

**Response to Florida Department of Environmental Protection (FDEP), Alachua County
Environmental Protection Department (ACEPD), and City of Gainesville Comments
Updated Tar Removal Work Plan and Fact Sheet dated December 3, 2010
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida**

FDEP Comments Dated December 8, 2010

Comment: 1) The work plan includes a lot of discussion on the potential public health or ecological risk that may be posed by contaminant levels in the sediments as well as the potential mobility or likelihood of reworking of sediments by natural creek processes that may bring deeper contaminants to the surface. Discussion or opinions in the work plan do not necessarily reflect EPA or DEP's interpretation of the data or the need for long term sediment remediation identified in EPA's proposed plan. As noted in DEP's previous June 9, 2010 correspondence to EPA which include the referenced University of Florida review comments and subsequent DEP October 14, 2010 proposed plan review comments, sediment contaminant levels in the creek occur at concentrations higher than sediment quality guidelines (SQAGs) and residential soil cleanup target levels (SCTLs) for PAHs and dioxin. In lieu of institutional controls limiting access and exposure frequency to creek sediments, DEP has recommended that final Superfund sediment cleanup goals be the more stringent of the SQAGs and SCTLs. We understand that the goal of this proposed interim action is the removal of tarry sediments based on visual criteria and support this interim action. We recommend that the work plan more explicitly state that this is an *interim* action and does not necessarily represent final cleanup activities to address PAH and dioxin sediment contamination in the creeks.

Response: We agree that it is appropriate to clarify that the proposed pine tar removal work is an interim action that targets the removal of significant tar deposits from the creeks and is different from the creek sediment remediation proposed in the US EPA Proposed Plan. Chapter 1 of the Work Plan will be updated to clarify this. However, note that the planned tar removal will also address almost all the sediment locations where polynuclear aromatic hydrocarbon (PAH) concentrations were found to exceed the probable effects concentration (PEC), the sediment cleanup goal established by US EPA in the Proposed Plan. Therefore, the planned pine tar removal action will address the PAH-related remedial action requirements, but not the dioxin related issues.

The risk assessment discussion presented in the Work Plan relies on evaluations undertaken by others, including FDOH¹ and University of Florida.² It appears that FDEP's objection to the risk discussion is driven by their position that the lower of the SCTLs and the SQAGs should be used as the sediment cleanup goal. This approach is not practicable at the Site since the BAP-TEQ concentration in the background sample collected at the Site exceeded the SCTL, and SCTLs were derived for soils and are not applicable to inundated sediments. We believe that a combination of the University of Florida developed Site-specific human health protection-based ACTLs, PECs (for environmental protection), and Site-specific background, are appropriate values to consider for establishment of sediment cleanup values. Regardless, there will be opportunity in the future to further discuss and resolve this issue. The Work Plan does not speak to this issue, nor does it need to. At this stage, it is important to implement the planned tar removal work since all stakeholders agree that this action is appropriate, will eliminate the tar material that has been of concern to the local community, and will provide further protection to human health and the environment.

¹ FDOH. 2010. "Health Consultation. Springstead and Hogtown Creek Sediments. Cabot Carbon-Koppers Hazardous Waste Site, Gainesville, Alachua County, Florida. EPA Facility ID: FLD980709356." June 23.

² Stuchal, LD; Roberts, SM. [University of Florida, Center for Environmental & Human Toxicology]. 2010. Letter to L. Mora-Applegate (Florida Department of Environmental Protection, Bureau of Waste Cleanup) re: Alternative criteria for exposed creek banks and bottoms downstream from the Cabot Carbon/Koppers site. May 10.

Comment: 2) Section 3.2.2 of the work plan proposes to use visually "clean" overlying sediments from excavation areas to backfill excavated areas of the creek. This is based in part on concerns expressed by the County who has noted the significant sediment removal activities required by DOT to address sediment buildup in downstream areas of the creek and recommendations not to bring in additional fill as part of the Cabot removal. DEP's review of the data has confirmed that shallow (<6" deep) sediments are generally less contaminated and approach the SCTL for BAP--TEQ except in the locations of H-4 and SS5 where the BAP-TEQ or PAH concentrations are significantly above the SCTL and SQAGs. In those 2 areas, we request that the shallow sediment within those excavation areas be removed as well. Backfilling using visually "clean" sediments from adjacent areas *outside of the excavation footprint* is acceptable as part of this *interim* action.

