



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

61 Forsyth Street SW
Atlanta, Georgia 30303-3104

MEMORANDUM

SUBJECT: De-Proposal of the Capitol City Plume Superfund Site, Montgomery, Alabama
EPA I.D. No. AL0001058056

FROM: Carol J. Monell, Director
Superfund & Emergency Management Division

CAROL MONELL

Digitally signed by CAROL
MONELL
Date: 2020.07.20 16:21:14 -04'00'

TO: Brigid Lowery, Director
Assessment and Remediation Division

I. Introduction

The United States Environmental Protection Agency, Region 4, is requesting to withdraw its earlier proposal to add the above referenced site to the National Priorities List (NPL). The proposal was published in the Federal Register on May 11, 2000 (65 F.R. 30489). This request is being initiated because site activities are being successfully implemented by the Potentially Responsible Parties (PRPs) under oversight by the Alabama Department of Environmental Management (ADEM). The EPA has reviewed all the documentation supporting this action and believes that ADEM has and will ensure all appropriate investigations and cleanup actions are performed pursuant to its state cleanup authority.

II. Site Background

The Capitol City Plume Superfund Site (Site) is located in downtown Montgomery, Montgomery County, Alabama, and consists of soil and groundwater contaminated with tetrachloroethylene (PCE), and trichloroethylene (TCE) among other Volatile Organic Compounds (VOCs), and metals. In September 1993, the ADEM began investigating a report of soil contamination at the Retirement Systems of Alabama Energy Plant at the corner of Monroe and McDonough Streets in downtown Montgomery. After 17 months of investigation work the ADEM concluded that there were several zones of PCE-contaminated groundwater in downtown Montgomery. The contaminated groundwater plume was migrating toward and impacting the City of Montgomery's (City's) North Well Field. PCE was detected in Public Wells 9 West and 9 East at up to 21 micrograms per liter (ug/L), exceeding the EPA's Safe Drinking Water Act Maximum Contaminant Level (MCL) of 5 ug/L. Well 9 West was closed in 1992 after the contamination was discovered. Well 9 East was maintained as a standby well until 1997, when it was also closed due to the contamination and structural problems.

A Superfund Preliminary Assessment was performed in 1995 and Site Inspection in 1996 and it was determined that the contamination posed a threat to much of the City's north and west well fields. Potential sources of the groundwater contamination were identified at that time and included a chemical wholesaler, airport maintenance shops, airport fueling area, an auto repair shop and a dry cleaner. The

Site was proposed for listing on the NPL on May 11, 2000. At the request of the City, the EPA delayed finalizing the addition of the Site to the NPL and proceeded with a non-NPL approach, similar to the Superfund Alternative Agreement approach, in order to address the risk at the site without adding it to the NPL.

III. Investigation and Cleanup Actions

Numerous actions have been taken to address the risk posed by the contamination at the Site. These include: an emergency soil excavation in 1993 of the initially discovered source area; permanent abandonment of all public water supply wells associated with the north well field in downtown Montgomery; installation of a phytoremediation pilot in 2010 and ongoing maintenance of other trees in the downtown area; permanent closure of all private wells within Site boundary; and implementation of institutional controls, including environmental covenants, within the Site boundary to prohibit groundwater use and to address future potential vapor intrusion risks. Further descriptions are provided below.

The City passed a groundwater ordinance on September 16, 2003, to prohibit well drilling in the downtown area. This action significantly reduces the potential for ingestion or dermal exposure pathways to groundwater for downtown employees and residents.

In 2004, the Agency for Toxic Substances and Disease Registry (ATSDR) issued a Public Health Assessment Report for the site. ATSDR noted that because of the quick response by the Montgomery Water Works and Sanitary Sewer Board (MWWSSB) in removing the contaminated well from service and the dilution of any contaminants that may have been present due to blending in the Montgomery water supply system, the site represented "no apparent public health hazard."

In 2005 and 2006, the City developed a groundwater monitoring plan under the EPA review. Using the available groundwater monitoring network (up to 14 wells), groundwater sampling was conducted in 2007, 2009, 2010, and 2011 by the City, USGS, and the EPA (2010 and 2011).

In 2005 and 2011, the MWWSSB contracted a licensed well driller to decommission and abandon (i.e., permanently grout) the wells formerly associated with the North Well Field, thus completely eliminating the wells from future use. The MWWSSB retained Well PW-9W for future environmental monitoring purposes until it was permanently abandoned in 2019.

From 2008 to 2010, USGS and the EPA conducted tree tissue, pore water, and groundwater surveys in the downtown Montgomery area as part of a technology assessment for the use of tree core data to assess groundwater quality. Chlorinated volatile organic compounds (VOCs) were detected in tree core samples collected from across the site, including four trees in the downgradient portion of the plume (three trees from near the Cypress Creek area and one tree near MW-12S). Detection of the chlorinated VOCs suggests phyto-uptake is occurring in the downgradient portion of the plume. Findings ultimately assisted with identifying potential source areas of contamination, as well as PRPs.

In 2010, the EPA and USGS sampled indoor air and collected soil vapor samples near the County Annex III and Attorney General (AG) buildings based on complaints of indoor air quality. Corrective

measures were taken at both buildings to address the indoor air quality, including installation of a filtration system in the County Annex building and replacement of carpet in the subbasement of the AG building, which resolved the odor issues in these buildings. Neither of the indoor air issues at these two buildings were found to be related to the groundwater plume.

In 2010, the City, in collaboration with the EPA constructed a demonstration phytoremediation plot consisting of clonal cottonwood trees in the central area of the plume. This location was located within the footprint of the Capitol City Plume and was intended to provide remediation of the PCE contaminated groundwater.

IV. Site Deferral to State

In June 2012, the City requested that the EPA formally defer the addition of the Site to the NPL while the State oversees response actions. In November 2012, the EPA suspended planned Site activities for a period of 90 days in order to allow the City, along with a group of PRPs and local stakeholders collectively referred to as the Downtown Environmental Alliance (Alliance), time to present an action plan for the Site. In May 2014, the EPA accepted the Alliance's proposed action plan and requested that the Alliance begin negotiations with ADEM for an enforceable work agreement to conduct the remaining response actions at the Site, in accordance with the approved action plan. Concurrently, the EPA began negotiations with the Alliance for a settlement agreement to recover the EPA's past Site response costs.

These two agreements, along with a Deferral Memorandum of Agreement (MOA) between the EPA and ADEM outlining the roles and expectations of each agency in the deferral of the NPL listing, were ultimately finalized in September 2015. The Deferral MOA between the EPA and ADEM is included as Attachment number 1 in the Attachments to this memorandum. In the MOA, the EPA agreed that once the Site remedial action is successfully completed, it is expected that the EPA will have no further interest in considering the Site for addition to the NPL and that the proposal to add the Site will be withdrawn.

Since the formal deferral in 2015, ADEM has overseen Site assessment and remediation activities conducted by the Alliance pursuant to an Agreement for Site Response (Agreement) between ADEM and the Site PRP group. The ADEM and PRP Alliance Agreement for Site Response is included as Attachment number 2 in the Attachments to this memorandum. The Agreement required the Alliance to develop a Supplemental Environmental Workplan, Supplemental Environmental Investigation Report, Risk Assessment/Alternatives Analysis Report assessing risks to human health and the environment along with potential remedial alternatives to address identified risks, as well as a Remedial Action Plan which would identify and implement the ADEM-approved remedy to address Site risks identified. The Agreement further required the Alliance to address community involvement by developing a Community Involvement and Outreach Plan.

The Community Involvement and Outreach Plan was submitted on November 24, 2015 and approved by ADEM on February 25, 2016. This Plan included a Community Involvement Action Plan that identified key stakeholders, recommended outreach methods, community interviews, and a community involvement schedule.

The Supplemental Environmental Workplan was prepared to supplement existing environmental data needed to complete the Risk Assessment/Alternatives Analysis Report. It was submitted on May 2, 2016 and approved by ADEM on May 20, 2016. This Workplan included proposed sampling for groundwater, surface water, soil vapor, geotechnical sampling, and a hydraulic study of the Cypress Creek/Alabama River system. This environmental data was collected and submitted along with data evaluation in a Supplemental Environmental Investigation Report to ADEM on October 13, 2017.

ADEM approved the Supplemental Environmental Investigation Report on March 19, 2018. On July 16, 2018, the Alliance submitted a Risk Assessment/Alternatives Analysis Report which included a human health and ecological risk assessment along with a conceptual site model with an evaluation of remedial alternatives to address Site risks. It identified an Institutional Controls Plan along with five-year reviews and groundwater monitoring as the selected remedial alternative to address remaining Site risks beyond those actions that have already taken place since the beginning of Site response.

The Alliance prepared an Institutional Controls Plan (ICP), which is was deemed by ADEM to be equivalent to a Proposed Plan/Record of Decision. The Final ICP was submitted to ADEM in July 2019. ADEM concurrence with the ICP was received in August 2019. A final PRP Determination Letter was received in September 2019, once the 45-day public comment period was completed with no public comments received. The purpose of the ICP was to provide the planning level details of the ICs that would be required. The ICP describes the following activities to be completed for the remedy to be considered completely implemented:

- 1.e Install one additional monitoring well located along the western edge of the plume footprint;e
- 2.e Amend the City's well drilling ordinance to prohibit groundwater use within the downtown area,e prohibit first-floor residential use for one block where soil vapor is a potential future concern,e and require property owners to follow the International Building Code regarding the use of vapore barriers for new construction;e
- 3.e Implement environmental covenants on the City-owned property in areas where soil vapor is ae potential future concern;e
- 4.e Provide and encourage the use of environmental covenants to downtown property owners;e
- 5.e Send IC Notification Letters to downtown property owners on an annual basis to describe thee restrictions for groundwater use, the use of vapor barriers, the availability of environmentale covenants, and the restriction of first-floor residential use (where applicable);e
- 6.e Conduct random, annual inspections of downtown properties and interviews with propertye owners to ensure the ICs are being implemented and maintained in accordance with the ICP;e
- 7.e Conduct annual groundwater monitoring at seven effectiveness monitoring wells; ande
- 8.e Provide annual Remedial Action Progress Reports to ADEM.e

On August 9, 2019, ADEM placed the proposed Institutional Controls Plan (ICP) on public notice to solicit feedback on the Alliance's proposed Remedial Action Plan approach to address Site risks to human health and the environment. No adverse comments were received, and this proposal was approved by ADEM on September 25, 2019. The ADEM approved ICP which has been implemented is included as Attachment number 3 in the Attachments to this memorandum. The ADEM-approved response actions have been demonstrated as protective of human and ecological receptors according to the approved risk assessment, which evaluated all environmental media and potential exposure routes at the Site.

V. Request for De-Proposal from the NPL

On November 13, 2019, ADEM requested formal de-proposal of the Site from the NPL, and the EPA and ADEM have held multiple discussions since this request. During a meeting on January 23, 2020, and a subsequent Site visit on March 10, 2020, the EPA requested additional information to support the request for de-proposal.

Specifically, the EPA requested ADEM to address various risks of vapor intrusion (VI) at the Site, particularly two areas which were previously found to pose a potential future risk for VI but were located in areas where buildings do not currently exist and have environmental covenants in place to restrict any type of construction. ADEM subsequently provided additional documentation on May 22, 2020, to address these concerns, as well as additional concerns raised by the EPA. The ADEM supplemental information report is included as Attachment number 4 in the Attachments to this memorandum.

The ADEM approved Human Health Risk Assessment (HHRA) indicates that soil vapor concentrations exceed EPA's residential and/or commercial Vapor Intrusion Screening Levels (VISLs) at only three locations, and that soil vapor at two of the locations was not related to the groundwater plume. Currently there are no residences in the areas of the VISL exceedances and therefore the commercial VISLs were used. The only area of a commercial VISL exceedance (which is interpreted to be unrelated to the groundwater plume) is an existing parking lot/city right-of-way. Therefore, there are no current human receptors. Soil vapor samples collected at the building nearest the area of commercial exceedance were within acceptable VISL limits.

ADEM asserted that the requirements of the MOA, which require a CERCLA-protective cleanup with response actions protective of human health and the environment and that address site-related contamination in an appropriate manner and to the extent practicable, have now been satisfied. In complying with requirements of the MOA, ADEM-approved response actions have been taken to ensure that the Site no longer poses an unacceptable risk to human health and the environment.

Following review of all documentation provided by ADEM, the EPA has determined that all future monitoring activities, enforcement of institutional controls, and five-year reviews will be conducted under the ongoing oversight of ADEM in accordance with the Agreement with the Alliance and that the proposal to add the Site to the NPL will be withdrawn.

ATTACHMENTS

1. September 2015 Deferral MOA between the EPA and ADEM.
2. September 2015 ADEM and PRP Alliance Agreement for Site Response.
3. July 2019 Institutional Controls Plan.
4. May 2020 ADEM Supplemental Information Report entitled "ADEM Recommendation for De-Proposal of the Capitol City Plume Site from the National Priorities List."

Attachment 1

Capitol City Plume EPA-ADEM Deferral Agreement

MEMORANDUM OF AGREEMENT

BETWEEN

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION 4

AND

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

FOR DEFERRAL OF THE

CAPITOL CITY PLUME SUPERFUND SITE, MONTGOMERY, ALABAMA

I. PURPOSE

In accordance with the United States Environmental Protection Agency's "Guidance on Deferral of NPL Listing Determinations While States Oversee Response Actions" (OSWER Directive 9375.6-11) (May 1995) (Deferral Guidance), the EPA agrees to defer final listing of the Capitol City Plume Superfund Site (Site) on the National Priorities List (NPL) while the Alabama Department of Environmental Management (ADEM) oversees the remaining response actions at the Site. The EPA agrees that ADEM has met the deferral criteria outlined in the Deferral Guidance and that Site deferral is appropriate at this time. This Memorandum of Agreement (MOA) specifies the plans and expectations of each agency at the Site in order to ensure that the response actions undertaken at the Site are substantially similar to actions that would otherwise be taken under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the National Contingency Plan (NCP). Once the Site remedial action is successfully completed, it is expected that the EPA will have no further interest in considering the Site for final listing on the NPL and that the Site will be de-proposed from the NPL.

II. BACKGROUND

The EPA proposed the Site, located in Montgomery, Alabama, to the NPL in May 2000. At the request of the City of Montgomery (City), the EPA has not finalized the listing of the Site on the NPL. The EPA proceeded with investigation of the Site under an informal, non-NPL approach similar to the EPA's Superfund Alternative approach. However, following a Remedial Investigation conducted by the EPA and Feasibility Study conducted by the City, additional monitoring and characterization efforts continued at the Site with minimal progress in addressing Site contamination.

In a letter, dated June 11, 2012 (Attachment A), the City requested that the EPA allow it to develop an action plan to address the environmental concerns at the Site pursuant to a formal agreement with ADEM. The EPA responded in a letter, dated November 14, 2012 (Attachment B), stating that it would suspend planned activities at the Site for a period of 90 days to allow the City time to present an action plan for the Site. Provided the City's plan was consistent with the EPA's objectives and concerns at the Site, the EPA would defer lead-agency authority of the Site cleanup to ADEM.

On February 12, 2013, in a meeting held at the EPA Region 4 office, the City presented its proposed action plan to the EPA and ADEM on behalf of the Downtown Environmental Alliance (Alliance), a group of stakeholders and potentially responsible parties representing the City, Montgomery County, the State of Alabama, the Montgomery Water Works and Sanitary Sewer Board, and the Advertiser



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Company. After working with the EPA on modifications to the action plan, the City submitted a revised action plan to the EPA on March 11, 2014 (Attachment C). The EPA approved the revised action plan in a letter, dated May 13, 2014 (Attachment D), and began negotiations with the Alliance on a settlement agreement for recovery of past response costs. Concurrently, ADEM began negotiations with the Alliance for an enforceable cleanup agreement to conduct the remaining response actions at the Site reflecting the revised action plan. Both agreements have since been negotiated, submitted for public comment, finalized, and signed by all necessary parties, allowing for the deferral of the Site to ADEM by the EPA pursuant to this MOA.

III. IMPLEMENTATION

A. State Program

ADEM is authorized under state law to implement a hazardous waste cleanup program which should ensure that response actions at the Site are carried out and that these actions are protective of human health and the environment. Furthermore, ADEM has sufficient capabilities, resources, expertise and authorities to ensure that a CERCLA-protective cleanup¹ is conducted and to coordinate with the EPA, other interested agencies and the public on different phases of implementation.

B. Site Eligibility

ADEM and the City have expressed interest in having the final listing of the Site deferred and ADEM overseeing the response at the Site under state law. ADEM agrees to pursue response actions at the Site in a timely manner. The EPA and ADEM agree that a deferral should address the Site at least as quickly as, if not sooner than, the EPA would expect to respond.

The Site has been assessed, scored and proposed for listing on the NPL. ADEM will not request, nor utilize, federal trust fund money to implement any portion of the actions required by this MOA.

C. Community Acceptance

ADEM placed the proposed cleanup agreement between ADEM and the Alliance, along with information pertaining to the proposed deferral, on public notice for a period of 45 days prior to final signature. During that time, the affected community was provided the opportunity to express any concerns they may have had with the deferral of the Site. ADEM explained to the community the difference between a response action under state law pursuant to the terms of the proposed MOA and a response conducted under the NCP and requested feedback from the community. The response from the community was supportive of the EPA deferring the Site to ADEM oversight, and was documented in a letter to the EPA, dated September 1, 2015 (Attachment E).

