined to the top of the low permeability Hawthorn Group middle clay unit (approximately 65 feet below

ground). Because the Hawthorn Group middle clay layer does not readily transmit water due to its low permeability and the surface cover/cap minimizes water from entering below the surface, the vertical barrier wall creates a subsurface containment area designed to completely surround the contaminated soil and groundwater in the surficial aquifer and Upper Hawthorn sediments.

2. Low permeability Hawthorn middle clay

The Hawthorn Group middle clay unit transmits very little groundwater as evidenced by pressure measurements above and below this clay unit. Working together, the vertical barrier wall and the middle clay layer will limit downward movement of contamination.

3. Low permeability surface cover/cap

The consolidation area will be covered with a low-permeability cap/cover that is a minimum of two feet thick and is constructed of clean material. This cover/cap will be gently sloped to promote storm water runoff and prevent pooling. The intent of the cap will be to prevent surface exposure to contaminated soil and limit rainfall from entering the subsurface within the consolidation area.

4. In-Situ Treatment

In-situ treatment of contaminated soil and groundwater within the consolidation area above the Hawthorn Group middle clay will reduce volume and toxicity of contaminated media and the potential for contaminant migration.

5. Groundwater monitoring

The EPA will monitor the groundwater in and around the soil consolidation area. Although it is unlikely, if increasing contamination concentrations are observed outside of the containment area, additional remedial actions may be evaluated for implementation.

6. Groundwater pump and treat system

Groundwater pump and treat systems will be operated in the Surficial Aquifer and the UFA to prevent contaminated on-site groundwater from moving off-Site.

7. Soils removal

Soils outside the containment area with concentrations high enough to pose a concern due to leaching to groundwater will be removed and placed within the containment/consolidation area. During the remedial design additional leachability studies will be done to assess areas for soil removal.

How will cleanup goals be met for soil outside of the soil consolidation area?

The green area on Figure 2 outside of the consolidation area that will be regarded and a clean soil cover of at least two feet thick will be placed over almost the entire property. The process of Site grading which is necessary for Site reuse preparation and stormwater management will result in the excavation of impacted surface soil. This soil will be moved to the consolidation area (blue area) of Figure 2. The clean cover with institutional controls will prevent contact with soils that may contain a low level of contaminants.

Why aren't residential cleanup goals selected for on-site soil?

EPA is required to look at reasonably anticipated future land uses in determining what cleanup criteria to apply at a Superfund Site. EPA has determined that unrestricted residential use is not a likely or practical future land use for the Site. However, a remedy that in effect meets Florida residential default cleanup standards has been selected. The remedy calls for clean soil to be placed over almost the entire Site. EPA has made its reasonably anticipated land use determination based on several factors including property owner Beazer East's planned retention of Site ownership and its indicated future use of the Site as commercial, recreational or mixed use with a residential component. Therefore, the EPA has determined that the reasonably anticipated future land use of the Koppers portion of the Site is likely to be commercial, recreational or mixed-use with a residential component.

What institutional controls will be applied at the Site?

Institutional controls will be applied at the Site to prevent exposure to subsurface soil and groundwater contamination. The institutional controls are controlled by local authorities and will become part of the property deed. They will prevent digging without formal plans to mitigate exposure to contaminants (via permits, etc.).

Will in-situ stabilization be effective?

In-situ stabilization/solidification (ISS) is proposed to treat source area contamination in the upper Hawthorn Group. In-situ biogeochemical stabilization (ISBS) is proposed to treat source area residual DNAPL in the vadose-zone (above the water table) and Surficial Aquifer. In-situ chemical oxidation or ISBS is proposed to treat contamination in the lower Hawthorn Group at source areas and along the eastern property boundary as an additional treatment method for groundwater migrating off-Site.

EPA has demonstrated the effectiveness of insitu stabilization at other wood treatment sites with soil contaminated by DNAPL and mixed wastes. During the remedial design of this remedy, treatability studies will be conducted to determine the appropriate type and quantity of in-situ stabilizer that will bind the contaminated soil and meet requirements for effective stabilization. Treatability testing will use contaminated soils from the site to determine the type and amount of stabilizer needed.

A pilot test of ISBS has been conducted at the Site.

Off-Site Creek Cleanup

Community concerns and details regarding off-Site cleanup of nearby creeks are addressed below. Off-site soil cleanup activities are detailed in a separate fact sheet.