Response: Acknowledged, we will not use shallow sediments at H-4 and SS5 as backfill material. However, note that the BAP-TEQ SCTL is also exceeded in the background sample collected in Springstead Creek, highlighting the impracticability of complying with the SCTLs for PAHs in urban settings, such as Gainesville.

Comment: 3) Section 3.1.2 of the work plan refers to air monitoring to support odor control but does not provide details on the air monitoring scope. The Health and Safety Plan should include those details and be provided to the regulatory agencies prior to mobilization for the interim action. We recommend that monitoring include semi-volatiles.

Response: Acknowledged. The Health and Safety Plan will provide details regarding the air monitoring to be undertaken.

Comment: 4) Section 3.1.4 of the work plan refers to staging area that have yet to be determined. We understand that Cabot is discussing options with some nearby property owners. The location of the staging area and related transportation routes should be identified and communicated to regulatory agencies prior to mobilization for the interim action.

Response: Acknowledged.

Comment: 5) Section 3.2.2- Please clarify if trucks transporting sediment for disposal will be lined to ensure that residual water leakage does not occur.

Response: The sediment will be transported to the staging area in the dewatering boxes that are designed to hold water in the lower chamber and not leak. The sediment will be allowed to dry before loading into trucks for transport to the disposal facility. Liners will be used in the trucks for any sediment that has excess moisture and deemed to be at risk of leaking during transport to the disposal facility.

Comment: 6) Section 3.2.2 of the work plan indicates that a confirmatory sampling plan will be provided to EPA and DEP. We agree that those results will be useful in evaluating the need and scope for additional assessment and to support future remedial actions.

Response: Acknowledged. The proposed confirmation sampling approach has been submitted to US EPA and FDEP.

Comment: 7) Section 3.2.4- Please reflect more clearly that properties used for access during the interim action will be restored to preexisting conditions to the extent possible.

Response: Acknowledged.

Comment: 8) The work plan and pollution prevention plan are not consistent with regard to how water recovered from sediment dewatering will be disposed (discharged at the Cabot lift station versus disposed at a separate disposal facility). This should be resolved prior to mobilization.

Response: The recovered water will be discharged to the lift station if the chemical concentrations are within permit discharge limits. An off-site disposal facility will be used for recovered water that cannot be discharged to the lift station.

FACT SHEET:

Comment: 1) Please clarify in the FACT SHEET that the Cabot removal of tarry sediments is an *interim removal action*. The goal of the interim action is to address the areas of the creeks containing more significant tarry deposits and address citizens concerns regarding potential contact with those deposits. It is not intended to address all site related contamination in the creeks nor serve as the final Superfund remedy.

Response: Acknowledged. The fact sheet has been revised to clarify this point.

Comment: 2) Please reflect that EPA, DEP, ACEPD and the City reviewed and provided comments on the work plan, not just ACEPD.

Response: Acknowledged. The fact sheet has been revised.

Comment: 3) We recommend that the fact sheet be provided to area residents as well as those along the creek to ensure that the public is aware of the upcoming removal. We also recommend that the final work plan, Health and Safety Plan and FACT SHEET be posted on the County web site where other Koppers-designated documents are posted.

Response: Acknowledged.

ACEPD Workplan Comments Dated December 10, 2010:

Comment: 1. The statement in the plan (Section 2.3.2, top of page 7) "the tar-affected sediments are not expected to be mobilized and brought to the surface" is not an accurate statement. Prior to the 2004 hurricanes many of the deposits of tarry materials were exposed in both Springstead and Hogtown Creeks. ACEPD staff sampled some of these materials between 1994 and 2000. The hurricanes in 2004, which occurred with very heavy rainfall and high water levels (stage) and flow in the creeks, eroded sediments in the upstream reaches of the creeks. These sediments moved downstream covering the tarry deposits with 6-12" or more of sand. It is likely that as sediments move through the system and eventually downstream, that these tarry deposits will again be exposed. Prior to the hurricanes in 2004 these deposits were exposed for at least 11 years. ACEPD requests that this statement be corrected.