D. Cleanup Levels

ADEM agrees to pursue a CERCLA-protective cleanup of the Site that will be substantially similar to a CERCLA response. The response actions will be protective of human health and the environment, as generally defined for individual human exposure by an acceptable risk level for carcinogens between 10^{-4} and 10^{-6} (using 10^{-6} risk level as the point of departure for determining remediation goals for

¹ The term "CERCLA-protective cleanup" is defined in OSWER Directive 9375.6-11, "Guidance on Deferral of NPL Listing Determinations While States Oversee Response Actions" (May 3, 1995).

alternatives) and for non-carcinogens a Hazard Index of 1 or less, and no significant adverse impacts to ecological receptors. The response actions will address all Site-related contamination in an appropriate manner and to the extent practicable. ADEM will give preference to solutions that will be reliable over the long term. In addition, ADEM agrees to ensure that any remedy selected at the Site will comply with all applicable or relevant and appropriate² federal requirements and more stringent applicable or relevant and appropriate state requirements to the maximum extent practicable under ADEM's state authorities. Soils, sediments, air, surface water and groundwater will be investigated and assessed as part of the comprehensive risk assessment conducted at the Site. The comprehensive risk assessment will include an assessment of contamination at the Site, as well as the consideration of potential exposure pathways to residents, workers, and receptors that might exist in and around Cypress Creek and the Alabama River. The EPA anticipates that the CERCLA-protective remedy will include the recognition that groundwaters of the United States are valued natural resources, and that response actions will ensure the remedies are protective by restoring contaminated groundwater to beneficial uses.

E. Natural Resources Trustees

ADEM agrees to promptly notify the appropriate state and federal trustees for natural resources of discharges and releases at the Site that are injuring or may injure natural resources, and include the trustees, as appropriate, in activities at the Site. ADEM agrees to, consistent with CERCLA and the NCP, seek to coordinate necessary assessments, evaluations, investigations and planning with state and federal trustees.

IV. PROCEDURAL REQUIREMENTS

A. Roles and Responsibilities

ADEM has responsibility, with minimal EPA involvement, to provide for a timely CERCLA-protective cleanup under state authority and to support the public's right of participation in the decision-making process. The EPA's role will generally be limited to review of ADEM semi-annual and annual reports and consultation on the proposed remedy. However, the EPA may request reports, data or other documentation related to the remedial activities at the Site, as it deems appropriate, or arrange for ADEM to provide certain draft documents for EPA review as they are prepared. The EPA will not provide financial assistance for Site activities to ADEM or the community during the deferral.

In the event that community members request that the EPA reconsider deferral of the Site or request the EPA's intervention in response actions, the EPA agrees to meet with ADEM to discuss the community concerns and to review the response actions in light of this MOA and the EPA's Deferral Guidance, and make a decision regarding whether terminating the deferral is warranted.

B. Schedule for Performance

ADEM has provided the EPA a copy of the signed cleanup agreement (and will provide any subsequent modifications thereto) between ADEM and the Alliance for informational purposes. ADEM has responsibility for ensuring that Site assessments and other activities are completed in a timely manner and for taking appropriate compliance and enforcement actions for deficiencies as necessary.

² The phrase "applicable or relevant and appropriate requirements" shall be defined by reference to Section 121 of CERCLA, 42 U.S.C. § 9621, the National Contingency Plan (see 40 C.F.R. § 300.5 definitions of "applicable requirements" and "relevant and appropriate requirements"), and applicable EPA guidance.

C. Documentation Submissions to the EPA

ADEM agrees to make available all Site data, reports, and other documentation to the EPA upon request.

D. ADEM Reporting to the EPA

ADEM agrees to provide management briefings to the EPA at least annually on whether the conditions in this MOA are being met and the progress in the investigation, assessment and response actions. In addition, ADEM agrees to report to the EPA at least semi-annually on any difficulties that it is having meeting the conditions of this MOA. Following the submission of a report required or requested, the EPA may request a briefing or meeting with ADEM to discuss the report(s).

E. Proposed Remedial Action

ADEM agrees to brief the EPA on the proposed remedial action before and after soliciting public comment.

V. COMMUNITY PARTICIPATION

ADEM will ensure public involvement that is substantially similar to the intent of the NCP. ADEM will ensure that a Community Involvement Plan is submitted for its approval and the activities within are carried out to provide participation and feedback from the community. ADEM will also maintain Site files at its Montgomery office located at 1400 Coliseum Boulevard, Montgomery, Alabama, 36110, as well as electronically on its website for public access.

VI. COMPLETION OF STATE RESPONSE ACTIONS

A. Certification and Confirmation

Once ADEM considers that all construction activities have been completed, has determined that the remedy is operational and functional, and has reviewed and approved the Site's Remedial Action Report, it agrees to certify to the EPA and the affected community that the remedy has been implemented successfully. As part of the certification, ADEM agrees to submit for EPA review a response action completion documentation substantially similar to that described in the EPA's Guidance, "Remedial Action Report; Documentation for Operable Unit Completion" (OSWER Directive 9355.0-39FS) (June 1992).

The EPA will review the certification and supporting information, and may choose to initiate a deferral completion inquiry to confirm the certification. The EPA agrees to work with ADEM to address any data deficiencies hindering the confirmation and agree to a time frame for completion of the inquiry. If the remedial action at the Site is confirmed as complete, the Site will not be further evaluated for NPL listing unless the EPA receives information of a release or potential release at the Site which poses a significant threat to human health or the environment. Upon completion of the remedial action and confirmation by the EPA, the Site will be de-proposed from the NPL pursuant to the EPA Policy Memorandum, "Guidelines for Withdrawing a Proposal to List a Site on the NPL (De-Proposal)," dated November 12, 2002, by David Evans.

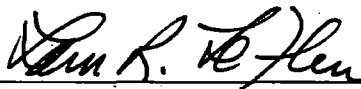
B. MOA Termination and Modification

The EPA may terminate this MOA at any time after providing 30 days notice to ADEM. This MOA may be terminated if the response is not CERCLA-protective, is unreasonably delayed, is inconsistent with this MOA, does not adequately address the concerns of the affected community, or for other appropriate reasons, such as ADEM's inability to enforce compliance or the absence of appropriate funding to complete the response actions. ADEM may also choose at any time, after 30 days notice to the EPA, to terminate this MOA for any reason. During any 30-day notice period required by this paragraph, the EPA and ADEM agree to meet to discuss the decision to terminate this MOA.

Upon termination of this MOA, the EPA will consider taking any necessary response actions, including initiating the rulemaking process to finalize listing the Site on the NPL. The EPA and ADEM agree to coordinate efforts to notify the community of the termination of the deferral or this MOA. These actions will assure the public that the EPA will continue to respond at the Site. At the EPA's request, ADEM agrees to provide to the EPA all information in its possession regarding the Site to the extent permitted by state law.

This MOA adheres to the EPA's Deferral Guidance. Furthermore, this MOA may be modified at any time upon written agreement of both parties. Notwithstanding any provision of this MOA, the EPA and ADEM retain their respective authorities and reserve all rights to take any and all response actions authorized by law.

VII. AGREEMENT APPROVALS



Lance R. LeFleur
Director
Alabama Department of Environmental
Management

9/30/2015
Date



Heather McTeer Toney
Regional Administrator
U.S. Environmental Protection Agency, Region 4

9/30/2015
Date

ATTACHMENTS

- A. June 11, 2012, letter from the City requesting formal deferral to ADEM
- B. November 14, 2012, letter from the EPA suspending Site activities
- C. March 11, 2014, letter from the City presenting the revised action plan
- D. May 13, 2014, letter from the EPA approving the revised action plan
- E. September 1, 2015, letter from ADEM documenting community acceptance

ATTACHMENT A



City of **Montgomery**, Alabama

OFFICE OF THE MAYOR
Todd Strange, Mayor

Post Office Box 1111
Montgomery, Alabama
36101-1111

PH 334.625.2000
FX 334.625.2600

June 11, 2012

Gwen Keyes Fleming
Regional Administrator, Region 4
U. S. Environmental Protection Agency
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303-3104

Re: Capitol City Plume Site

Dear Administrator Keyes-Fleming:

Let me take this opportunity to express the City of Montgomery's appreciation for the cooperation extended by EPA in searching for viable alternatives to keep the Capitol City Plume site from formal inclusion on EPA Superfund's National Priorities List. While the City is not a potentially responsible party (PRP) for this site, it does have a vital interest in the timely resolution of these environmental issues.

I was recently able to share directly with Mr. Franklin Hill of your office, Ms. Lisa Feldt of EPA OSWER, and other regional and headquarters officials attending the Association of State and Territorial Solid Waste Officials mid-year meeting held in downtown Montgomery, that the City is in the midst of a major revitalization of historic downtown Montgomery and is also participating in the development of the Selma-to-Montgomery Civil Rights Trail. These efforts, as well as the City's obvious interest in protecting the general health and welfare of our citizens and workers in the downtown area, make it imperative that the environmental issues associated with the Capitol City Plume site be addressed effectively.

At the meeting held on March 15, 2012, at your offices in Atlanta, GA, EPA representatives indicated that they believed that the Feasibility Study conducted by the City was comprehensive and wouldn't need substantial modifications based on the new data generated for the site. It is our current understanding; however, that EPA would like to collect additional data.

The City of Montgomery proposes that you allow us to develop an action plan to address the Capitol City Plume pursuant to a formal agreement under the oversight of the Alabama Department of Environmental Management ("ADEM"). This agreement will likely involve several other parties, but we need additional time to establish a working

group to develop a plan that will allow the City to continue our efforts to revitalize the downtown area, while completing the assessment of the Capitol City Plume and selecting a remedy that will protect our citizens and economic interests. As such, the City requested earlier this week from Scott Miller that EPA delay the sampling which was proposed to start next week on approximately 48 downtown blocks. We are requesting at this time to present an alternate plan.

The City believes that within ninety (90) days we can organize a group of interested parties and develop the aforementioned action plan. The plan will identify additional data needs with a schedule of implementation to select an appropriate remedy for the Capitol City Plume. Should this path forward be approved by EPA, the City will begin immediately to form a stakeholders group to address the Capital City Plume. We respectfully request that this effort be addressed under a formal agreement with ADEM.

Please let me know if this plan to move forward is acceptable to enable this course of action in lieu of pursuing listing the Capitol City Plume on the NPL at this time. Thank you for your attention and we await further discussions.

Sincerely,

A handwritten signature in black ink, appearing to read "Todd Strange".

Todd Strange
Mayor

cc: Franklin Hill, EPA R4, Superfund Director, Waste Management Division
Lisa Feldt, EPA HQ, Deputy Assistant Administrator, Office of Solid Waste and
Emergency Response
Scott Miller, EPA R4, Remedial Project Manager

ATTACHMENT B



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

NOV 14 2012

The Honorable Todd Strange
Office of the Mayor
City of Montgomery
P.O. Box 1111
Montgomery, Alabama 36101

Dear Mayor Strange:

Thank you for your June 11, 2012, letter proposing that the U.S. Environmental Protection Agency permit the City of Montgomery (City) to develop an action plan to address the Capitol City Plume Superfund Site (Site), located in downtown Montgomery, Alabama, pursuant to a formal agreement with the Alabama Department of Environmental Management. We greatly appreciate the City's efforts in investigating the environmental issues associated with the Site, as well as its continued willingness to assume an active role in their resolution.

As you are aware, the EPA proposed the Site for inclusion on the National Priorities List in 2000 at ADEM's request. The sampling data collected at that time indicated that two of the City's public drinking water wells, located near the northern portion of the groundwater plume, contained the solvent tetrachloroethylene (PCE) at concentrations above the maximum contaminant level (MCL) for this contaminant of concern under the National Primary Drinking Water Regulations. As a result, the wells were closed and a new well field was constructed outside the Site. A moratorium was also enacted to prohibit well drilling within the Site.

Since 2000, the EPA has taken numerous steps to investigate the Site, including working collaboratively with the City and ADEM on actions to protect human health and the environment. These steps include the City's decision in 2002 to enter into an Administrative Order on Consent with the EPA to conduct a Feasibility Study (FS) of possible remedial alternatives to address contamination at the Site. The FS conducted by the City in 2003 acknowledged that source areas had not been completely identified, but nevertheless identified multiple remedial alternatives that could be employed at the Site to decrease PCE and trichloroethylene (TCE) concentrations in groundwater to levels below the MCLs and remove potential and actual human exposure to Site contamination. Despite eventual phytoremediation efforts taken by the City over the next several years and the hope that groundwater concentrations would naturally decrease over time, data collected at the Site in 2007 and 2011 indicated that PCE and TCE contamination in groundwater remained at levels similar to those measured in the early 1990s.

From 2008 to 2012, under an Interagency Agreement with the EPA, the U.S. Geological Survey conducted additional sampling at the Site, including the collection of tree cores and groundwater samples. Findings from these sampling efforts identified a potential source of PCE and TCE contamination in the subsurface near the Montgomery County's (County's) building, located at 101 South Lawrence Street. Additionally, an anonymous complaint received by the EPA from a county employee at the same building raised concerns of employee sickness resulting from indoor air quality problems. Two rounds of indoor air quality sampling conducted by a county environmental contractor with EPA oversight, and three rounds of indoor air sampling by EPA and USGS featuring two separate

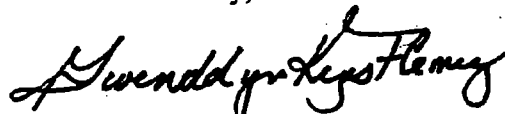
air monitoring techniques, indicated that contaminants detected in nearby groundwater and the subsurface of the Site are also present in the indoor air of the County's building.

In order to further identify plume boundaries and confirm the locations of subsurface contamination and other possible source areas, the EPA and USGS developed a Statement of Work (SOW) outlining additional sampling to be conducted. The SOW was previously submitted to ADEM and is included with this letter. In brief, the SOW includes the installation of passive soil-gas samplers in a 47-block area within the current identified plume boundaries where no monitoring wells currently exist. At the time of the SOW, the EPA also anticipated the implementation of a pilot-scale source area treatment, such as in-situ chemical oxidation, to decrease TCE and PCE concentrations previously identified in the subsurface at 101 South Lawrence Street. Lastly, the EPA was planning to require additional testing to better understand the extent and source of possible contamination at the current Alabama Attorney General's Office building at 501 Dexter Avenue, given that samples collected near the building indicate the presence of PCE and TCE in the subsurface, including the detection of TCE in a drain located in the basement of the building. The EPA believes that additional response activities such as these are warranted in order to assure that the evaluation of remedial options and implementation of a cleanup are protective of the health of Montgomery citizens, downtown workers and the environment.

The EPA is very interested in exploring ways to accomplish these objectives and encourage the participation of all willing, interested parties, including any potentially liable parties. Since receiving your letter, the EPA has had several discussions with ADEM about how best to proceed with Site cleanup. In light of your letter, and given ADEM's expressed desire to take the lead on the cleanup, the EPA is prepared to suspend its planned activities at the Site for a period of 90 days to allow the City the opportunity to present to the EPA an action plan detailing its strategy to address the environmental concerns that remain at the Site. Provided the City's plan is consistent with the objectives and concerns addressed above, the EPA will defer lead-agency authority for Site cleanup to ADEM. In so doing, the EPA reserves the right to seek full recovery of any and all costs incurred by the EPA in connection with the Site.

The EPA looks forward to receiving the City's proposed action plan for the Site. If you have any questions or need additional information from the EPA, please contact me or the Region 4 Office of Congressional and Intergovernmental Relations at (404) 562-8327.

Sincerely,



Gwendolyn Keyes Fleming
Regional Administrator

cc: Lance LeFleur, Director, ADEM

ATTACHMENT C



City of **Montgomery**, Alabama

OFFICE OF THE MAYOR
Todd Strange, Mayor

Post Office Box 1111
Montgomery, Alabama
36101-1111

PH 334.625.2000
FX 334.625.2600

March 11, 2014

Mr. Scott Miller
Remedial Project Manager
United States Environmental Protection Agency
Region IV
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303-8960

Subject: Capitol City Plume Superfund Site, Environmental Action Plan

Dear Mr. Miller:

We appreciated you and Carol meeting with our consultants, CH2M HILL, on February 28 at ADEM's offices to discuss our Environmental Action Plan and the process which EPA and ADEM will be for deferral of the Capitol City Plume site to regulation under and ADEM led arrangement. CH2M HILL reported that the conversations were very productive and that substantial agreement occurred between the three parties present regarding changes to be made in the Action Plan which will make our plan acceptable to EPA.

To that end, I am attaching the revised Action Plan. This revision includes the addition of goals related to groundwater remediation and remediation of source areas (see the introduction to Section 2, page 2-1) which were discussed during the meeting. We are confident that these modifications will address EPA's concerns, based on the meeting.

In addition, regarding the process for moving forward, our understanding is that upon EPA approval of the Environmental Action Plan, and notice to us of that approval, that EPA will prepare a 30 day public notice of the proposed deferral to ADEM. Concurrent with these events, EPA and ADEM will be working to establish a Memorandum of Agreement, formally confirming the deferral. Also concurrent with these events, the Alliance will work to finalize its Agreement, followed by establishing an agreement between ADEM and the Alliance. A reference to these agreements has also been added to the end of Section 4 in this revised Action Plan, as requested in our meeting. As we discussed in our meeting, the Alliance has made substantial progress on its Agreement, and we are confident that this can be finalized once the approval is given by EPA Action Plan, and hence the path forward for our group, is confirmed. If our understanding of the process is not correct, please let us know.

We appreciate EPA's consideration of the attached Environmental Action Plan, and look forward to hearing back from EPA in the very near future on the Plan. In the interim, if you have questions, please feel free to contact me at 334.241.2000, or contact our consultant, JP Martin of CH2M HILL at 334.215.9036.

Sincerely,

Todd Strange
Mayor

Enclosures: Environmental Action Plan (3)

c: Carol Monell/US EPA Region IV
Lance LaFleur/ADEM w/ enc (2)
JP Martin/CH2M HILL



10947254

ATTACHMENT D



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAY 13 2014

**Mayor Todd Strange
Office of the Mayor
City of Montgomery, Alabama
Post Office Box 1111
Montgomery, Alabama 36101**

Dear Mayor Strange:

The United States Environmental Protection Agency has received the City of Montgomery's (City's) revised Downtown Environmental Assessment Action Plan (Action Plan), dated March 11, 2014, and appreciates the City's cooperation in revising the plan to address technical comments provided by our technical staff. Following review of the revised Action Plan, including ongoing communications with the Alabama Department of Environmental Management (ADEM), the EPA has determined that the Action Plan represents an acceptable path forward for evaluating and responding to the environmental issues at the Capitol City Plume Superfund Site (Site).