How are Hogtown and Springstead Creeks being addressed?

The selected remedy address citizen concerns with the creeks in two distinct ways. First, to address previous contamination of the sediments in each creek, sediments that have contaminant concentrations associated with either former Cabot Carbon or Koppers that exceed the threshold effects concentrations (i.e. contaminant concentrations in excess of levels that would adversely effect animal life) are required to be excavated and replaced with clean fill material. Assessment of creek sediments is ongoing. To address possible future impacts on sediments, the former Koppers facility is required to construct and operate a detention/retention pond(s) to capture storm water from the former Koppers Site prior to allowing it to be discharged to the tributary to Springstead Creek. The detention/retention pond(s) will be designed, including placement, during the remedial design of the on-site remedy.

Although future migration of contaminated soils due to storm water flow is highly unlikely due to the implementation of Site surface covers and consolidation of contaminated materials beneath a low-permeability cover/cap, storm water capture will allow potentially contaminated sediment to settle so that it will not be released to the creeks.

Other Community Concerns

General community concerns not covered in the previous sections of this fact sheet relating to the Koppers remedial action are addressed below.

Why was the FS not certified by a professional engineer?

The NCP regulations found at 40 Code of Federal Regulations (CFR) Part 300, contains the EPA regulations for implementing CERCLA, as well as governance on documents to be submitted to the agency. Per EPA FS guidance, the FS is a conceptual document that supports the design of selected remedies. The NCP requires certification of engineering design documents; therefore, design documents for the Koppers Site generated during the remedial design phase of the project, will be signed and sealed by a professional engineer registered in the State of Florida. The remedial design of the selected remedy will occur after the Record of Decision (ROD) is signed.

When will the Community Involvement Plan be updated?

EPA developed the Community Involvement Plan (CIP) to serve as a framework for community involvement and outreach efforts associated with the Cabot Carbon/Koppers Superfund Site. The CIP addresses the relationship between the Site, the community, and EPA; provides a background of the community; presents EPA's community involvement program; and provides a listing of resources. The goals of the CIP are to inform the public of planned and ongoing site activities; maintain open communication about site remediation; ensure that former concerns are acknowledged and addressed; provide interested parties with useful information; provide citizens with opportunities to comment on and be involved in technical decisions; and encourage and assist local citizens in providing input to agency decisions that will have long-term effects on the community. Information discussed during community interviews is essential in developing the CIP. The CIP update is expected to be complete by late September 2010

How will EPA evaluate the cleanup process and what happens if it is unsuccessful?

EPA will evaluate the progress of the cleanup through confirmation sampling of soils and sediments once a remedy has been implemented. Groundwater sampling will continue after remedy implementation has taken place. Groundwater data will be evaluated to ensure that contaminant levels are reduced over time until target cleanup levels are met. Surface water discharges will also be sampled and analyzed on a quarterly basis to ensure that permitted levels are met. In addition, EPA is required to evaluate remedial action effectiveness once every five years in a FiveYear review to determine if the remedy is functioning as intended. If the remedy does not function as intended, EPA will update the remedy to include additional measures so that the updated remedy is effective.

What is being done to ensure no contamination has been missed at the Site?

A work plan is being developed for the remedial design phase of the project to identify if there are possible buried drums or other primary source areas on the Site. In addition, soil, groundwater, and sediment sampling and analyses will continue as the footprint for installation of all the remedial technologies is refined. After additional sampling and analyses occur and the remedial action is implemented, the proposed on-site actions will ensure exposure at the surface has been mitigated.

How are vapor intrusion possibilities being addressed?

The Site groundwater contaminant plume does not consist of significant concentrations of highly volatile components such as solvents or BTEX compounds. The primary concern in Site groundwater is low concentrations of naphthalene which are only partially volatile. Vapor intrusion is unlikely at wood-treatment sites, and is not anticipated to create a hazard at the Koppers Site.

What studies are being conducted to assess Site-related human health concerns?

Human health risks due to exposure to on-site contaminants have been assessed. Human health risk assessments typically look at the types of activities that may expose people to Site contaminants. In general, Site media concentrations are compared to various riskbenchmarks to determine whether the type of contaminant at its concentration present a risk. Contaminants that present a significant risk are included as Site chemicals of concern (COCs). COCs were listed in the Proposed Plan. EPA provides information to the community regarding Site cleanup through fact sheets, public meetings, local Site information repository, and the Administrative Record file. Copies of data and reports generated during Site investigations for use in the remedy selection process are located in the Administrative Record file. This fact sheet will become part of the Administrative Record file for the cleanup decision for the Cabot Carbon/Koppers Superfund Site. The public may review this file at the Alachua County Library.