Response: For the reasons presented in section 2.3.2 of the Work Plan (pages 6 and 7), *i.e.*, observation of tar in the same general areas since 1994, the age of the release, and the current presence of the thick layers of "clean" sediments overlying the tar, it is highly unlikely that the tar deposits will be mobilized in the future and pose significant risks to ecological receptors. Regardless, any uncertainty regarding the future fate of the tar deposits will be addressed by the planned removal of this material – an action that is supported by all stakeholders.

Comment: 2. Section 3.1.3, page 11 of workplan indicates that odor control and air monitoring will be implemented at the sediment excavation sites. As per FDEP request, ACEPD requests additional clarification on the types of air monitoring to be conducted at the excavation sites. This section also indicates that odor control efforts will include keeping stockpiles of excavated tarry sediment covered. However in section 3.2.2 page 13 of the workplan, there is a statement referring to the staging area that "the sediment will be placed on plastic sheeting and allowed to dry before transport to the disposal facility". ACEPD assumes that some type of odor control will need to be implemented at the staging area. If odor control is to involve covering the sediment pile, how are these sediments to dry out before transport? The odor control efforts at the staging area need to be described to clarify. ACEPD understands that the workplan does include odor control practices to be implemented at the excavation sites on private property near the creeks.

Response: Acknowledged. The Health & Safety Plan will provide details regarding the air monitoring plan associated with project implementation. Regarding odor control, the excavated sediments will be transported to the staging area in dewatering boxes. Thus, the sediments stored in the staging area are expected to be fairly dry and will be covered to facilitate odor control.

Comment: 3. ACEPD requests that the reference to ACEPD be changed in the first sentence of 1st paragraph of Section 3.2.2., page 13 of workplan, that states " Prior to excavation, Cabot and ACEPD personnel will use an insulated probe....." This sentence should be changed to state that "Prior to excavation, Cabot personnel will use an insulated soil probe rod to clearly delineate and mark the lateral and vertical extents of the area containing tar. ACEPD staff will provide limited assistance in this delineation effort". This is to make it clear that Cabot personnel are responsible for the work plan and that ACEPD is not performing the work but only providing assistance.

Response: Acknowledged

Comment:

4. Section 3.2.2., page 13 of the work plan states "work will continue during rain events as long as the water can be kept away from the excavation zone and the safety of the workers is not compromised." ACEPD has serious concerns with this work approach from a safety perspective due to the unpredictable nature of stormwater flows in the creek during rain events. Once rainfall begins the creek water levels

rise rapidly; plans should be enacted to have equipment and personnel out of the creek before rainfall begins if possible.

Response: The work plan will be amended to state " Once continuous rainfall begins, plans will be made to remove equipment and personnel from the creek.

Comment: 5. Pollution Prevention Plan Section 9.0, page 13 should include a language recognizing that permits (or notification) for tree removal or other activities may be needed from the City of Gainesville for stream access and restoration.

Response: Acknowledged

6. Public Outreach—The Workplan does not fully describe the public outreach or notification that is being planned to notify residents along the creek and the local community about the tar removal activities planned. This needs to be clarified and documented prior to mobilization. ACEPD understands that contact with specific property owners along the creek is planned to seek access to perform the work. In addition we understand that a FACT Sheet is being distributed to residents in the area. ACEPD is also agreeing to post the completed workplan and fact sheet on the County's website once finalized.

Alachua County will also get a press release out if everyone agrees. ACEPD has the following additional recommendations;

Response: Public outreach and communications is an important element of the project. Cabot prefers to work collaboratively with the City and County on communications about the project, In the interest of time, we don't believe there is a need to include this detail in the Work Plan.

Comment: 1. If the FACT sheet is to be mailed out prior to or during December, that the fact sheet be also mailed out or distributed to residents also in January to make sure they get the information. We are concerned that during the holiday season, these notices may not be seen because of people being out or being busy.

Response: Acknowledged.

Comment: 2. The Fact Sheet should also be sent along with a letter briefly summarizing the project to the residents on the EPA mailing list used by EPA to communicate Koppers activities. Cabot should obtain this list from EPA.

Response: We agree with sending the Fact Sheet to area residents.

Comment: 3. As per the City's comments, the wording of the fact sheet should be coordinated with the City of Gainesville's Public Information office.

Response: We agree to coordinate with the City Public Information Office.