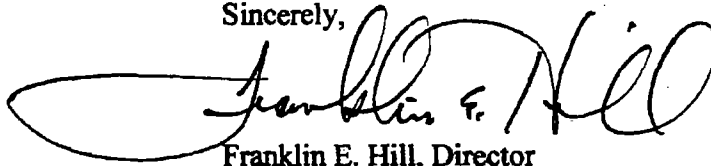
In accordance with the deferral requirements provided in our September 19, 2013, letter to the City and ADEM, as well as the next steps outlined in our February 28, 2014, meeting (Enclosure A), the EPA requests that ADEM and the Downtown Environmental Alliance (DEA) begin negotiations for an enforceable work agreement to conduct the remaining response actions at the Site, including any future operation and maintenance, reflecting the revised Action Plan (Step 3A in Enclosure A). Concurrently, the EPA expects to begin negotiations with DEA for an Administrative Order on Consent and Settlement Agreement (AOC) to recover the EPA's approximately \$3.5 million in outstanding Site costs (Step 3C in Enclosure A) and have enclosed a draft AOC for DEA's review (Enclosure B). The EPA requests that DEA respond in writing indicating its willingness and financial ability to enter into these two agreements within one (1) month of receipt of this letter. Once DEA indicates its willingness to negotiate, a timeframe for negotiations will be agreed upon by all parties to complete both agreements within six (6) months of receipt of this letter.

When both agreements are signed, the EPA and ADEM will enter into a Deferral Memorandum of Agreement (Deferral MOA) as previously provided in our September 19, 2013, letter (Step 3B in Enclosure A). The Deferral MOA will formalize the deferral of the Site to ADEM and allow for DEA's response efforts at the Site to begin. When the response action at the Site is confirmed complete and acceptable by the EPA and there is no further information of a release or potential release at the Site which might pose a significant threat to human health or the environment, the Site will no longer be evaluated for final listing on the National Priorities List (NPL), and will be formally de-proposed from the NPL. Please be aware that if there is no written indication of interest by DEA during the one (1) month period or if negotiations are not completed within the six (6) month negotiation period, the EPA will consider termination of the deferral process and consider taking any necessary response actions at the Site including initiating the rulemaking process to finalize the Site on the NPL.

As a reminder, community participation and acceptance in the decision-making process of the deferral and ultimate cleanup of the Site are very important to the EPA. The EPA expects that both the work agreement between ADEM and DEA and the past cost AOC between the EPA and DEA will include public notice and comment periods provided by each agency's respective regulations in order to receive public comment and assurance that the affected community does not have significant, valid objections to deferring the Site. There may be opportunities to combine public notice and comment activities in a way that meets both agencies' requirements simultaneously, and we may explore this possibility with our State partners at ADEM.

The EPA looks forward to working with the City, ADEM and DEA to facilitate the remaining steps of the Site deferral process. If you have any questions or need additional information from the EPA, please contact me or Scott Miller, Remedial Project Manager, at (404) 562-9120.

Sincerely,

A handwritten signature in black ink, appearing to read "Franklin E. Hill". The signature is fluid and cursive, with a large loop at the beginning and end.

Franklin E. Hill, Director
Superfund Division

Enclosures

cc: Lance LeFleur, Director, ADEM
Phillip Davis, Chief, Land Division, ADEM
Heather McTeer Tony, Regional Administrator, EPA

Enclosure "A"



possible
agreement
pending

This agreement effective
upon signature and upon
finalization of Protocol

loose alliance
no action plan
no EPA commitment

no action plan
no EPA commitment
loose alliance

Area of
controversy

Enclosure "B"

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I. JURISDICTION

1. This Settlement Agreement is entered into pursuant to the authority vested in the Administrator of the U.S. Environmental Protection Agency ("EPA") by Section 122(h)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 ("CERCLA"), 42 U.S.C. § 9622(h)(1), which authority has been delegated to the Regional Administrators of the EPA by EPA Delegation No. 14-14-D and redelegated from the Regional Administrator through the Director of the Superfund Division (formerly the Waste Management Division), to the Chief of the Superfund Enforcement and Information Management Branch, by EPA Regional Delegation R-14-14-D.

2. This Settlement Agreement is made and entered into by EPA and the parties listed in Appendix A ("Settling Parties"). Each Settling Party consents to and will not contest EPA's authority to enter into this Settlement Agreement or to implement or enforce its terms.

II. BACKGROUND

3. This Settlement Agreement concerns the Capitol City Plume Superfund Site ("Site") located in Montgomery, Montgomery County, Alabama. EPA alleges that the Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

4. In response to the release or threatened release of hazardous substances at or from the Site, EPA undertook response actions at the Site pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604.

5. In performing response action, EPA has incurred response costs at or in connection with the Site.

6. EPA alleges that Settling Parties are responsible parties pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and are jointly and severally liable for response costs incurred or to be incurred at or in connection with the Site.

7. EPA and Settling Parties recognize that this Settlement Agreement has been negotiated in good faith and that this Settlement Agreement is entered into without the admission or adjudication of any issue of fact or law.

III. PARTIES BOUND

8. This Settlement Agreement shall be binding upon EPA and upon Settling Parties and their successors and assigns. Any change in ownership or corporate or other legal status of a Settling Party, including but not limited to, any transfer of assets or real or personal property, shall in no way alter such Settling Party's responsibilities under this Settlement Agreement. Each signatory to this Settlement Agreement certifies that he or she is authorized to enter into the terms and conditions of this Settlement Agreement and to bind legally the party represented by him or her.

IV. DEFINITIONS

9. Unless otherwise expressly provided in this Settlement Agreement, terms used in this Settlement Agreement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meanings assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or its appendices, the following definitions shall apply:

“CERCLA” shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.

“Day” or “day” shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or federal or state holiday, the period shall run until the close of business of the next working day.

“Effective Date” shall mean the effective date of this Settlement Agreement as provided by Section XVII.

“EPA” shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

“EPA Hazardous Substance Superfund” shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

“Interest” shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

“Paragraph” shall mean a portion of this Settlement Agreement identified by an Arabic numeral or an upper or lower case letter.

“Parties” shall mean EPA and Settling Parties.

“Past Response Costs” shall mean all costs, including but not limited to direct and indirect costs, that EPA or the U.S. Department of Justice on behalf of EPA has paid at or in connection with the Site through Month X, XXXX (to be updated), plus accrued Interest on all such costs through such date.

“RCRA” shall mean the Solid Waste Disposal Act, 42 U.S.C. §§ 6901-6992 (also known as the Resource Conservation and Recovery Act).

“Section” shall mean a portion of this Settlement Agreement identified by a Roman numeral.

“Settlement Agreement” shall mean this Settlement Agreement and any attached appendices. In the event of conflict between this Settlement Agreement and any appendix, the Settlement Agreement shall control.

“Settling Parties” shall mean those parties identified in Appendix A.

“Site” shall mean the Capitol City Plume Superfund Site, encompassing approximately fifty (50) city blocks, located in downtown Montgomery, Montgomery County, Alabama, depicted generally on the map attached as Appendix B, and the areal extent of contamination that has emanated from the Site.

“United States” shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

V. PAYMENT OF RESPONSE COSTS

10. Payment by Settling Parties for Past Response Costs. Within 30 days after the Effective Date, Settling Parties shall pay to EPA \$X,XXX,XXX.XX (to be updated with final cost package) plus an additional sum for interest on that amount calculated from Month X, XXXX (to be updated) through the date of payment.

11. The total amount to be paid by Settling Parties pursuant to Paragraph 10 shall be deposited by EPA in the EPA Hazardous Substance Superfund.

12. Payment by Settling Parties shall be made to EPA by Fedwire Electronic Funds Transfer (“EFT”) to:

Federal Reserve Bank of New York
ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York, NY 10045
Field Tag 4200 of the Fedwire message should read “D 68010727 Environmental Protection Agency”

and shall reference Site/Spill ID Number A4H7 and the EPA docket number for this action.

13. At the time of payment, Settling Parties shall send notice that payment has been made to EPA in accordance with Section XIII to:

Paula V. Painter
Environmental Protection Specialist
SD-SEIMB, 11th Floor
U.S. EPA Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303

and to the EPA Cincinnati Finance Office by email at acctsreceivable.cinwd@epa.gov, or by mail to:

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

Such notice shall reference Site/Spill ID Number A4H7 and the EPA docket number for this action.

VI. FAILURE TO COMPLY WITH SETTLEMENT AGREEMENT

14. Interest on Late Payments. If any Settling Party fails to make any payment required by Paragraph 10 by the required due date, Interest shall continue to accrue on the unpaid balance through the date of payment.

15. Stipulated Penalty.

a. If any amounts due to EPA under Paragraph 10 (Payment by Settling Parties for Past Response Costs) are not paid by the required date, Settling Parties shall be in violation of this Settlement Agreement and shall pay to EPA, as a stipulated penalty, in addition to the Interest required by Paragraph 14, \$750.00 per violation per day that such payment is late.

b. Stipulated penalties are due and payable within 30 days after the date of demand for payment of the penalties by EPA. All payments to EPA under this Paragraph shall be identified as "stipulated penalties," shall reference Site/Spill ID Number A4H7 and the EPA docket number for this action, and shall be made by Fedwire Electronic Funds Transfer ("EFT") to:

Federal Reserve Bank of New York
ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York, NY 10045
Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"

c. At the time of payment, Settling Parties shall send notice that payment has been made as provided in Paragraph 14 above.

d. Penalties shall accrue as provided in this Paragraph regardless of whether EPA has notified Settling Parties of the violation or made a demand for payment, but need only be paid upon demand. All penalties shall begin to accrue on the day after payment is due and shall continue to accrue through the date of payment. Nothing in this Settlement Agreement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

16. In addition to the Interest and stipulated penalty payments required by this Section and any other remedies or sanctions available to EPA by virtue of Settling Parties' failure to comply with the requirements of this Settlement Agreement, any Settling Party who fails or refuses to comply with the requirements of this Settlement Agreement shall be subject to enforcement action pursuant to Section

122(h)(3) of CERCLA, 42 U.S.C. § 9622(h)(3). If the United States, on behalf of EPA, brings an action to enforce this Settlement Agreement, Settling Parties shall reimburse the United States for all costs of such action, including but not limited to costs of attorney time.

17. The obligations of Settling Parties to pay amounts owed to EPA under this Settlement Agreement are joint and several. In the event of the failure of any one or more Settling Parties to make the payments required under this Settlement Agreement, the remaining Settling Parties shall be responsible for such payments.

18. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive payment of any portion of the stipulated penalties that have accrued pursuant to this Settlement Agreement. Payment of stipulated penalties shall not excuse Settling Parties from payment as required by Section V (Payment of Response Costs) or from performance of any other requirements of this Settlement Agreement.

VII. COVENANTS BY EPA

19. Covenants for Settling Parties by EPA. Except as specifically provided in Section VIII (Reservations of Rights by EPA), EPA covenants not to sue or take administrative action against Settling Parties pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), to recover Past Response Costs. These covenants shall take effect upon receipt by EPA of the payment required by Paragraph 10 (Payment by Settling Parties for Past Response Costs) and any Interest or stipulated penalties due thereon under Paragraph 14 (Interest on Late Payments) or 15 (Stipulated Penalty). These covenants are conditioned upon the satisfactory performance by Settling Parties of their obligations under this Settlement Agreement. These covenants extend only to Settling Parties and do not extend to any other person.

VIII. RESERVATIONS OF RIGHTS BY EPA

20. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Settling Parties with respect to all matters not expressly included within the Covenants for Settling Parties by EPA in Paragraph 19. Notwithstanding any other provision of this Settlement Agreement, EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Settling Parties with respect to:

- a. liability for failure of Settling Parties to meet a requirement of this Settlement Agreement;
- b. liability for costs incurred or to be incurred by the United States that are not within the definition of Past Response Costs;
- c. liability for injunctive relief or administrative order enforcement under Section 106 of CERCLA, 42 U.S.C. § 9606;
- d. criminal liability; and

e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments.

21. Nothing in this Settlement Agreement is intended to be nor shall it be construed as a release, covenant not to sue, or compromise of any claim or cause of action, administrative or judicial, civil or criminal, past or future, in law or in equity, that the United States may have against any person, firm, corporation or other entity not a signatory to this Settlement Agreement.

IX. COVENANTS BY SETTLING PARTIES

22. Covenants by Settling Parties. Settling Parties covenant not to sue and agree not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to Past Response Costs and this Settlement Agreement, including but not limited to:

a. any direct or indirect claim for reimbursement from the EPA Hazardous Substance Superfund based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claims arising out of the response actions at the Site for which the Past Response Costs were incurred, including any claim under the United States Constitution, the Constitution of the State of Alabama, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, or at common law; and

c. any claim pursuant to Section 107 or 113 of CERCLA, 42 U.S.C. § 9607 or 9613, Section 7002(a) of RCRA, 42 U.S.C. § 6972(a), or state law for Past Response Costs.

23. Nothing in this Settlement Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

24. Claims Against De Micromis Parties. Settling Parties agree not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) and 113 of CERCLA) that they may have for all matters relating to the Site against any person where the person's liability to Settling Parties with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials.

25. The waiver in Paragraph 24 shall not apply with respect to any defense, claim, or cause of action that a Settling Party may have against any person meeting the above criteria if such person asserts a claim or cause of action relating to the Site against such Settling Party. This waiver also shall not apply to any claim or cause of action against any person meeting the above criteria if EPA determines:

a. that such person has failed to comply with any EPA requests for information or administrative subpoenas issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. §§ 9604(e)

or 9622(e), or Section 3007 of RCRA, 42 U.S.C. § 6972, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site, or has been convicted of a criminal violation for the conduct to which this waiver would apply and that conviction has not been vitiated on appeal or otherwise; or

b. that the materials containing hazardous substances contributed to the Site by such person have contributed significantly, or could contribute significantly, either individually or in the aggregate, to the cost of response action or natural resource restoration at the Site.

26. Claims Against De Minimis and Ability to Pay Parties. Settling Parties agree not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) and 113 of CERCLA) that they may have for response costs relating to the Site against any person that has entered or in the future enters into a final Section 122(g) *de minimis* settlement, or a final settlement based on limited ability to pay, with EPA with respect to the Site. This waiver shall not apply with respect to any defense, claim, or cause of action that a Settling Party may have against any person if such person asserts a claim or cause of action relating to the Site against such Settling Party.

X. EFFECT OF SETTLEMENT/CONTRIBUTION

27. Except as provided in Paragraphs 24 (Claims Against De Micromis Parties) or 26 (Claims Against *De Minimis* and Ability to Pay Parties), nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Except as provided in Section IX (Covenants by Settling Parties), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action that each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613 (f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

28. The Parties agree that the actions undertaken by Settling Parties in accordance with this Settlement Agreement do not constitute an admission of any liability by any Settling Party. Settling Parties do not admit, and retain the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the facts or allegations contained in Section II (Background) of this Settlement Agreement.

29. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and that each Settling Party is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or as may be otherwise provided by law, for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are Past Response Costs. The Parties further agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which each

Settling Party has, as of the Effective Date, "resolved its liability to the United States . . . for some or all of a response action or for some or all of the costs of such action."

30. Each Settling Party shall, with respect to any suit or claim brought by it for matters related to this Settlement Agreement, notify EPA in writing no later than 60 days prior to the initiation of such suit or claim. Each Settling Party also shall, with respect to any suit or claim brought against it for matters related to this Settlement Agreement, notify EPA in writing within 10 days after service of the complaint or claim upon it. In addition, each Settling Party shall notify EPA within 10 days after service or receipt of any Motion for Summary Judgment and within 10 days after receipt of any order from a court setting a case for trial, for matters related to this Settlement Agreement.

31. In any subsequent administrative or judicial proceeding initiated by EPA, or by the United States on behalf of EPA, for injunctive relief, recovery of response costs, or other relief relating to the Site, Settling Parties shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, *res judicata*, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenant by EPA set forth in Section VII (Covenants by EPA).

32. Effective upon signature of this Settlement Agreement by a Settling Party, such Settling Party agrees that the time period commencing on the date of its signature and ending on the date EPA receives from such Settling Party the payment(s) required by Section V (Payment of Response Costs) and, if any, Section VI (Failure to Comply with Settlement Agreement) shall not be included in computing the running of any statute of limitations potentially applicable to any action brought by the United States related to the "matters addressed" as defined in Paragraph 29, and that, in any action brought by the United States related to the "matters addressed," such Settling Party will not assert, and may not maintain, any defense or claim based upon principles of statute of limitations, waiver, laches, estoppel, or other defense based on the passage of time during such period. If EPA gives notice to Settling Parties that it will not make this Settlement Agreement effective, the statute of limitations shall begin to run again commencing ninety days after the date such notice is sent by EPA.

XI. ACCESS TO INFORMATION

33. Settling Parties shall provide to EPA, upon request, copies of all records, reports, or information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as "Records") within their possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information regarding the Site.

34. Business Confidential, Privileged, and Protected Documents.

a. Settling Parties may assert business confidentiality claims covering part or all of the Records submitted to EPA under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Records submitted to EPA determined to be confidential by EPA will be accorded the protection

specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies Records when they are submitted to EPA, or if EPA has notified Settling Parties that the Records are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2 Subpart B, the public may be given access to such Records without further notice to Settling Parties.

b. In lieu of providing a Record, Settling Parties may assert that all or part of the record is privileged or protected as provided under federal law, provided they comply with Paragraph 34.c, and except as provided in Paragraph 34.d.

c. If Settling Parties assert such a privilege or protection, they shall provide EPA with the following: (1) the title of the Record; (2) the date of the Record; (3) the name, title, affiliation (e.g., company or firm), and address of the author of the Record; (4) the name and title of each addressee and recipient; (5) a description of the subject of the Record; and (6) the privilege or protection asserted. If a claim of privilege or protection applies only to a portion of a Record, the Record shall be provided to EPA in redacted form to mask the privileged or protected information only. Settling Parties shall retain all Records that they claim to be privileged until the United States has had a reasonable opportunity to dispute the privilege or protection claim and any such dispute has been resolved in Settling Parties' favor.

d. Settling Parties may make no claim of privilege or protection regarding:

- (1) any data regarding the Site, including but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, radiological, or engineering data, or the portion of any other Record that evidences conditions at or around the Site, or
- (2) the portion of any Record that Settling Parties are required to create or generate pursuant to this Consent Decree.