EPA will be providing an additional opportunity for the community to address any remaining questions they may have about Site cleanup during an availability session that will be held from 6:00 PM until 9:00 PM on October 6, 2010, at the Eastside Community Center, 2841 East University Avenue, Gainesville, Florida 32601.

Availability Session An availability session for the Cabot Carbon/ Koppers Superfund Site will be held from 6:00 PM until 9:00 PM on October 6, 2010, at the Eastside Community Center, 2841 East University Avenue, Gainesville, Florida 32601.

Mailing List Anyone wishing to be placed on the mailing list for this Site should send his/her request to Ms. LaTonya Spencer, EPA Community Involvement Coordinator, at the above address. You may also call Ms. Spencer with your request at (800) 435-9234 or (404) 562-8463

Information Repositories

Information concerning the Cabot Carbon/ Koppers Superfund Site may be found at the following location:

> Alachua County Library 401 E. University Ave. Gainesville, FL 32601 (352) 334-3860 www.aclib.us/locations/headquarters

Appendix L Glossary

Administrative Order on Consent (Administrative Order):

A legal agreement between the United States Environmental Protection Agency (EPA) and potentially responsible parties (PRPs) whereby PRPs agree to conduct or pay the cost of a Site investigation and or cleanup. In contrast to a consent decree, an administrative order by consent does not need to be approved by a judge.

Administrative Record File:

A file that is maintained for the public and contains information used to make a decision about a Site under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The file is available for public review, and a copy is usually placed in the same location as the Site information repository. A duplicate file is held at a central location, such as the EPA Regional office.

Agency for Toxic Substances and Disease Registry (ATSDR):

Superfund created ATSDR within the federal Public Health Service to work with other government agencies to initiate and implement a variety of health-related responsibilities. ATSDR develops toxicological profiles, prepares Site-specific health assessments, establishes formal registries of persons exposed to hazardous substances, develops and disseminates health education information, establishes and maintains literature inventories on hazardous substances, helps prepare health and safety programs for workers at Superfund Sites and workers responding to emergency releases, and provides health-related support in public health emergencies.

Availability Session:

An "open house" event hosted by EPA to meet informally with citizens about Site activities.

Cleanup:

Actions taken to deal with a release or threatened release of hazardous substances that could affect public health or the environment. The term is often used broadly to describe various response actions or phases of remedial responses, such as the Remedial Investigation Feasibility Study (RI FS).

Cleanup Remedy:

A prescribed technical approach to reducing the concentrations of contaminants at a Site. EPA selects a cleanup remedy from alternatives identified in the feasibility study after applying a set of balancing criteria and considering public comments.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):

Federal Law, commonly known as Superfund, passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA) to investigate and cleanup abandoned or uncontrolled hazardous waste Sites (CERCLA is commonly known as Superfund, because the Act created a special tax that goes into a Trust fund). EPA either Koppers Superfund Site pays for the Site cleanup when the responsible parties cannot be located or are unwilling or unable to perform the remedial actions, or takes legal action to force responsible parties to clean up the Site or reimburse EPA for the cost of the cleanup.

Community Involvement Plan (CIP):

The goals of the CIP are to inform the public of planned and ongoing Site activities: maintain open communication about Site remediation; ensure concerns are acknowledged and addressed provide interested parties with useful information; provide citizens with opportunities to comment on and be involved in technical decisions; and encourage and assist local citizens in providing input to agency decisions that will have long-term effects on their community.

Feasibility Study (FS):

The second part of a two-part study called a remedial investigation feasibility study. The feasibility study involves identifying and evaluating the most appropriate technical approaches to addressing contamination problems at a Site. Alternatives are evaluated for their effectiveness in protecting human health and the environment.

Florida Department of Environmental Protection (FDEP):

An agency in Florida's government charged with most functions relating to environmental quality in the state.

Groundwater:

Water found underground that fills pores between materials such as mud, soil, or gravel. In aquifers, groundwater often occurs in qualities where it can be used for drinking water, irrigation, and other purposes.