ACEPD Fact Sheet Comments:

In addition to the FDEP Comments which ACEPD supports, ACEPD has the following comments:

Comment: 1. Due to potential concerns from residents along the creek about health impacts from any noticeable odors generated during the excavation activities, ACEPD recommends that the name of Anthony Dennis, Environmental Health Director, Alachua County Health Department and his phone number 352-334-7931, e-mail, Anthony_Dennis@doh.state.fl.us be included on the fact sheet

underneath the name of John Mousa of ACEPD to address any health related concerns or questions from the residents.

Response: Acknowledged. The fact sheet has been revised.

Comment: 2. The wording on health risks in the section on Clean-up Plan Elements should be changed. Recommended " Some odors may be noticeable near the work area. Odor control measures will be implemented to minimize odors. Air monitoring near the work areas will be conducted to assure the safety of the public and workers."

Response: Acknowledged. The fact sheet has been revised.

Comment: 3. The wording on "Work areas to be restored." Needs to add that private properties impacted by access to the creek as well as creek work areas will be restored."

Response: Acknowledged. The fact sheet has been revised.

Comment: 4. The reference to John Mousa should be , " John Mousa, Pollution Prevention Manager, Alachua County Environmental Protection Department. Tel: (352) 264-6805 e-mail: jjm@alachuacounty.us

Response: Acknowledged. The fact sheet has been revised.

City of Gainesville Public Works Department Comments dated December 9, 2010

Section 2.4.1, Page 8 The sentence "Overall, the proposed removal of tar affected sediments will address the community related concerns associated with the presence of tar in the creek sediments." seems to be overly broad. Prefer a more pointed statement.

Response: Acknowledged. We will update the Work Plan.

Section 2.4.2, Page 9, Items 3 & 4. Neither of these items mentions the dewatering box as part of the process described in Appendix A and Attachment 1. It should be consistent.

Response: The following sentence will be added to item 3 under Section 2.4.2 "Excavated sediments will be placed in a dewatering box (specially designed roll-off container)."

Section 3.1.4, Page 11 and Section 3.1.5, Page 12. The sentence "WESTON will work closely with the City of Gainesville to determine appropriate access points to the staging areas" should have this language added "from the public right of way, when applicable."

Response: Acknowledged we will revise the work plan

Section 3.2.2, Page 13, Paragraph 4. This sentence "During sediment excavation, silt fencing and absorbent booms will be placed downstream of the excavation zone to reduce downstream turbidity and potential contaminant migration." should indicate whether the additional work is to be within the isolated work area or in the downstream area as additional controls.

These sentences "Water in the excavation will be controlled by either pumping the upstream water around the excavation or construction of berms upstream of the excavation area. The berms will be situated to prevent water from entering the work area but still allow the stream flow to continue outside of the excavation zone." are not consistent with the Appendix A and Attachment 1.

Response: This text has been deleted from the work plan and the reader is referred to the Pollution Prevention Plan.

Section 3.2.2, Page 13, Paragraph 5. No mention of the dewatering box occurs in this part of the narrative.

Response: This portion of the work plan has been amended to be consistent with the Pollution Prevention Plan

Section 3.2.5, Page 15. Would property owner releases be appropriate and how long is Cabot going to warrant the work to guarantee success.

Response: A release is included in the Property Access Agreement under which permission to access to property is being sought to perform the work.

Figure 2 - Proposed Sediment Removal and Sample Locations. Location SD/S4 should be corrected to SC/S4.

Response: Acknowledged. The figure will be revised.

Appendix A

3.0, Paragraph 1. This paragraph differs from the work description on page 13 of the Plan. It should be consistent.

Response: The work plan had been modified to refer to the dewatering plans in the Pollution Prevention Plan.

6.0 Paragraph 2. Hay bales are a preferred BMP for work in creeks. Too many get lost during storm events.

Response: When significant rainfall is expected, the erosion control devices will be removed from the stream and reinstalled after the rain event and high discharge subsides. Erosion control devices that are lost during storm events will be recovered and removed from the stream. Turbidity control devices will be removed as soon as possible once the work is completed in a given area.

Public Information The fact sheets should be reviewed by the City Public Information Officer for coordination and guidance in assisting Cabot with a press release on the activity.

Response: Acknowledged.