35. Notwithstanding any provision of this Consent Decree, the United States retains all of its information gathering and inspection authorities and rights, including enforcement actions relating thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XII. RETENTION OF RECORDS AND CERTIFICATION

36. Until ten years after the Effective Date, each Settling Party shall preserve and retain all non-identical copies of Records (including records in electronic form) now in its possession or control, or that come into its possession or control, that relate in any manner to liability under CERCLA with respect to the Site, provided, however, that Settling Parties who are potentially responsible as owners or operators of the Site must retain, in addition, all Records that relate to the liability of any person under CERCLA with respect to the Site. Each of the above record retention requirements shall apply regardless of any corporate retention policy to the contrary.

37. After the conclusion of the ten-year record retention period, Settling Parties shall notify EPA at least 90 days prior to the destruction of any such Records and, upon request by EPA, and except as provided in Paragraph 34, Settling Parties shall deliver any such Records to EPA. Each Settling Party certifies individually that, to the best of its knowledge and belief, after thorough inquiry, it has not

altered, mutilated, discarded, destroyed, or otherwise disposed of any Records (other than identical copies) relating to its potential liability regarding the Site since the earlier of notification of potential liability by the United States or the State or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information regarding the Site pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XIII. NOTICES AND SUBMISSIONS

38. Whenever, under the terms of this Settlement Agreement, notice is required to be given or a document is required to be sent by one Party to another, it shall be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice of a change to the other Parties in writing. Written notice as specified in this Section shall constitute complete satisfaction of any written notice requirement of this Settlement Agreement with respect to EPA.

As to EPA:

Paula V. Painter
Environmental Protection Specialist
SD-SEIMB, 11th Floor
U.S. EPA Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303

As to Settling Parties:

Contact for Settling Parties
Street Address
City, State Zip

XIV. INTEGRATION/APPENDICES

39. This Settlement Agreement and its appendices constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement: "Appendix A" is a complete list of the Settling Parties; and "Appendix B" is the map of the Site.

XV. PUBLIC COMMENT

40. This Settlement Agreement shall be subject to a public comment period of not less than 30 days pursuant to Section 122(i) of CERCLA, 42 U.S.C. § 9622(i). In accordance with Section 122(i)(3) of CERCLA, EPA may modify or withdraw its consent to this Settlement Agreement if comments received disclose facts or considerations which indicate that this Settlement Agreement is inappropriate, improper, or inadequate.

XVI. EFFECTIVE DATE

41. The effective date of this Settlement Agreement shall be the date upon which EPA issues written notice that the public comment period pursuant to Paragraph 40 has closed and that comments received, if any, do not require modification of or EPA withdrawal from this Settlement Agreement.

IT IS SO AGREED:

U.S. Environmental Protection Agency

By:

Anita L. Davis, Chief
Superfund Enforcement and
Information Management Branch
Superfund Division
Region 4

Date

THE UNDERSIGNED SETTLING PARTY enters into this Settlement Agreement in the matter of CERCLA Docket No. XXXXX, relating to the Capitol City Plume Superfund Site located in Montgomery, Montgomery County, Alabama:

FOR SETTLING PARTY: _____
Name

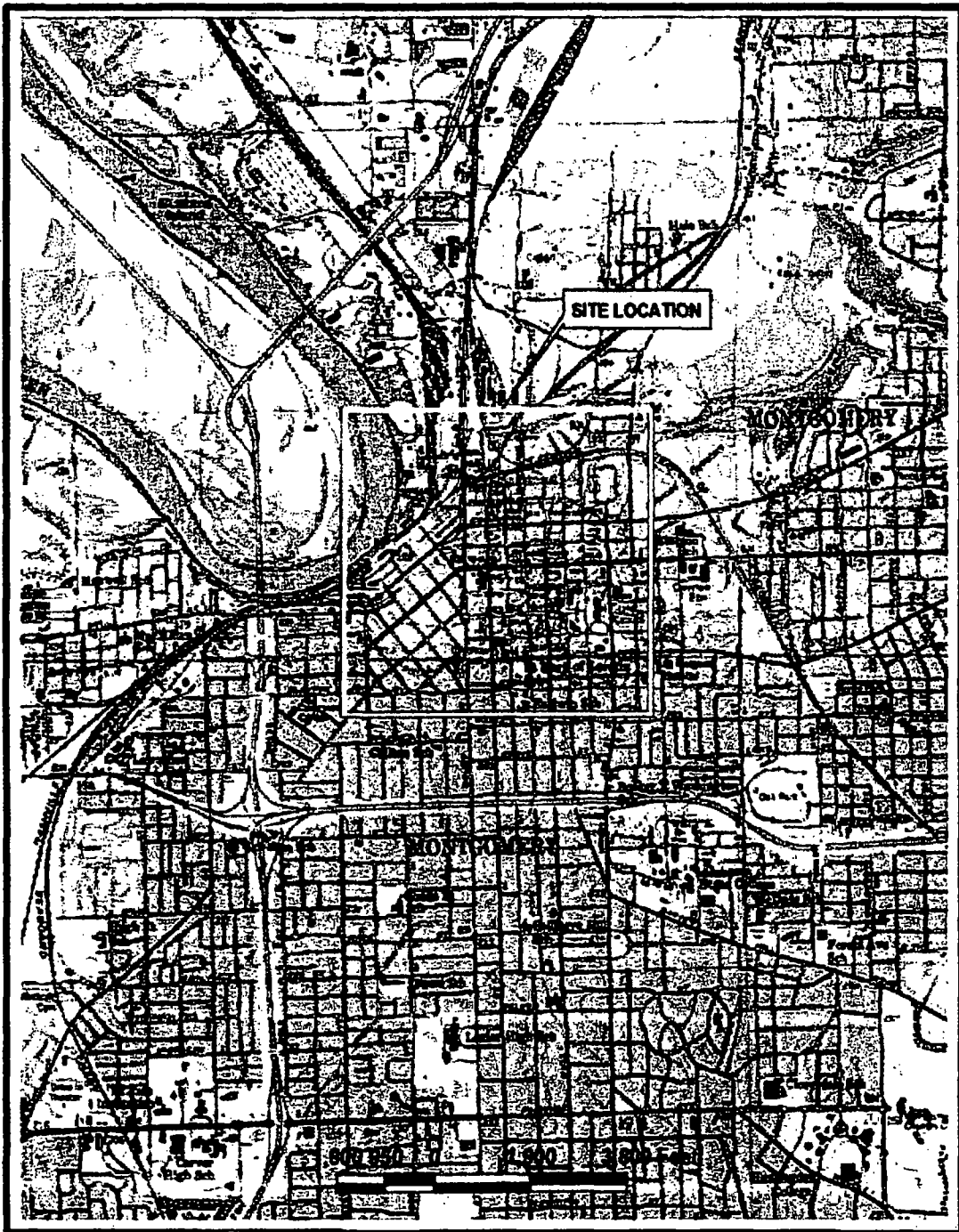
Address

By: _____
Name Date

Appendix A (Settling Parties)

To be updated

Appendix B (Site Map)



ATTACHMENT E

LANCE R. LEFLEUR
DIRECTOR



ROBERT J. BENTLEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ■ FAX (334) 271-7950

September 1, 2015

CERTIFIED MAIL #

91 7108 2133 3936 7154 4380

Ms. Heather McTeer Toney
Regional Administrator
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW
Atlanta, GA 30303

Re: **Certification of Community Acceptance for Deferral of the Capitol City Plume Site**
Montgomery, AL
USEPA I.D. Number AL0 001 058 056


Dear Ms. McTeer Toney:

The Alabama Department of Environmental Management (ADEM or the Department) held a public comment period regarding the proposed deferral of remedial action for the Capitol City Plume Site from July 6, 2015 to August 19, 2015. The draft *Memorandum of Agreement between USEPA, Region 4 and ADEM for Deferral of the Capitol City Plume Superfund Site* and the draft *Settlement Agreement for Site Response* between ADEM and the Downtown Environmental Alliance were made available for public review electronically via <http://www.adem.state.al.us/newEvents/PublicNotice.cnt> and at the Department's main office in Montgomery during the comment period. The purpose of the public notice was to solicit comments from the affected community regarding the potential deferral of remedial action for the Capitol City Plume site from USEPA oversight to ADEM oversight.

The Department received only one correspondence with comments supporting the proposed deferral during the public comment period; no comments opposing the proposed deferral were received. All comments were carefully considered and appropriate responses have been prepared. A copy of the comments received and the Department's responses to those comments are attached.

If questions or comments should arise concerning this matter, please contact Ms. Julie Ange of the Remediation Engineering Section at (334) 270-5646.

Sincerely,



Phillip D. Davis, Chief
Land Division

Attachments

cc/via email: ADEM: Stephen A. Cobb, Ashley T. Mastin
US EPA Region 4: Stephen Smith, Melissa Waters, Scott Miller

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (FAX)

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (FAX)



Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (FAX)

Mobile-Coastal
3664 Dauphin Street, Suite B
Mobile, AL 36608
(251) 304-1176
(251) 304-1189 (FAX)



CH2M
4121 Carmichael Rd. Suite 400
Montgomery, AL 36106
US
(334) 271-1444
(334) 277-5763 [office]
www.ch2m.com

Mr. Russell Kelly
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, AL 36103-1463

July 21, 2015

Subject: Capital City Plume Site

Dear Mr. Kelly,

On behalf of the Downtown Environmental Alliance (Alliance), CH2M has reviewed the information associated with the public notice on the Capitol City Plume Site and submits this comment for the administrative record. The Alliance also reserves the right to adopt other public comments submitted and reserves the right, in the event necessary, to raise any points raised in such comments in any further proceedings. By submitting this comment, the Alliance members do not admit any liability, issue of law or fact, or waive any rights or defenses.

We believe that the deferral of the project's remedial oversight from the EPA to ADEM is in the best interests of the citizens of Montgomery, and will provide a clear path-forward for the successful resolution of the Capitol City Plume Site. This deferral will also allow for the downtown area of Montgomery to continue the revitalization efforts that began 10 to 15 years ago. The City of Montgomery, Mayor Strange, and the rest of the Alliance members should be commended for their proactive approach in addressing the Site, and moving the project towards an end that ensures protection of public health and the environment.

Regards,
CH2M

J.P. Martin, P.E.
Project Manager

Glen Davis, PE
Project Manager

LANCE R. LEFLEUR
DIRECTOR



ROBERT J. BENTLEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ■ FAX (334) 271-7950

August 24, 2015

Messrs. J.P. Martin, P.E. and Glen Davis, P.E.
Project Managers
CH2M
4121 Carmichael Road
Suite 400
Montgomery, Alabama 36106

RE: Public Notice Comment Letter regarding the proposed deferral of the Capital City
Plume Site, Montgomery, AL, dated July 21, 2015

Dear Messrs. Martin and Davis:

The Alabama Department of Environmental Management (ADEM or the Department) has reviewed your comment letter dated July 21, 2015 regarding the proposed deferral of the Capitol City Plume (CCP) site. According to your letter, the CH2M company is in favor of deferral of remedial oversight for the CCP site from the Environmental Protection Agency to ADEM and believes that the deferral would be in the best interests of the community.

ADEM appreciates your comment letter and will include it as part of the administrative record for the CCP site.

If you have any questions concerning this matter, please contact Mrs. Ashley T. Mastin of the Remediation Engineering Section at 334-271-7797 or via email at atmastin@adem.state.al.us.

Sincerely,

A handwritten signature in black ink, appearing to read "S. Cobb", is written over a horizontal line.

Stephen A. Cobb, Chief
Governmental Hazardous Waste Branch
Land Division

SAC/ATM/akr

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1503 (FAX)

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (FAX)

Mobile Branch
2204 Perimeter Road
Mobile, AL 36615-1131
(251) 450-3400
(251) 479-2593 (FAX)

Mobile-Coastal
3664 Dauphin Street, Suite B
Mobile, AL 36608
(251) 304-1176
(251) 304-1189 (FAX)

Attachment 2

DEA-ADEM Settlement Agreement

**State of Alabama
Department of Environmental Management**

SETTLEMENT AGREEMENT FOR SITE RESPONSE

I. Introduction

This Site Response Agreement (“Agreement”) is entered into by the Downtown Environmental Alliance (“Alliance”) which consists of the City of Montgomery (“City”), The Advertiser Company (“Advertiser”), the Alabama Law Enforcement Agency (“ALEA”) as successor-in-interest to the Alabama Department of Public Safety (“ADPS”), the Alabama Department of Education (“Education”), the Alabama Department of Transportation (“ALDOT”), Montgomery County Commission, and the Montgomery Water Works & Sanitary Sewer Board (“Water Board”), with the Alabama Department of Environmental Management (“ADEM”) (collectively “the Parties”). This Agreement provides for the performance of site activities including the assessment and remediation of the area defined as the Capitol City Plume in Downtown Montgomery, Alabama (the “Site”).

II. Responsibilities and Authorities of the Downtown Environmental Alliance and Its Members

The members of the Alliance maintain a separate agreement amongst themselves (the “Alliance Agreement”) that defines their roles and responsibilities within the Alliance. All submittals to ADEM pursuant to this Agreement shall be signed by the City of Montgomery as the designated signatory pursuant to the Alliance Agreement to denote that they are official submittals of the Alliance.

The Alliance shall communicate changes in membership of the Alliance in writing to ADEM within thirty (30) business days. Specifically, should the City decide to leave the Alliance, and its responsibilities regarding this Agreement and the Alliance Agreement, a new signatory shall be designated and this Agreement shall be modified to reflect such changes.

III. Jurisdiction and General Provisions

This Agreement is entered into pursuant to the Alabama Environmental Management Act, Ala. Code, §§ 22-22A-1 through 22-22A-16, as amended, the Alabama Water Pollution Control Act, Ala. Code, §§ 22-22-1 through 22-22-14, as amended, the Hazardous Wastes Management and Minimization Act, Ala. Code, §§ 22-30-1 through 22-30-24, as amended, and the Alabama Hazardous Substance Cleanup Fund, Ala. Code, §§ 22-30A-1 through 22-30A-11, as amended.

The participation of the Alliance in this Agreement shall not constitute or be construed as an admission or evidence that the Alliance or any of its members bear any responsibility or liability for any soil, soil-vapor, surface water, or groundwater contamination associated with the Site. Nothing in this Agreement may be used against the Alliance or any of its members except to enforce the terms of this Agreement in a court of competent jurisdiction. The Parties agree, subject to the terms of this Agreement and subject to provisions otherwise provided by statute, that upon issuance of a Notice of Completion by ADEM that this Agreement is intended to operate as a full resolution of all matters cited in this Agreement. The Parties agree that they are not relieved from any liability if they fail to comply with any provision of this Agreement. Furthermore, by signing this Agreement, ADEM acknowledges that the Alliance and its members do not waive any claims or defenses that they might raise in any proceeding involving third parties, ADEM, or any other governmental agency or person, except that in any action to enforce the terms of this Agreement, the Alliance and its members shall be limited to the defenses of Force Majeure, compliance with the Agreement, physical impossibility, or technical impracticability.

For purposes of this Agreement, and to facilitate record keeping at ADEM, this Site shall be known as the Capitol City Plume Site. All correspondence should reference the specific Site name.

IV. Parties Bound

This Agreement shall apply to and be binding upon ADEM, the Alliance, and their agents, successors, assigns, officers, directors, and principals. The signatories of this Agreement certify that they are authorized to execute and legally bind the Party they represent to this Agreement.

V. Statement of Purpose

This Agreement provides for the performance by the Alliance of an investigation and assessment of the Site and for the remediation of Site conditions as may be necessary because of the release of hazardous substances into the environment at or near the Site.

In entering into this Agreement, the mutual objectives of the Parties are to evaluate the horizontal and vertical extent of potential surface water and groundwater contamination at the Site, assess soil vapor and vapor intrusion risks, and to provide for the evaluation of any necessary work at the Site.

VI. Relevant Historical Information

For purposes of this Agreement, ADEM notes the following historical information:

- A. The Capitol City Plume Site consists of government and private property with multiple, distinct plumes of tetrachloroethylene (PCE) contamination in an area of

Downtown Montgomery. The Site is located in an area of mixed land use with the majority of the Site consisting of governmental and commercial office buildings.

- B. In approximately 1991 to 1992, detectible concentrations of PCE were encountered in Well 9W, located within the Board's North Well Field (approximately 0.25 to 0.5 mile northwest of the Retirement Systems of Alabama [RSA] Tower energy plant). In response to this discovery, the Board closed the entire North Well Field and abandoned all of the wells associated with it, except for Well 9W, which was left in-place for environmental testing.
- C. In approximately 1993, workers performing excavation work for the construction of an energy plant associated with the RSA Tower energy plant discovered PCE in the excavation for the foundation of the facility. The soil and free-phase liquid were removed before completion of the facility.
- D. From September 1993 to September 1994, ADEM's Special Projects Branch collected groundwater samples from four wells as well as soil samples near the construction location of RSA energy plant.
- E. In February 1995, ADEM produced a *Preliminary Assessment Report* which concluded from groundwater and soil gas survey data that six (6) PCE groundwater plumes, as well as, six (6) benzene, toluene, ethyl benzene and xylenes (BTEX) plumes exist within thirty (30) city blocks of Downtown Montgomery. On March 7, 1996, ADEM produced a Site Investigation Report that recommended the Site be considered for placement on the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List (NPL).
- F. In 1999, EPA contracted Black and Veatch Special Project Corp. ("Black and Veatch") to begin developing a work plan for a remedial investigation (RI). Three *Data Evaluation Reports* were produced for EPA in September 2000, June 2001, and July 2002 to evaluate existing data for the Site and included further sample data collected by Black and Veatch as part of the RI work plan.
- G. In a March 29, 1999 memo, the EPA remedial project manager at the Capitol Site concluded that, "the City of Montgomery's groundwater is contaminated with tetrachloroethylene, which is suspected to come from dry cleaners, and BTEX which probably comes from gasoline stations." In a November 2000 public presentation, EPA identified over 45 dry cleaners that operated in Downtown Montgomery between 1905 and 2000.
- H. On May 11, 2000, the EPA published its proposal to include the Capitol City Plume Site on the CERCLA NPL.