Hazard Ranking System (HRS):

A numerical screening system used by EPA to evaluate the relative potential risks to public health and the environment from releases or threatened releases of hazardous substances from contaminated Sites. Data from preliminary Site investigations is used to develop a Site score from 0 to 100 indicating the potential for substances released in groundwater, air, surface water, or soil to affect people on or near the Site. The HRS ranking is the principal factor used to determine if a Site qualifies for the National Priorities List.

Health Consultation:

A review of available data by the ATSDR at EPA's request to determine if existing levels of contaminants and conditions at a Site are creating a public health hazard that requires immediate action.

Information Repository:

The information repository is usually located in a public building that is convenient for local residents, such as a public school, city hall, or library, and contains current information, technical reports, reference documents, and other information regarding a Superfund Site. As the Site proceeds through the remedial process, the file at the information repository is contractually updated.

National Priorities List (NPL):

A list generated by EPA depicting the uncontrolled or abandoned hazardous waste Sites that are priorities for long-term remedial investigation (RI) and response. The list is based primarily on the score a Site receives on the Hazard Ranking System. A nonfederal site must be on the NPL to receive money from the Trust Fund for Remedial Action. Federal properties listed on the NPL do not receive money from the Trust Fund, but EPA takes a more formal role in the cleanup process. EPA is required to update the NPL at least once a year.

Potentially Responsible Party (PRP):

An individual, company, or group of companies that may have contributed to the hazardous conditions at a Site. These parties may be held liable for costs of the remedial activities by EPA through CERCLA laws.

Preliminary Assessment:

The process of collecting and reviewing available information about a known or suspected hazardous waste Site or release status.

Proposed Plan:

A public participation requirement of CERCLA in which EPA and or the PRP summarize for the public the preferred cleanup strategy, rationale for the preference, and alternatives presented in the detailed analysis of the RI FS. The proposed plan may be prepared as a fact sheet or a separate document. In either case, it must actively solicit public review and comment on all alternatives under consideration.

Public Comment Period:

The time in which the public can review and comment on various documents. A 30-day minimum comment period is held to allow the community to review and comment on the document.

Record of Decision (ROD):

A ROD provides the justification for the cleanup remedial action (treatment) chosen at a Superfund Site. It also contains Site history, Site description, Site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, scope and role of response action, and the remedy selected for cleanup.

Remedial Action:

The actual construction or implementation phase that follows the remedial design of the selected cleanup alternative at a CERCLA Site.

Remedial Design:

An engineering phase that follows the ROD when technical drawings and specifications are developed for subsequent remedial action at a CERCLA Site.

Remedial Investigation (RI):

A study designed to collect the data necessary to determine the nature and extent of contamination at a Site.

Responsiveness Summary:

A summary of oral and written comments received by EPA during a public comment period on key Site-related documents, with EPA's responses to those comments. The responsiveness summary highlights community concerns to be taken into account by EPA in making decisions on a Site and is a key part of the ROD.

Risk Assessment:

An evaluation of the likelihood of exposure and potential magnitude of future health or environmental effects that could occur if no cleanup action is taken on a Site. Risk assessment may include both qualitative (non-numerical) evaluation and quantitative (numerical) calculations based on specific assumptions about long-term exposure risks. Ecological risk assessment applies to animals, fish, vegetation, and other environmental receptors. Human health risk assessment estimates the potential effects on people. Risk assessment results are used to identify Site cleanup requirements.

Superfund:

The trust fund established under CERCLA to pay for cleanup of abandoned hazardous waste Sites if PRPs cannot be identified. Superfund is the common name for CERCLA and is often used as an adjective for hazardous waste Sites and the investigation and cleanup process directed by EPA.

Superfund Amendments and Reauthorization Act of 1986 (SARA):

SARA established standards for cleanup activities and stipulates the conditions for off-Site disposal of wastes. The amendments also clarified many public participation questions and made federal facilities accountable under the statute.

Technical Assistance Grant (TAG)

The purpose of the Technical Assistance Grant is to increase the level of understanding and participation in the Superfund process among community members and provide independent technical review of Site documents. As part of the Administrative Order by Consent, a grant in the amount of \$50,000 is awarded to a community group (that is directly affected by the Superfund Site) that is responsible for hiring and managing a Technical Advisor, to assist the affected community. The community group is also responsible for disseminating information to additional stakeholders or other affected communities.

United States Environmental Protection Agency (EPA):

Established in 1970 to bring together parts of various government agencies involved with the control of pollution.