- I. On July 7, 2000, the City of Montgomery Mayor's and State of Alabama Governor's offices sent letters requesting that EPA defer listing the Capitol City Plume on the NPL.
- J. In September 2002, EPA issued an Administrative Order to the City of Montgomery (City) for completion of a Feasibility Study (FS).
- K. On November 8, 2002, EPA submitted a *Remedial Investigation Report*. The *RI Report* concluded that sample data indicates that there are two PCE plumes.
- L. In January 2003, the City submitted a *FS Work Plan*. In October 2003, the City submitted a Final Feasibility Study.
- M. On January 16, 2004, ADPH issued a Public Health Assessment for public comment. The Final Release was issued on December 2, 2004. It concluded that the Site presented *No Apparent Public Health Hazard* with respect to 1) drinking water because no municipal or residential wells in use at the time were known to be contaminated, 2) municipal Well 9W which was taken out of service once PCE was detected, and 3) use of a shallow groundwater industrial well for daily vehicle washing operations. However, the Site presented an *Indeterminate Public Health Hazard* with respect to 1) potential future exposures to groundwater due to migration of contaminants toward the North Well Field, and 2) future excavation workers since contaminant levels and exposure times were not yet known. Finally, vapor intrusion was unlikely since contaminated groundwater is approximately 50 feet below ground surface.
- N. On August 20, 2007, the City submitted a *Groundwater Monitoring Report*.
- O. On June 28, 2010, EPA submitted a *Report on the Continued Monitoring of Contamination in Shallow Groundwater within the Capital City Plume Site*.
- P. In 2011, the U.S. Geological Survey (USGS) submitted a *Final Investigation of the Potential Source Area, Contamination Pathway, and Probable Release History of Chlorinated-Solvent-Contaminated Groundwater at the Capital City Plume Site, Montgomery, AL, 2008-2010* on behalf of the EPA.
- Q. In 2011, the USGS began a multi-phase indoor air and soil vapor study using Summa canisters and GORE samplers. The investigations were conducted due to odor complaints received by EPA at the Montgomery County Courthouse Annex building (formerly owned by the Advertiser) and the Attorney General's Office (formerly occupied by ALDOT and ALEA).
- R. On June 11, 2012, the City requested that the EPA allow the City to organize a group of stakeholders to prepare an action plan under the oversight of the ADEM. EPA authorized the City to prepare the Action Plan on November 14, 2012. The Action Plan was submitted on February 12, 2013 and revised in December 2013 and March 2014. EPA sent a letter to the City with terms for formal Deferral of

the Site from the proposed listing on the NPL to oversight under ADEM on May 13, 2014.

- S. The information in Paragraphs A through R above is not intended by ADEM or the Alliance to be a complete recitation of the history of this Site.

VII. Definition of the Site

The area known as the Capitol City Plume (“the Site”) is defined as shown on the attached Figure 1.

VIII. Work to Be Performed

Unless otherwise specified herein, all investigations, assessments, and other work conducted at the Site under this Agreement will be performed by the Alliance. The following actions are to be performed in accordance with the schedule specified in Table 1.:

- A. The Alliance shall develop and submit a Community Involvement and Outreach Plan. The plan shall identify key stakeholders and target audiences along with communication strategies (i.e., periodic press releases) to be implemented throughout the project that will encourage participation and feedback from the community. The Alliance shall implement the plan upon approval by ADEM.
- B. The Alliance shall develop and submit a Supplemental Environmental Investigation (EI) Work Plan that provides 1) a comprehensive overview of existing Site data collected from all investigations to date, 2) a detailed evaluation of whether the extents of the groundwater plumes have been defined sufficiently to perform a risk assessment and alternatives assessment, and identify data gaps that must be filled to complete the assessment(s), 3) a description of the activities necessary to conduct further assessment and/or investigation of the Site necessary to fill such data gaps, and 4) a description of activities necessary to evaluate the potential for current and future vapor intrusion risks due to soil and groundwater contamination at the Site. The Alliance shall implement the work plan upon approval by ADEM.
- C. The Alliance shall prepare and submit a Supplemental EI Report to ADEM that includes an evaluation of the data collected during the investigation activities described in the EI Work Plan, together with all other assessment and investigation data from the Site.
- D. The Alliance shall prepare and submit a Risk Assessment/Alternatives Analysis Report. The Risk Assessment shall address the issues and concerns raised in the December 2, 2004 Public Health Assessment. This assessment shall also present any human health risks that presently exist and/or may exist in the future based on current information known about the Site. This report also shall present the Alliance’s evaluation of remedial alternatives and identification of its

recommended alternative(s). To develop proposed alternatives, the Alliance may weigh various factors, including, but not limited to, overall protection of human health and the environment, ability to achieve cleanup goals, long term effectiveness, implementability, community acceptance, and cost. Remedial actions may include, but are not limited to, no action, passive, and/or active treatment, as appropriate.

- E. The Alliance shall prepare and submit its Remedial Action (RA) Plan that presents the development of proposed performance standards and the Alliance's proposal for remediation of the Capitol City Plume Site. The RA Plan shall include, but not be limited to, design drawings, technical specifications, modeling parameters, groundwater monitoring and reporting schedules, and procedures for management of areas of the site to meet remedial performance standards and mitigate potential human health risks. The RA Plan shall include an implementation schedule. If the plan requires long-term operation and maintenance (O&M), an O&M Plan shall be incorporated. The RA Plan shall be placed on public notice by ADEM for a public comment period of 45 days prior to final approval.
- F. Upon approval of the Remedial Action Plan by ADEM, ADEM shall request that EPA de-propose the Site from the NPL.
- G. Also upon approval of the Remedial Action Plan by ADEM, the Alliance will implement the plan and submit a final Remedial Action Report to ADEM including (as applicable), but not limited to, a description of remedial construction activities, copies of survey plats, maps, etc. and documentation of legal and administrative controls, including ordinances, if the remedy includes land use controls, monitoring data, and certification by a professional engineer registered in the State of Alabama that the remedy is operational and functioning as designed.
- H. If the time required to implement the remedy(ies) exceeds 180 days, the Alliance shall submit Remedial Action Progress Reports to ADEM in accordance with the approved schedule in the RA Plan.
- I. Upon successful attainment of all remedial performance standards and successful completion of any required O&M, monitoring, and other components of the approved remedy(ies), the Alliance shall prepare and submit a Final Report Upon Completion to ADEM.
- J. All plans prepared under this Agreement shall include, unless otherwise approved by ADEM, an implementation schedule, an appropriate milestone submittal schedule, and provisions for implementing appropriate quality assurance and quality control procedures. Those activities which are included in Table 1. will be submitted to ADEM for review and comment in accordance with the submittal schedule.

- K. Upon receipt of ADEM review comments, the Alliance shall revise any submittals to address ADEM comments. The Alliance shall prepare and transmit final submittals to ADEM within 60 days from the date of receipt of ADEM comments, unless otherwise agreed on by the parties.
- L. The Alliance shall adhere to any schedule for submittals and major milestones presented in Table 1. and any modifications to said schedule. The Alliance may submit a request for extension for any activity included in Table 1. if it cannot meet the submittal schedule. It shall be at ADEM's discretion whether to approve or deny the request. Individual documents/reports or plans may be submitted which address multiple activities listed in Table 1.

IX. Obligations of the Parties

Unless otherwise specified herein, all actions required by this Agreement shall be subject to the following stipulations:

- A. All actions performed by or on behalf of the Alliance shall be under the direction and supervision of a qualified professional engineer or registered geologist licensed to practice in the State of Alabama or other qualified professional with specific expertise and experience in site characterization, investigation and cleanup.

Actions performed by or on behalf of the Alliance under this Agreement shall be conducted in a manner consistent with the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP") promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. §9605, codified at 40 CFR Part 300, and with applicable EPA policies and guidance, and with applicable Alabama law and ADEM regulations, policies, and guidance.

- B. In pursuing activities under this Agreement, the Parties shall cooperate and seek to establish mutual objectives, as jointly agreed upon by the Parties, to further evaluate and provide any required remediation of Site conditions.
- C. The Alliance shall provide reimbursement to the Alabama Hazardous Substance Cleanup Fund for ADEM's reasonable costs of overseeing the response actions to be undertaken at the Site by the Alliance as provided in Section XII. of this Agreement.
- D. Reports, work plans, data, and other correspondence to be submitted to ADEM pursuant to this Agreement should be sent to:

Chief, Governmental Hazardous Waste Branch
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, Alabama 36130-1463

Express mail, overnight or hand deliveries should be sent to:

Chief, Governmental Hazardous Waste Branch
Alabama Department of Environmental Management
1400 Coliseum Boulevard
Montgomery, Alabama 36110-2059

Telephone: (334) 271-7739

E. Correspondence to the Alliance should be sent to:

Mayor
City Hall, Room 206,
103 North Perry Street
Montgomery, AL 36104

Telephone: (334) 241-2000

Express mail or overnight deliveries should be sent to:

Mayor
City Hall, Room 206,
103 North Perry Street
Montgomery, AL 36104

Telephone: (334) 241-2000

F. ADEM shall arrange for oversight and review of all activities conducted under this Agreement.

X. Submittals

Major submittals required under this Agreement are presented in Table 1. ADEM reserves the right to review, comment on, and request changes to all plans, proposals, reports, studies, and data submitted under this Agreement prior to implementation thereof. ADEM shall specify the type and number of copies of plans, reports, studies, and data submitted under this Agreement in accordance with applicable laws. Unless stated otherwise, the Alliance shall submit three (3) copies of all draft and final documents to ADEM, in addition to one copy maintained in any public repository that may be established under this Agreement. ADEM agrees not to unreasonably withhold or delay approval of any such plans and proposals.

XI. Participation in Community Relations Activities

ADEM shall give the Alliance at least seven days advance notice of media releases or public meetings that ADEM may hold or sponsor to explain activities at or

concerning the Site or the presence of contaminants or pollutants nearby, except when special circumstances arise or when information must be provided to the public on an emergency basis. If an emergency media release is necessary, ADEM shall give the Alliance notice immediately prior to or immediately upon issuance of the media release.

XII. Reimbursement of ADEM's Oversight Costs

- A. Within ninety (90) days after the completion of each quarterly anniversary date under this Agreement, ADEM shall prepare and submit to the Alliance an invoice for the reasonable oversight costs for work on this Site incurred by ADEM during the preceding quarter, together with documentation describing such costs, for reimbursement into the Alabama Hazardous Substance Cleanup Fund in accordance with the Alabama Hazardous Substance Cleanup Fund Act, Ala. Code, §§ 22-30A-1 to 22-30A-11, as amended.
- B. The Alliance shall reimburse all properly documented costs of ADEM's oversight activities at the Capitol City Plume Site, as stipulated in Paragraph IX.C. of this Agreement, by payment to the Alabama Department of Environmental Management within sixty (60) days of receipt of ADEM's invoice.
- C. Any payment by the Alliance or its members under this Section shall not constitute or be evidence of any admission by the Alliance or its members of any liability to ADEM or to any other person or entity with respect to the Site. The check shall be made payable to "The Alabama Department of Environmental Management," specifically reference the Site Number, and be forwarded to:
- Alabama Department of Environmental Management
Attn: Chief, Fiscal Branch
P.O. Box 301463
Montgomery, Alabama 36130-1463
- D. ADEM shall make a reasonable effort, as staff availability allows, to respond to each major deliverable as outlined in Table 1. and for other general project matters, in a timely manner.
- E. The Alliance shall reimburse ADEM for its oversight costs pursuant to this Agreement for the duration of the activities required by this Agreement. ADEM shall provide the Alliance with an estimate of its expected regulatory oversight costs for each new fiscal year, to assist the Alliance with its budget planning. The cost estimate for each new fiscal year shall be provided to the Alliance by July 1 of the previous fiscal year. These estimates will include quarterly projections of such costs, along with a description of the expected staffing needs and scope of such costs. ADEM shall invoice actual costs incurred. ADEM will advise the Alliance in writing within thirty (30) days of becoming aware that its costs significantly exceed its estimates.

- F. Should the Alliance and ADEM be unable to reach agreement with respect to the payment of any claim by ADEM for its oversight costs, the Alliance shall have the right to invoke the dispute resolution under Section XIII. below.

XIII. Dispute Resolution

It is the intent and expectation of ADEM and the Alliance that any issues related to the implementation of this Agreement will be resolved informally to the extent possible. For matters which cannot be resolved informally, if the Alliance objects to any ADEM decision pertaining to (i) the payment of oversight costs pursuant to Section XII. above, or (ii) the performance of the work under this Agreement, then the Alliance shall notify ADEM in writing of its objections within twenty-one (21) days of receipt of the decision or dispute regarding payment. The Parties shall have an additional thirty (30) days from ADEM's receipt of the written notification of such an objection in which to reach agreement. Dispute resolution will be conducted at ADEM by a committee comprised of the Director of ADEM and Land Division Chief, and up to two representatives from the Alliance. If agreement cannot be reached on any issue within the 30 day period, each party reserves all rights and defenses regarding such matter, and ADEM shall have the right to (i) seek an order in a court of competent jurisdiction to compel action by the Alliance, or (ii) take any other legal or administrative action authorized by law. In any such proceeding, the Alliance fully reserves all rights and defenses to contest such action.

XIV. Compliance with Law

All activities required under this Agreement shall be performed in compliance with all applicable federal, state and local laws and regulations.

XV. Termination

All obligations of the Parties under this Agreement shall terminate upon satisfactory completion (as determined in writing by ADEM) of the work set forth in Section VIII. of this Agreement. Once it has been determined that all activities required under Section VIII. of this Agreement have been satisfactorily completed, the Alliance shall submit a request for termination of this Agreement to ADEM. Upon completion of ADEM's review of the request and supporting documentation and a determination by ADEM that termination of the Agreement is appropriate, ADEM shall confirm such determination in writing. ADEM agrees not to unreasonably withhold the issuance of any such determination.

XVI. Reservation of Rights

- A. ADEM and the Alliance reserve all rights against all non-parties to this Agreement. This Agreement shall not be construed to provide any rights, interests, or benefits to non-parties.

- B. ADEM reserves the right to perform clean-up and to seek recovery of costs from any potentially liable parties.
- C. The Alliance expressly denies liability as set forth in Section III. of this Agreement, reserves its rights to deny liability and to defend any claims brought against it by any party, and reserves its right to bring an action against any potentially liable party that is not a party to this Agreement for the recovery of costs, including attorney's fees and costs previously incurred, and all such fees and costs incurred to prosecute the cost recovery action.

XVII. Force Majeure

A Force Majeure event is defined as any event arising from causes that are not reasonably foreseeable and are beyond the reasonable control of the Alliance, including its contractors and consultants (i.e., causes which could have been overcome or avoided by the exercise of reasonable due diligence will not be considered to be beyond the reasonable control of the Alliance) and which delays or prevents performance. Changed economic circumstances, normal precipitation events, and failure to obtain federal, state or local permits shall not constitute a Force Majeure event. Any request for a modification of a deadline must be accompanied by the reasons (including documentation) for each extension and the proposed extension time. This information shall be submitted to ADEM within ten (10) business days of when the Alliance obtained, or should have obtained, knowledge of the Force Majeure event, or, when possible, a minimum of two (2) business days prior to the original anticipated completion date, whichever is sooner. If ADEM, after review of the extension request, finds the work was delayed because of conditions beyond the control and without the fault of the Alliance, ADEM may extend the time as justified by the specific circumstances. ADEM may also grant any other additional time extension for good cause shown but is not obligated to do so.

XVIII. Good Faith Settlement

This Agreement was negotiated in good faith by ADEM and the Alliance. Accordingly, the Parties intend that this Agreement shall constitute an administratively approved settlement of the matters covered by this Agreement. Therefore, by entering into and carrying out the terms of this Agreement, ADEM agrees that all claims it had or has against the Alliance, its Members, employees in both their official and individual capacities, and its agents, servants, contractors or consultants, whether administrative or otherwise, are fully resolved for matters covered by this Agreement. This Agreement is limited to the matters contained herein and does not preclude ADEM from taking enforcement action regarding any unrelated violation of law or regulation administered by ADEM.

XIX. Other Claims

ADEM is not liable for any personal injuries or property damage arising from the acts or omissions of the Alliance, or their principals, contractors, agents or employees, in the execution of activities required by this Agreement. ADEM is not liable as a party to any contract executed by the Alliance in furtherance of this Agreement. The Alliance shall not be liable for the contracts, acts or omissions of ADEM, its agents, employees or contractors in the execution of ADEM's duties under this Agreement.

XX. Subsequent Modification

This Agreement may be amended only in writing and only by the mutual agreement of the Parties. The Parties expressly understand and agree that an amendment or revision approved by the Parties may be limited to a specific part, section, provision, or table of this Agreement or any portion of said part, provision or table without any requirement to replace or revise any other portion of the Agreement or any requirement for execution of a new agreement. This Agreement shall apply in full force and effect to all members of the Alliance, including any member that joins the Alliance following the execution of this Agreement. Modification of this Agreement shall not be required in the event a member joins the Alliance or leaves the Alliance, unless the member leaving the Alliance is the designated signatory, pursuant to Section II. of this Agreement.

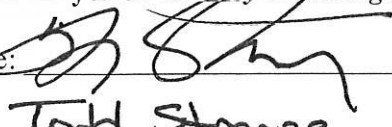
XXI. Severability

The provisions of this Agreement are severable and if any provision of this Agreement, or the application of any provision of this Agreement to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this Agreement shall not be affected thereby. Invalidation of any State or Federal statutory or regulatory provision which forms the basis for any condition of this Agreement does not affect the validity of any other State or Federal statutory or regulatory basis for said condition.

XXII. Cooperation

The Parties hereby mutually agree to cooperate with each other to the fullest extent possible in the implementation of this Agreement.

**For Downtown Environmental Alliance
By the Mayor of the City of Montgomery**

Name: 

Print Name

Todd Strange

Title: Mayor

Date: Sept. 30, 2015

For Alabama Department of Environmental Management

Name: 

Print Name

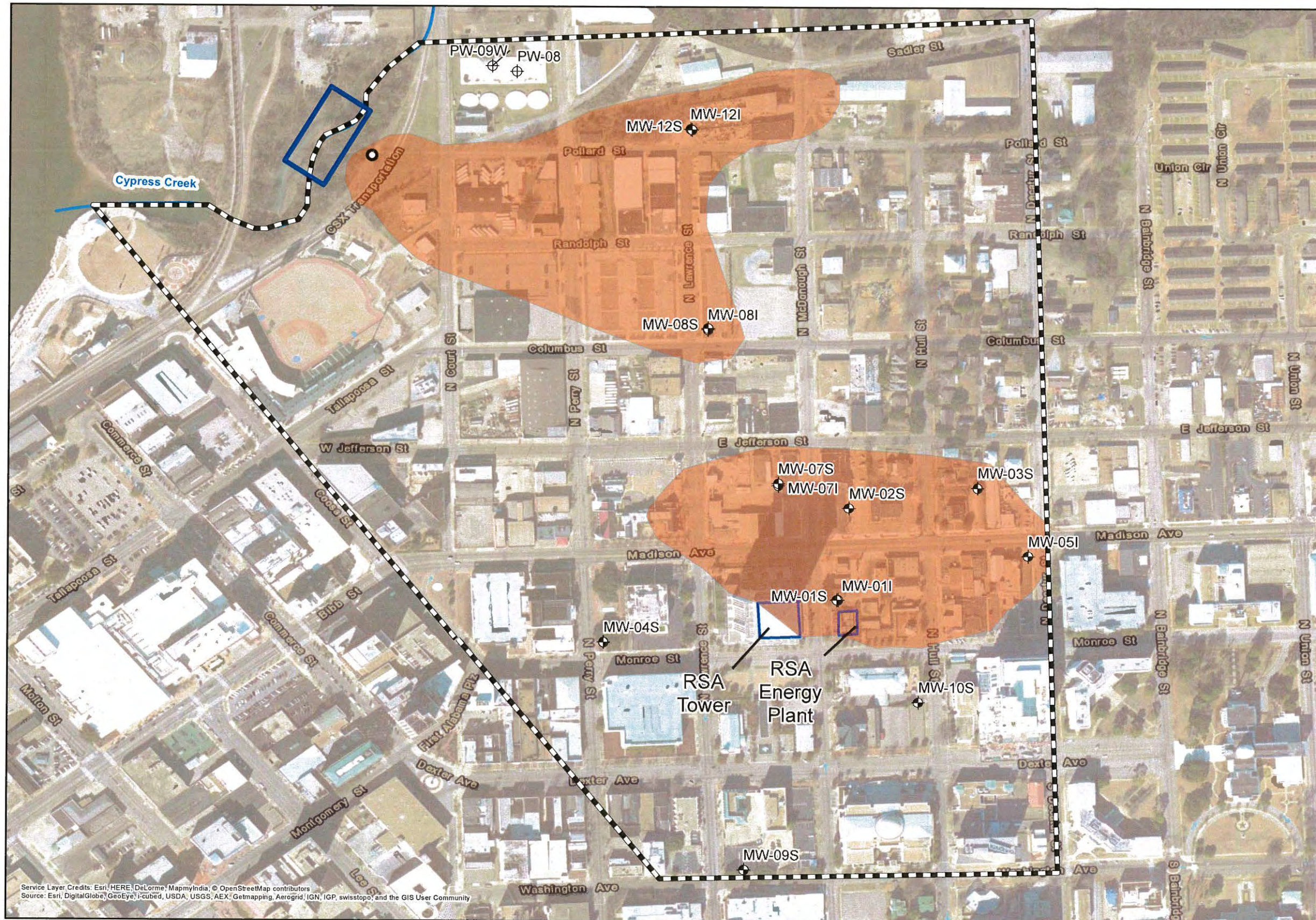
Lance R. LeFleur

Title: Director

Date: Sept. 30, 2015

**Table 1.
Summary of Deliverables**

Deliverable	Due
Community Involvement and Outreach Plan	60 days after execution of Agreement
Supplemental Environmental Investigation Work Plan	120 days after execution of Agreement
Supplemental Environmental Investigation Report	9 months after approval of EI Work Plan
Risk Assessment/Alternatives Analysis Report	120 days after concurrence with EI Report
Remedial Action Plan (may be combined with Risk Assessment/AA Report)	60 days after concurrence with Risk Assessment/AA Report. If the RA Plan is combined with the Risk Assessment/AA Report as a single submittal, the combined document shall be submitted within 180 days after concurrence with the EI Report
Remedial Action Report	Within 60 days of completing implementation of remedial action
Remedial Action Progress Report (if warranted)	To be submitted according to the schedule described in the Remedial Action Plan, as approved by ADEM and as required in Paragraph VIII.I.
Final Report Upon Completion	Within 60 days of attaining performance standards and completing all requirements of the Remedial Action Plan



Service Layer Credits: Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors
 Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

LEGEND

- ⊕ Former City Water Supply Well
- ⊕ Monitoring Well
- Temporary Well
- Site Boundary
- Approximate Area of Transducer Study
- PCE Plume

Notes:

1. RSA - Retirement Systems of Alabama
2. Plume extents drawn based on historical temporary well and direct-push sampling as well as results from Phase II Assessments conducted within or adjacent to the downtown area.
3. Temporary well proposed adjacent to Cypress Creek to conduct transducer study.
4. PCE = Tetrachloroethene

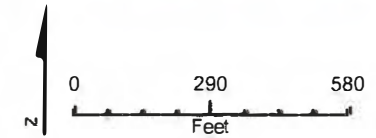


FIGURE 1
 Conceptual Site Model
 Montgomery Capitol City Plume
 Montgomery, Alabama

Attachment 3

Capitol City Plume IC plan 7-26-2019

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NOTICE OF FINAL INSTITUTIONAL CONTROLS PLAN AND MODIFICATION OF THE SETTLEMENT AGREEMENT FOR SITE RESPONSE BETWEEN THE DOWNTOWN ENVIRONMENTAL ALLIANCE AND THE ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT UNDER THE ALABAMA HAZARDOUS SUBSTANCES CLEANUP FUND (AHSCF), AND THE ALABAMA HAZARDOUS WASTES MANAGEMENT AND MINIMIZATION ACT (AHWMMA), AND REQUEST FOR COMMENTS

PUBLIC NOTICE – 348

MONTGOMERY COUNTY

The Downtown Environmental Alliance (DEA) has submitted an Institutional Controls Plan for the Capitol City Plume (EPA I.D. Number AL0001058056) located in downtown Montgomery, Montgomery County, Alabama. Tetrachloroethylene contaminated soils and groundwater were discovered at the site in 1993 during construction of the RSA Energy Plant. The site has undergone extensive soil, groundwater and soil vapor sampling and investigation. The Institutional Controls Plan presents the DEA's selected remedy for the site. The Department has completed the review of the Institutional Controls Plan and determined the plan to be complete. The Department has prepared a draft modified Settlement Agreement to incorporate the Institutional Controls Plan by reference.

Copies of the fact sheet, the modified Settlement Agreement for Site Response, and the Institutional Controls Plan are available for public inspection electronically via <http://adem.alabama.gov/newsEvents/publicNotices.cnt> and at the following locations Monday – Friday (except legal holidays) during the hours of 8:00 a.m. to 5:00 p.m. A nominal fee for copying and/or mailing may be charged. Arrangements for copying should be made in advance.

Russell A. Kelly, Chief
Permits and Services Division
ADEM
1400 Coliseum Blvd.
[Mailing address: PO Box 301463; Zip 36130-1463]
Montgomery, Alabama 36110-2400
(334) 271-7714

Persons wishing to comment may do so, in writing, to the Department's named contact above within 45 days following the publication date of this notice. In order to affect final decisions, comments must offer technically substantial information that is applicable to the proposed plan.

A written request for a public hearing may also be filed within that 45-day period and must state the nature of the issues proposed to be raised in the hearing. The Director shall hold a public hearing upon receipt of a significant number of technical requests.

After consideration of all written comments, review of any public hearing record, and consideration of the requirements of the AHWMMA, the Federal Resource, Conservation and Recovery Act (RCRA), AHSCF, and applicable regulations, the Department will make a final determination. The Department will develop a response to comments, which will become part of the public record and will be available to persons upon request. Notice will be sent to any person requesting notice of the final action.

The Department maintains a list of interested individuals who are mailed legal notices regarding proposed permits. If you wish to receive such notices, contact the Permits & Services Division via telephone (334-

271-7714), e-mail (permitsmail@adem.alabama.gov), or postal service (P.O. Box 301463, Montgomery, AL 36130-1463).

This notice is hereby given this 9th day of August, 2019, by authorization of the Alabama Department of Environmental Management.

Lance R. LeFleur
Director

Nondiscrimination Statement: The Department does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in the

**Capitol City Plume
Downtown Environmental Alliance
Montgomery, Alabama
EPA I.D. Number AL0 001 058 056**

FACT SHEET

A Remedial Action Plan (document titled *Institutional Controls Plan*) has been submitted by the Downtown Environmental Alliance pursuant to the September 30, 2015 Settlement Agreement for Site Response (Agreement) between the Alabama Department of Environmental Management (ADEM) and the Downtown Environmental Alliance (DEA). This fact sheet has been prepared to briefly advise the public of the principle legal and policy issues regarding the remediation of the Capitol City Plume under the Settlement Agreement.

I. SETTLEMENT AGREEMENT FOR SITE RESPONSE

The Settlement Agreement provides a mechanism for the continued performance of site response actions involving the assessment and remediation of contaminated groundwater and soil vapor at the Capitol City Plume site.

II. PROCEDURES FOR REACHING A FINAL DECISION

In accordance with Section VIII.E. of the Agreement, a 45-day public comment period will be provided for the *Institutional Controls Plan* and the draft modification to the Settlement Agreement to incorporate the *Institutional Controls Plan* by reference. The comment period will begin on August 9, 2019, which is the date of publication of the public notice in major local newspaper(s) of general circulation, and will end on September 23, 2019.

Any person interested in commenting on any part of the draft Agreement or the *Institutional Controls Plan* must do so within the 45-day comment period and should submit their comments in writing to the Alabama Department of Environmental Management, Permits and Services Division, 1400 Coliseum Boulevard (Zip 36110-2059), P.O. Box 301463 (Zip 36130-1463) Montgomery, Alabama, ATTENTION: Mr. Russell A. Kelly.

ADEM will consider all written comments received during the comment period while making a decision regarding the draft *Institutional Controls Plan* for the Capitol City Plume Site. When ADEM makes its final decision, notice will be given to the applicant and each person who has submitted written comments or requested notice of the final decision.

III. FACILITY DESCRIPTION

The Capitol City Plume Site was originally discovered in former public water supply well PW-09W in 1991 and during the construction of the Retirement Systems of Alabama (RSA) Tower Energy Plant in 1993 in downtown Montgomery, Alabama. The Capitol City Plume or Downtown Environmental Alliance Project covers approximately 30 city blocks in downtown Montgomery and includes groundwater and soil vapor potentially impacted by tetrachloroethene (PCE) discovered during construction of the RSA Energy Plant.

IV. SUMMARY OF PROPOSED MODIFICATIONS

The proposed modification to the Settlement Agreement includes two additional columns to Table 1. to include the submittal and approval dates of documents required pursuant to the Agreement. The modification also includes the addition of the site nomenclature referenced as the Downtown Environmental Assessment Project, the inclusion of the *Institutional Controls Plan* by reference into the Agreement, and minor errors within the Agreement.

V. CHANGES TO THE EXISTING AGREEMENT

The specific changes to the Agreement are explained below.

Section	<u>Reason</u>
III. Jurisdiction and General Provisions	Addition of the Site name as the Downtown Environmental Assessment Project.
III. Jurisdiction and General Provisions	Incorporation by reference of the Remedial Action Plan (submitted as document titled <i>Institutional Controls Plan</i>) into the Agreement.
IX. Obligations of the Parties	Update to the telephone number for the Chief of the Governmental Hazardous Waste branch from (334) 271-7739 to (334)271-7789.
XXIII. Agreement History	Added "Agreement History" to record previous and subsequent modifications to this Agreement
Table 1. Summary of Deliverables	A column titled "Document Date" was created in this table to record the date documents were submitted by the DEA to the Department.
Table 1. Summary of Deliverables	A column titled "Approval Date" was created in this table to record the date documents received Department approval.
Table 1. Summary of Deliverables	Footnotes added to document nomenclature changes for the Supplemental Environmental Investigation Work Plan and the Remedial Action Plan deliverables.

VI. TECHNICAL CONTACT

For questions involving the technical content of this draft modification to the Agreement and *Institutional Controls Plan*, please contact the individual listed below:

Samantha Downing, Project Manager
Remediation Engineering Section
Governmental Hazardous Waste Branch, Land Division
Alabama Department of Environmental Management
1400 Coliseum Boulevard (Zip 36110)
P.O. Box 301463 (Zip 36130)
Montgomery, Alabama
(334) 270-5687

**State of Alabama
Department of Environmental Management**

SETTLEMENT AGREEMENT FOR SITE RESPONSE

I. Introduction

This Site Response Agreement (“Agreement”) is entered into by the Downtown Environmental Alliance (“Alliance”) which consists of the City of Montgomery (“City”), The Advertiser Company (“Advertiser”), the Alabama Law Enforcement Agency (“ALEA”) as successor-in-interest to the Alabama Department of Public Safety (“ADPS”), the Alabama Department of Education (“Education”), the Alabama Department of Transportation (“ALDOT”), Montgomery County Commission, and the Montgomery Water Works & Sanitary Sewer Board (“Water Board”), with the Alabama Department of Environmental Management (“ADEM”) (collectively “the Parties”). This Agreement provides for the performance of site activities including the assessment and remediation of the area defined as the Capitol City Plume in Downtown Montgomery, Alabama (the “Site”).

II. Responsibilities and Authorities of the Downtown Environmental Alliance and Its Members

The members of the Alliance maintain a separate agreement amongst themselves (the “Alliance Agreement”) that defines their roles and responsibilities within the Alliance. All submittals to ADEM pursuant to this Agreement shall be signed by the City of Montgomery as the designated signatory pursuant to the Alliance Agreement to denote that they are official submittals of the Alliance.

The Alliance shall communicate changes in membership of the Alliance in writing to ADEM within thirty (30) business days. Specifically, should the City decide to leave the Alliance, and its responsibilities regarding this Agreement and the Alliance Agreement, a new signatory shall be designated and this Agreement shall be modified to reflect such changes.

III. Jurisdiction and General Provisions

This Agreement is entered into pursuant to the Alabama Environmental Management Act, Ala. Code, §§ 22-22A-1 through 22-22A-16, as amended, the Alabama Water Pollution Control Act, Ala. Code, §§ 22-22-1 through 22-22-14, as amended, the Hazardous Wastes Management and Minimization Act, Ala. Code, §§ 22-30-1 through 22-30-24, as amended, and the Alabama Hazardous Substance Cleanup Fund, Ala. Code, §§ 22-30A-1 through 22-30A-11, as amended.

The participation of the Alliance in this Agreement shall not constitute or be construed as an admission or evidence that the Alliance or any of its members bear any responsibility or liability for any soil, soil-vapor, surface water, or groundwater contamination associated with the Site. Nothing in this Agreement may be used against the Alliance or any of its members except to enforce the terms of this Agreement in a court of competent jurisdiction. The Parties agree, subject to the terms of this Agreement and subject to provisions otherwise provided by statute, that upon issuance of a Notice of Completion by ADEM that this Agreement is intended to operate as a full resolution of all matters cited in this Agreement. The Parties agree that they are not relieved from any liability if they fail to comply with any provision of this Agreement. Furthermore, by signing this Agreement, ADEM acknowledges that the Alliance and its members do not waive any claims or defenses that they might raise in any proceeding involving third parties, ADEM, or any other governmental agency or person, except that in any action to enforce the terms of this Agreement, the Alliance and its members shall be limited to the defenses of Force Majeure, compliance with the Agreement, physical impossibility, or technical impracticability.

For purposes of this Agreement, and to facilitate record keeping at ADEM, this Site shall be known as the Capitol City Plume Site or the Downtown Environmental Assessment Project. All correspondence should reference the specific Site name.

The Remedial Action Plan (submitted as document titled *Institutional Controls Plan*) listed in Table 1. is hereby incorporated by reference into this Agreement.

IV. Parties Bound

This Agreement shall apply to and be binding upon ADEM, the Alliance, and their agents, successors, assigns, officers, directors, and principals. The signatories of this Agreement certify that they are authorized to execute and legally bind the Party they represent to this Agreement.

V. Statement of Purpose

This Agreement provides for the performance by the Alliance of an investigation and assessment of the Site and for the remediation of Site conditions as may be necessary because of the release of hazardous substances into the environment at or near the Site.

In entering into this Agreement, the mutual objectives of the Parties are to evaluate the horizontal and vertical extent of potential surface water and groundwater contamination at the Site, assess soil vapor and vapor intrusion risks, and to provide for the evaluation of any necessary work at the Site.

VI. Relevant Historical Information

For purposes of this Agreement, ADEM notes the following historical information:

- A. The Capitol City Plume Site consists of government and private property with multiple, distinct plumes of tetrachloroethylene (PCE) contamination in an area of Downtown Montgomery. The Site is located in an area of mixed land use with the majority of the Site consisting of governmental and commercial office buildings.
- B. In approximately 1991 to 1992, detectible concentrations of PCE were encountered in Well 9W, located within the Board's North Well Field (approximately 0.25 to 0.5 mile northwest of the Retirement Systems of Alabama [RSA] Tower energy plant). In response to this discovery, the Board closed the entire North Well Field and abandoned all of the wells associated with it, except for Well 9W, which was left in-place for environmental testing.
- C. In approximately 1993, workers performing excavation work for the construction of an energy plant associated with the RSA Tower energy plant discovered PCE in the excavation for the foundation of the facility. The soil and free-phase liquid were removed before completion of the facility.
- D. From September 1993 to September 1994, ADEM's Special Projects Branch collected groundwater samples from four wells as well as soil samples near the construction location of RSA energy plant.
- E. In February 1995, ADEM produced a *Preliminary Assessment Report* which concluded from groundwater and soil gas survey data that six (6) PCE groundwater plumes, as well as, six (6) benzene, toluene, ethyl benzene and xylenes (BTEX) plumes exist within thirty (30) city blocks of Downtown Montgomery. On March 7, 1996, ADEM produced a Site Investigation Report that recommended the Site be considered for placement on the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List (NPL).
- F. In 1999, EPA contracted Black and Veatch Special Project Corp. ("Black and Veatch") to begin developing a work plan for a remedial investigation (RI). Three *Data Evaluation Reports* were produced for EPA in September 2000, June 2001, and July 2002 to evaluate existing data for the Site and included further sample data collected by Black and Veatch as part of the RI work plan.
- G. In a March 29, 1999 memo, the EPA remedial project manager at the Capitol Site concluded that, "the City of Montgomery's groundwater is contaminated with tetrachloroethylene, which is suspected to come from dry cleaners, and BTEX which probably comes from gasoline stations." In a November 2000 public presentation, EPA identified over 45 dry cleaners that operated in Downtown Montgomery between 1905 and 2000.
- H. On May 11, 2000, the EPA published its proposal to include the Capitol City Plume Site on the CERCLA NPL.

- I. On July 7, 2000, the City of Montgomery Mayor's and State of Alabama Governor's offices sent letters requesting that EPA defer listing the Capitol City Plume on the NPL.
- J. In September 2002, EPA issued an Administrative Order to the City of Montgomery (City) for completion of a Feasibility Study (FS).
- K. On November 8, 2002, EPA submitted a *Remedial Investigation Report*. The *RI Report* concluded that sample data indicates that there are two PCE plumes.
- L. In January 2003, the City submitted a *FS Work Plan*. In October 2003, the City submitted a Final Feasibility Study.
- M. On January 16, 2004, ADPH issued a Public Health Assessment for public comment. The Final Release was issued on December 2, 2004. It concluded that the Site presented *No Apparent Public Health Hazard* with respect to 1) drinking water because no municipal or residential wells in use at the time were known to be contaminated, 2) municipal Well 9W which was taken out of service once PCE was detected, and 3) use of a shallow groundwater industrial well for daily vehicle washing operations. However, the Site presented an *Indeterminate Public Health Hazard* with respect to 1) potential future exposures to groundwater due to migration of contaminants toward the North Well Field, and 2) future excavation workers since contaminant levels and exposure times were not yet known. Finally, vapor intrusion was unlikely since contaminated groundwater is approximately 50 feet below ground surface.
- N. On August 20, 2007, the City submitted a *Groundwater Monitoring Report*.
- O. On June 28, 2010, EPA submitted a *Report on the Continued Monitoring of Contamination in Shallow Groundwater within the Capital City Plume Site*.
- P. In 2011, the U.S. Geological Survey (USGS) submitted a *Final Investigation of the Potential Source Area, Contamination Pathway, and Probable Release History of Chlorinated-Solvent-Contaminated Groundwater at the Capital City Plume Site, Montgomery, AL, 2008-2010* on behalf of the EPA.
- Q. In 2011, the USGS began a multi-phase indoor air and soil vapor study using Summa canisters and GORE samplers. The investigations were conducted due to odor complaints received by EPA at the Montgomery County Courthouse Annex building (formerly owned by the Advertiser) and the Attorney General's Office (formerly occupied by ALDOT and ALEA).
- R. On June 11, 2012, the City requested that the EPA allow the City to organize a group of stakeholders to prepare an action plan under the oversight of the ADEM. EPA authorized the City to prepare the Action Plan on November 14, 2012. The Action Plan was submitted on February 12, 2013 and revised in December 2013 and March 2014. EPA sent a letter to the City with terms for formal Deferral of the

Site from the proposed listing on the NPL to oversight under ADEM on May 13, 2014.

- S. The information in Paragraphs A through R above is not intended by ADEM or the Alliance to be a complete recitation of the history of this Site.

VII. Definition of the Site

The area known as the Capitol City Plume (“the Site”) is defined as shown on the attached Figure 1.

VIII. Work to Be Performed

Unless otherwise specified herein, all investigations, assessments, and other work conducted at the Site under this Agreement will be performed by the Alliance. The following actions are to be performed in accordance with the schedule specified in Table 1.:

- A. The Alliance shall develop and submit a Community Involvement and Outreach Plan. The plan shall identify key stakeholders and target audiences along with communication strategies (i.e., periodic press releases) to be implemented throughout the project that will encourage participation and feedback from the community. The Alliance shall implement the plan upon approval by ADEM.
- B. The Alliance shall develop and submit a Supplemental Environmental Investigation (EI) Work Plan that provides 1) a comprehensive overview of existing Site data collected from all investigations to date, 2) a detailed evaluation of whether the extents of the groundwater plumes have been defined sufficiently to perform a risk assessment and alternatives assessment, and identify data gaps that must be filled to complete the assessment(s), 3) a description of the activities necessary to conduct further assessment and/or investigation of the Site necessary to fill such data gaps, and 4) a description of activities necessary to evaluate the potential for current and future vapor intrusion risks due to soil and groundwater contamination at the Site. The Alliance shall implement the work plan upon approval by ADEM.
- C. The Alliance shall prepare and submit a Supplemental EI Report to ADEM that includes an evaluation of the data collected during the investigation activities described in the EI Work Plan, together with all other assessment and investigation data from the Site.
- D. The Alliance shall prepare and submit a Risk Assessment/Alternatives Analysis Report. The Risk Assessment shall address the issues and concerns raised in the December 2, 2004 Public Health Assessment. This assessment shall also present any human health risks that presently exist and/or may exist in the future based on current information known about the Site. This report also shall present the Alliance’s evaluation of remedial alternatives and identification of its recommended alternative(s). To develop proposed alternatives, the Alliance may

weigh various factors, including, but not limited to, overall protection of human health and the environment, ability to achieve cleanup goals, long term effectiveness, implementability, community acceptance, and cost. Remedial actions may include, but are not limited to, no action, passive, and/or active treatment, as appropriate.

- E. The Alliance shall prepare and submit its Remedial Action (RA) Plan that presents the development of proposed performance standards and the Alliance's proposal for remediation of the Capitol City Plume Site. The RA Plan shall include, but not be limited to, design drawings, technical specifications, modeling parameters, groundwater monitoring and reporting schedules, and procedures for management of areas of the site to meet remedial performance standards and mitigate potential human health risks. The RA Plan shall include an implementation schedule. If the plan requires long-term operation and maintenance (O&M), an O&M Plan shall be incorporated. The RA Plan shall be placed on public notice by ADEM for a public comment period of 45 days prior to final approval.
- F. Upon approval of the Remedial Action Plan by ADEM, ADEM shall request that EPA de-propose the Site from the NPL.
- G. Also upon approval of the Remedial Action Plan by ADEM, the Alliance will implement the plan and submit a final Remedial Action Report to ADEM including (as applicable), but not limited to, a description of remedial construction activities, copies of survey plats, maps, etc. and documentation of legal and administrative controls, including ordinances, if the remedy includes land use controls, monitoring data, and certification by a professional engineer registered in the State of Alabama that the remedy is operational and functioning as designed.
- H. If the time required to implement the remedy(ies) exceeds 180 days, the Alliance shall submit Remedial Action Progress Reports to ADEM in accordance with the approved schedule in the RA Plan.
- I. Upon successful attainment of all remedial performance standards and successful completion of any required O&M, monitoring, and other components of the approved remedy(ies), the Alliance shall prepare and submit a Final Report Upon Completion to ADEM.
- J. All plans prepared under this Agreement shall include, unless otherwise approved by ADEM, an implementation schedule, an appropriate milestone submittal schedule, and provisions for implementing appropriate quality assurance and quality control procedures. Those activities which are included in Table 1. will be submitted to ADEM for review and comment in accordance with the submittal schedule.
- K. Upon receipt of ADEM review comments, the Alliance shall revise any submittals to address ADEM comments. The Alliance shall prepare and transmit final

submittals to ADEM within 60 days from the date of receipt of ADEM comments, unless otherwise agreed on by the parties.

- L. The Alliance shall adhere to any schedule for submittals and major milestones presented in Table 1. and any modifications to said schedule. The Alliance may submit a request for extension for any activity included in Table 1. if it cannot meet the submittal schedule. It shall be at ADEM's discretion whether to approve or deny the request. Individual documents/reports or plans may be submitted which address multiple activities listed in Table 1.

IX. Obligations of the Parties

Unless otherwise specified herein, all actions required by this Agreement shall be subject to the following stipulations:

- A. All actions performed by or on behalf of the Alliance shall be under the direction and supervision of a qualified professional engineer or registered geologist licensed to practice in the State of Alabama or other qualified professional with specific expertise and experience in site characterization, investigation and cleanup.

Actions performed by or on behalf of the Alliance under this Agreement shall be conducted in a manner consistent with the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP") promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. §9605, codified at 40 CFR Part 300, and with applicable EPA policies and guidance, and with applicable Alabama law and ADEM regulations, policies, and guidance.

- B. In pursuing activities under this Agreement, the Parties shall cooperate and seek to establish mutual objectives, as jointly agreed upon by the Parties, to further evaluate and provide any required remediation of Site conditions.
- C. The Alliance shall provide reimbursement to the Alabama Hazardous Substance Cleanup Fund for ADEM's reasonable costs of overseeing the response actions to be undertaken at the Site by the Alliance as provided in Section XII. of this Agreement.
- D. Reports, work plans, data, and other correspondence to be submitted to ADEM pursuant to this Agreement should be sent to:

Chief, Governmental Hazardous Waste Branch
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, Alabama 36130-1463

Express mail, overnight or hand deliveries should be sent to:

Chief, Governmental Hazardous Waste Branch

Alabama Department of Environmental Management
1400 Coliseum Boulevard
Montgomery, Alabama 36110-2059

Telephone: (334) 271-7789

- E. Correspondence to the Alliance should be sent to:

Mayor
City Hall, Room 206,
103 North Perry Street
Montgomery, AL 36104

Telephone: (334) 241-2000

Express mail or overnight deliveries should be sent to:

Mayor
City Hall, Room 206,
103 North Perry Street
Montgomery, AL 36104

Telephone: (334) 241-2000

- F. ADEM shall arrange for oversight and review of all activities conducted under this Agreement.

X. Submittals

Major submittals required under this Agreement are presented in Table 1. ADEM reserves the right to review, comment on, and request changes to all plans, proposals, reports, studies, and data submitted under this Agreement prior to implementation thereof. ADEM shall specify the type and number of copies of plans, reports, studies, and data submitted under this Agreement in accordance with applicable laws. Unless stated otherwise, the Alliance shall submit three (3) copies of all draft and final documents to ADEM, in addition to one copy maintained in any public repository that may be established under this Agreement. ADEM agrees not to unreasonably withhold or delay approval of any such plans and proposals.

XI. Participation in Community Relations Activities

ADEM shall give the Alliance at least seven days advance notice of media releases or public meetings that ADEM may hold or sponsor to explain activities at or concerning the Site or the presence of contaminants or pollutants nearby, except when special circumstances arise or when information must be provided to the public on an emergency

basis. If an emergency media release is necessary, ADEM shall give the Alliance notice immediately prior to or immediately upon issuance of the media release.

XII. Reimbursement of ADEM's Oversight Costs

- A. Within ninety (90) days after the completion of each quarterly anniversary date under this Agreement, ADEM shall prepare and submit to the Alliance an invoice for the reasonable oversight costs for work on this Site incurred by ADEM during the preceding quarter, together with documentation describing such costs, for reimbursement into the Alabama Hazardous Substance Cleanup Fund in accordance with the Alabama Hazardous Substance Cleanup Fund Act, Ala. Code, §§ 22-30A-1 to 22-30A-11, as amended.
- B. The Alliance shall reimburse all properly documented costs of ADEM's oversight activities at the Capitol City Plume Site, as stipulated in Paragraph IX.C. of this Agreement, by payment to the Alabama Department of Environmental Management within sixty (60) days of receipt of ADEM's invoice.
- C. Any payment by the Alliance or its members under this Section shall not constitute or be evidence of any admission by the Alliance or its members of any liability to ADEM or to any other person or entity with respect to the Site. The check shall be made payable to "The Alabama Department of Environmental Management," specifically reference the Site Number, and be forwarded to:
- Alabama Department of Environmental Management
Attn: Chief, Fiscal Branch
P.O. Box 301463
Montgomery, Alabama 36130-1463
- D. ADEM shall make a reasonable effort, as staff availability allows, to respond to each major deliverable as outlined in Table 1. and for other general project matters, in a timely manner.
- E. The Alliance shall reimburse ADEM for its oversight costs pursuant to this Agreement for the duration of the activities required by this Agreement. ADEM shall provide the Alliance with an estimate of its expected regulatory oversight costs for each new fiscal year, to assist the Alliance with its budget planning. The cost estimate for each new fiscal year shall be provided to the Alliance by July 1 of the previous fiscal year. These estimates will include quarterly projections of such costs, along with a description of the expected staffing needs and scope of such costs. ADEM shall invoice actual costs incurred. ADEM will advise the Alliance in writing within thirty (30) days of becoming aware that its costs significantly exceed its estimates.
- F. Should the Alliance and ADEM be unable to reach agreement with respect to the payment of any claim by ADEM for its oversight costs, the Alliance shall have the right to invoke the dispute resolution under Section XIII. below.

XIII. Dispute Resolution

It is the intent and expectation of ADEM and the Alliance that any issues related to the implementation of this Agreement will be resolved informally to the extent possible. For matters which cannot be resolved informally, if the Alliance objects to any ADEM decision pertaining to (i) the payment of oversight costs pursuant to Section XII. above, or (ii) the performance of the work under this Agreement, then the Alliance shall notify ADEM in writing of its objections within twenty-one (21) days of receipt of the decision or dispute regarding payment. The Parties shall have an additional thirty (30) days from ADEM's receipt of the written notification of such an objection in which to reach agreement. Dispute resolution will be conducted at ADEM by a committee comprised of the Director of ADEM and Land Division Chief, and up to two representatives from the Alliance. If agreement cannot be reached on any issue within the 30 day period, each party reserves all rights and defenses regarding such matter, and ADEM shall have the right to (i) seek an order in a court of competent jurisdiction to compel action by the Alliance, or (ii) take any other legal or administrative action authorized by law. In any such proceeding, the Alliance fully reserves all rights and defenses to contest such action.

XIV. Compliance with Law

All activities required under this Agreement shall be performed in compliance with all applicable federal, state and local laws and regulations.

XV. Termination

All obligations of the Parties under this Agreement shall terminate upon satisfactory completion (as determined in writing by ADEM) of the work set forth in Section VIII. of this Agreement. Once it has been determined that all activities required under Section VIII. of this Agreement have been satisfactorily completed, the Alliance shall submit a request for termination of this Agreement to ADEM. Upon completion of ADEM's review of the request and supporting documentation and a determination by ADEM that termination of the Agreement is appropriate, ADEM shall confirm such determination in writing. ADEM agrees not to unreasonably withhold the issuance of any such determination.

XVI. Reservation of Rights

- A. ADEM and the Alliance reserve all rights against all non-parties to this Agreement. This Agreement shall not be construed to provide any rights, interests, or benefits to non-parties.
- B. ADEM reserves the right to perform clean-up and to seek recovery of costs from any potentially liable parties.
- C. The Alliance expressly denies liability as set forth in Section III. of this Agreement, reserves its rights to deny liability and to defend any claims brought against it by

any party, and reserves its right to bring an action against any potentially liable party that is not a party to this Agreement for the recovery of costs, including attorney's fees and costs previously incurred, and all such fees and costs incurred to prosecute the cost recovery action.

XVII. Force Majeure

A Force Majeure event is defined as any event arising from causes that are not reasonably foreseeable and are beyond the reasonable control of the Alliance, including its contractors and consultants (i.e., causes which could have been overcome or avoided by the exercise of reasonable due diligence will not be considered to be beyond the reasonable control of the Alliance) and which delays or prevents performance. Changed economic circumstances, normal precipitation events, and failure to obtain federal, state or local permits shall not constitute a Force Majeure event. Any request for a modification of a deadline must be accompanied by the reasons (including documentation) for each extension and the proposed extension time. This information shall be submitted to ADEM within ten (10) business days of when the Alliance obtained, or should have obtained, knowledge of the Force Majeure event, or, when possible, a minimum of two (2) business days prior to the original anticipated completion date, whichever is sooner. If ADEM, after review of the extension request, finds the work was delayed because of conditions beyond the control and without the fault of the Alliance, ADEM may extend the time as justified by the specific circumstances. ADEM may also grant any other additional time extension for good cause shown but is not obligated to do so.

XVIII. Good Faith Settlement

This Agreement was negotiated in good faith by ADEM and the Alliance. Accordingly, the Parties intend that this Agreement shall constitute an administratively approved settlement of the matters covered by this Agreement. Therefore, by entering into and carrying out the terms of this Agreement, ADEM agrees that all claims it had or has against the Alliance, its Members, employees in both their official and individual capacities, and its agents, servants, contractors or consultants, whether administrative or otherwise, are fully resolved for matters covered by this Agreement. This Agreement is limited to the matters contained herein and does not preclude ADEM from taking enforcement action regarding any unrelated violation of law or regulation administered by ADEM.

XIX. Other Claims

ADEM is not liable for any personal injuries or property damage arising from the acts or omissions of the Alliance, or their principals, contractors, agents or employees, in the execution of activities required by this Agreement. ADEM is not liable as a party to any contract executed by the Alliance in furtherance of this Agreement. The Alliance shall not be liable for the contracts, acts or omissions of ADEM, its agents, employees or contractors in the execution of ADEM's duties under this Agreement.

XX. Subsequent Modification

This Agreement may be amended only in writing and only by the mutual agreement of the Parties. The Parties expressly understand and agree that an amendment or revision approved by the Parties may be limited to a specific part, section, provision, or table of this Agreement or any portion of said part, provision or table without any requirement to replace or revise any other portion of the Agreement or any requirement for execution of a new agreement. This Agreement shall apply in full force and effect to all members of the Alliance, including any member that joins the Alliance following the execution of this Agreement. Modification of this Agreement shall not be required in the event a member joins the Alliance or leaves the Alliance, unless the member leaving the Alliance is the designated signatory, pursuant to Section II. of this Agreement.

XXI. Severability

The provisions of this Agreement are severable and if any provision of this Agreement, or the application of any provision of this Agreement to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this Agreement shall not be affected thereby. Invalidation of any State or Federal statutory or regulatory provision which forms the basis for any condition of this Agreement does not affect the validity of any other State or Federal statutory or regulatory basis for said condition.

XXII. Cooperation

The Parties hereby mutually agree to cooperate with each other to the fullest extent possible in the implementation of this Agreement.

XXIII. Agreement History

This Agreement is effective as of September 30, 2015, as revised September XX, 2019, and shall remain in effect until terminated pursuant to Section XV.

**For Downtown Environmental Alliance
By the Mayor of the City of Montgomery**

Name: _____

Print Name

Title: _____

Date: _____

For Alabama Department of Environmental Management

Name: _____

Print Name

Title: _____

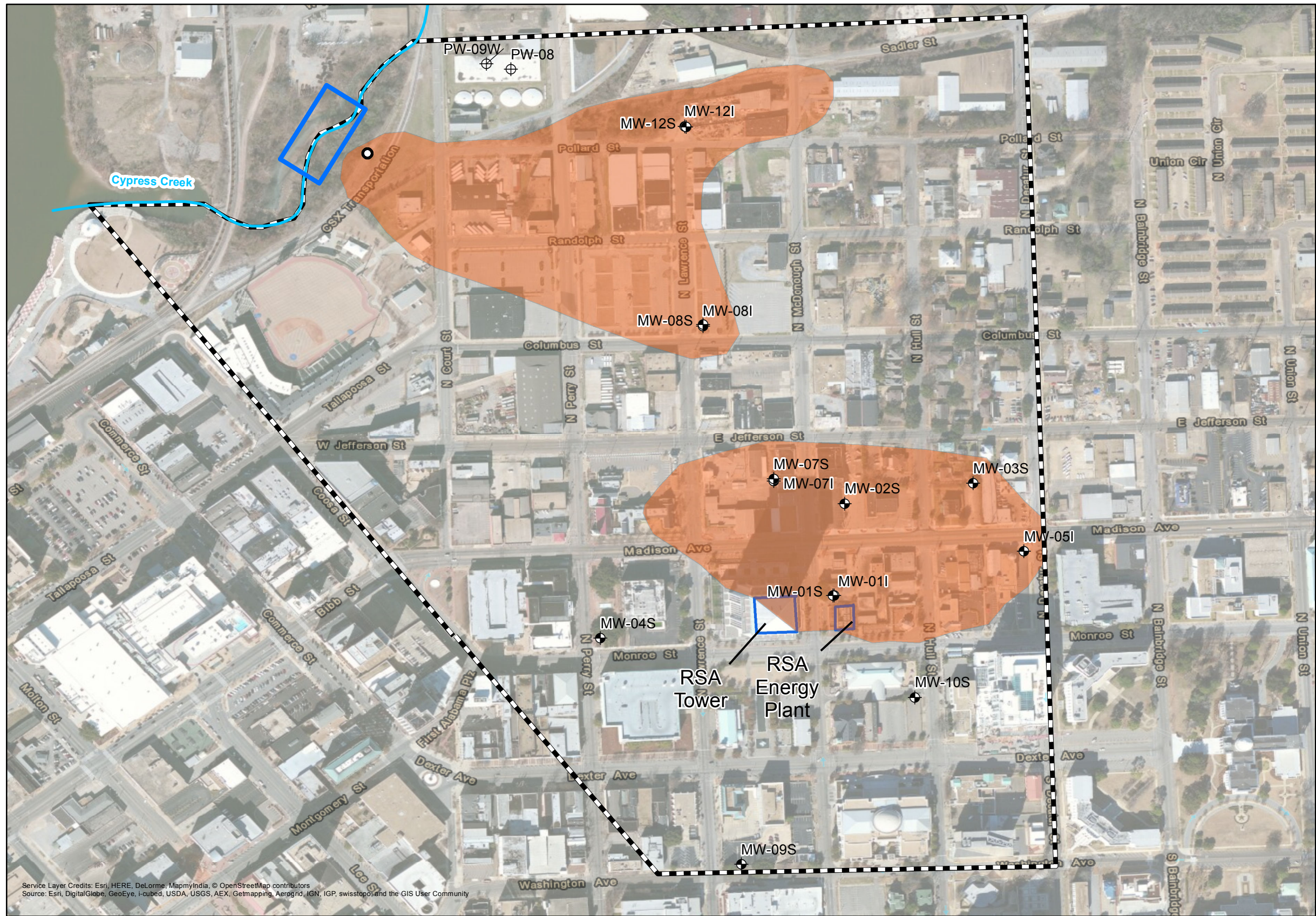
Date: _____

**Table 1.
Summary of Deliverables**

Deliverable	Due	Document Date	Approval Date
Community Involvement and Outreach Plan	60 days after execution of Agreement	November 24, 2015	February 25, 2016
Supplemental Environmental Investigation Work Plan ^a	120 days after execution of Agreement	May 2, 2016 ^a	May 20, 2016
Supplemental Environmental Investigation Report	9 months after approval of EI Work Plan	October 13, 2017	March 19, 2018
Risk Assessment/Alternatives Analysis Report	120 days after concurrence with EI Report	February 28, 2019	March 8, 2019
Remedial Action Plan (may be combined with Risk Assessment/AA Report) ^b	60 days after concurrence with Risk Assessment/AA Report. If the RA Plan is combined with the Risk Assessment/AA Report as a single submittal, the combined document shall be submitted within 180 days after concurrence with the EI Report	July 26, 2019 ^b	TBD
Remedial Action Report	Within 60 days of completing implementation of remedial action		
Remedial Action Progress Report (if warranted)	To be submitted according to the schedule described in the Remedial Action Plan, as approved by ADEM and as required in Paragraph VIII.I.		
Final Report Upon Completion	Within 60 days of attaining performance standards and completing all requirements of the Remedial Action Plan		

^aThe Supplemental Environmental Investigation Work Plan was submitted under the document title *Technical Work Plan – Downtown Environmental Assessment Project*.

^bThe Remedial Action Plan was submitted under the document title *Institutional Controls Plan – Downtown Environmental Assessment Project*.



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 Source: Esri, DigitalGlobe, GeoEye, I-cubed, USDA, USGS, AEX, Getmapping, Aergrid, IGN, IGP, swisstopo, and the GIS User Community

LEGEND

- ⊕ Former City Water Supply Well
- ⊕ Monitoring Well
- Temporary Well
- Site Boundary
- PCE Plume
- Approximate Area of Transducer Study

Notes:

1. RSA - Retirement Systems of Alabama
2. Plume extents drawn based on historical temporary well and direct-push sampling as well as results from Phase II Assessments conducted within or adjacent to the downtown area.
3. Temporary well proposed adjacent to Cypress Creek to conduct transducer study.
4. PCE = Tetrachloroethene

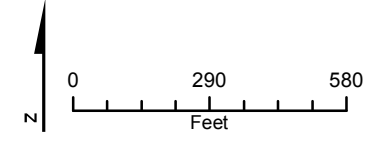


FIGURE 1
 Conceptual Site Model
 Montgomery Capitol City Plume
 Montgomery, Alabama



City of **Montgomery**, Alabama

OFFICE OF THE MAYOR
Todd Strange, Mayor

Post Office Box 1111
Montgomery, Alabama
36101-1111

PH 334.625.2000
FX 334.625.2600

July 26, 2019

Ms. Ashley Mastin
Governmental Hazardous Waste Branch, Land Division
Alabama Department of Environmental Management
1400 Coliseum Boulevard
Montgomery, Al. 36110-2059

Subject: Final Institutional Controls Plan – Downtown Environmental Assessment Project

Dear Ms. Mastin:

On behalf of the Downtown Environmental Alliance (DEA), enclosed is the Final Institutional Controls Plan (ICP) for the Downtown Environmental Assessment Project (DEAP). In addition, the following responses are provided from the DEA to the comments from the Alabama Department of Environmental Management (ADEM), dated June 7, 2019, on the Draft ICP Report:

- **ADEM General Comment #1:** *The Department notes that site contaminants (tetrachloroethene [PCE], trichloroethene [TCE], cis-1,2-dichloroethene [DCE], trans-1,2-DCE, and vinyl chloride [VC]) are referred to as Chemicals of Potential Concern (COPCs) throughout the IC Plan. In accordance with the Alabama Risk-Based Corrective Action (ARBCA) Guidance Manual, Site COPCs with concentrations exceeding screening values or Maximum Contaminant Levels (MCLs) are to be further considered as Chemicals of Concern (COCs) throughout the risk assessment and remedial action, while remaining COPCs are no longer carried forward. The Department recommends revising this nomenclature throughout the report to be consistent with ARBCA Guidance. Please address.*

Response: DEA will revise the Draft ICP to refer to PCE as a COC for groundwater and soil vapor, and TCE as a COC for soil vapor only (TCE did not exceed MCLs in groundwater). DEA will revise the third sentence of the third paragraph of Section 2.1.3 as follows:

“Therefore, although other chemicals that are commonly found in industrial or commercial areas were observed during the historical investigations, chemicals of potential concern (COPCs) for the DEAP ~~are~~ were initially identified as PCE in groundwater, are identified at the RSA Energy Plant and former public water supply well PW-09W, and associated degradation products, namely trichloroethene (TCE), cis-1,2-dichloroethene (DCE), trans-1,2-DCE, and vinyl chloride (VC).”

Also, the last sentence of the first paragraph of Section 2.2 will be revised as follows:

“The chemicals of concern (COC) (PCE in groundwater and soil vapor; TCE in soil vapor only) sources and fate and transport pathways are summarized in the conceptual exposure model (CEM), presented on Figure 2-2.”

DEA will revised the remaining sections of the document change COPCs to COCs.

- **ADEM Specific Comment #1 – Page 2-1; Section 2.1:** *This section states that the PCE concentration in soil was less than the Environmental Protection Agency's (EPA) Regional Screening Level (RSL) and, therefore, both surface and subsurface soils are not considered media of interest. Please include a reference document where this information can be found.*

Response: The DEA will include the following sentence at the end of Section 2.1:

"This information was discussed in the Final Technical Work Plan (CH2M 2016)¹."

The DEA will also include the following footnote regarding this sentence:

"There are also several ADEM and/or EPA-approved documents from 1993 through 2011 that support this conclusion."

- **ADEM Specific Comment #2 – Page 2-1; Section 2.1:** *Please add residential in the first sentence describing land use in the downtown area.*

Response: DEA will add "residential" to the first sentence of Section 2.1.1.

- **ADEM Specific Comment #3 – Page 2-2; Section 2.1.3** *Please include reference documents for the historical investigation information provided.*

Response: The DEA will add the following sentence to the end of the third paragraph of Section 2.1.3:

"A summary of this historical investigation information can be found in the Final Technical Work Plan (CH2M 2016)."

- **ADEM Specific Comment #4 – Page 2-3; Section 2.1.3:** *Please define the acronym "VISL" within the text.*

Response: The definition for the acronym "VISL" will be added to the final ICP, at the term's first use in Section 2.1.3.

- **ADEM Specific Comment #5 – Page 2-3; Section 2.2:** *Please revise references to Figure 2-3 to Figure 2-2 as there is no Figure 2-3 in the document.*

Response: The references to Figure 2-3 will be revised to reference Figure 2-2.

- **ADEM Specific Comment #6 – Page 3-1 Section 3.1:** *Please define the acronym "AOI" within the text.*

Response: The definition for the acronym "AOI" will be added to the final ICP at the term's first use in Section 3.1.

- **ADEM Specific Comment #7 – Page 3-1 Section 3.1:** *Please provide drafts of the environmental covenants (ECs) proposed to the Department for review and approval. These may be provided under separate cover.*

Response: A draft of the proposed ECs will be provided to ADEM for review and approval under separate cover.

- **ADEM Specific Comment #8 – Page 3-1 Section 3.1:** *According to this section, the DEA will provide future remedial action (RA) progress reports to ADEM. Please provide details regarding the frequency and the information that will be included in this submittals.*

Response: The DEA plans on these “future RA progress reports” will be submitted following post-Remedial Action Report (RAR) site activities, such as annual groundwater sampling events, Five-year Reviews, etc. The first sentence of the second paragraph of Section 3.1 will be revised as follows:

“The DEA and ADEM will continue to evaluate the site conditions and provide future RA progress reports (i.e., Initially reports to address groundwater monitoring and effectiveness of institutional controls will be submitted annually, and will likely transition to FYR Reports when the groundwater monitoring frequency is reevaluated (See Section 5), and approval from ADEM to make this transition is received) to ADEM.”

The DEA also will add the following sentence to the second paragraph of Section 3.1:

“These RA progress reports will initially be submitted annually and will include inspection results, groundwater results, progress on voluntary ECs executed from the public notice/website during the effectiveness period, etc.”

- **ADEM Specific Comment #9 – Page 3-1 Section 3.1:** *Please clarify how environmental covenants (ECs) will be “confirmed” from the DEAP website.*

Response: The DEA will revise the second to last sentence in the second paragraph of Section 3.1 as follows:

“In future RA progress reports, the DEA will review, obtain copies of and will summarize any EC’s that have been recorded within the DEA site. The basis of this information will be through communicating with ADEM, and any other information on EC’s in progress which the City has been made aware of through its interaction with property owners and through the DEAP website.”

- **ADEM Specific Comment #10 – Page 3-1 Section 3.2:** *Please clarify how the additional ICs will be made permanent and/or not modified without ADEM approval. Also, please provide draft language for the ordinances proposed.*

Response: A draft of the proposed ordinance language will be provided to ADEM for review and approval under separate cover.

- **ADEM Specific Comment #11 – Page 3-2 Section 3.2:** *In the last bullet, please revise the word “thought” to “through”.*

Response: The document will be revised as recommended.

- **ADEM Specific Comment #12 – Page 3-2 Section 3.2.1.1:** *In the discussion regarding the water well ordinance, the DEA refers to Section 3.1.1, however, there is no Section 3.1.1 in the document. Please address.*

Response: DEA will revise this reference from 3.1.1 to 3.2.1.

- **ADEM Specific Comment #13– Page 3-2 Section 3.2.1.2:** *This section states that there are two areas of interest (AOIs) with potential vapor intrusion exposure risks; however, according to Section 3.1, three AOIs were identified. Please address this discrepancy.*

Response: The first sentence of Section 3.2.1.2 states “As previously discussed, **within the proposed DEAP Overlay**, there are two AOIs for which potential exposure risk to soil vapor exists. Those are the soil vapor sample locations near MW-08S and MW-02S.” As shown on Figure 3-1 of the Draft ICP, the third AOI is the VIMS, which is located outside of the proposed DEAP Overlay. The DEA will revise the above statement to read as follows:

“As previously discussed, within the proposed DEAP Overlay, there are two AOIs for which potential exposure risk to soil vapor exists (The VIMS is not within the DEAP overlay). Those are the soil vapor sample locations near MW-08S and MW-02S.”

- **ADEM Specific Comment #14– Page 3-2 Section 3.2.2.1:** *This section states that potential VI exposure risks are only present at the 8S AOI and 2S AOI; however, according to Section 3.1, the Vapor Intrusion Monitoring System (VIMS) was also identified as an AOI for potential VI exposure risks. Please address this discrepancy.*

Response: The first sentence of Section 3.2.2.1 states “Although potential VI risk **within the plume areas** is present only at the 8S AOI and 2S AOI, the DEA will inform affected parties within the DEAP Overlay of potential risks and relevant, proposed land use restrictions (including those related to the AOIs), and the availability of ECs for use by private property owners.”

As shown on Figure 3-1 of the Draft ICP, the third AOI is the VIMS, which is located outside of the “plume area”. Therefore, these statements are correct, and no changes are proposed. The DEA will revise the above statement to read as follows:

“Although potential VI risk within the plume areas is present only at the 8S AOI and 2S AOI (The VIMS is not within the plume areas), the DEA will inform affected parties within the DEAP Overlay of potential risks and relevant, proposed land use restrictions (including those related to the AOIs), and the availability of ECs for use by private property owners.”

- **ADEM Specific Comment #15– Page 3-3 Section 3.2.2.1:** *Please provide details regarding how the DEA will report on the effectiveness of the public notice methods discussed in this section to ADEM*

Response: The DEA will add the following sentence to the end of the fourth paragraph of Section 3.2.2.1:

“The effectiveness of these public notice methods will be documented in future RA progress reports in the form of website visits, requests for information, etc.”

- **ADEM Specific Comment #16– Page 3-3 Section 3.2.2.1:** *The DEA states that Community Outreach Group meetings will continue to be held as a means to report on the ongoing effectiveness of the IC Plan and monitoring results. Please provide details regarding the frequency of these meetings.*

Response: The DEA will revise the last paragraph of Section 3.2.2.1 as follows:

“Periodic meetings with members of the community (through the COG) are held to update interested parties on the status of any work being performed in conjunction with the DEAP. These meetings will continue to be held to report the ongoing effectiveness of this ICP as well as any future monitoring results. These COG meetings will be held in conjunction with post-RAR activities, such as annual groundwater monitoring events, and FYRs to update the community on the continued activities of the project.”

- **ADEM Specific Comment #17– Page 4-1 Section 4.1:**
 - a. *This section states “City inspectors will perform checks to evaluate that the City ordinances and property use restrictions are still in-place....” Please provide details regarding the frequency of these “checks” and how these events will be reported to ADEM.*
 - b. *This section also states, “if needed, groundwater use restrictions could be monitored by the City through inspections required when building permits or property transactions occur.” Please clarify what constitutes “if needed”. The Department recommends monitoring the proposed ICs as often as possible to ensure they remain protective.*

Response: The DEA will revise the first paragraph of Section 4.1 to read as follows:

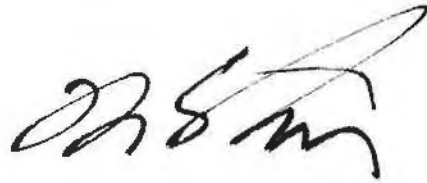
“The DEA/City (or its consultant) will perform inspections to evaluate that the City ordinances and property use restrictions are still in-place (i.e., no wells are being installed, property zoning ordinances are being adhered to, environmental covenant requirements are being followed, etc.). These inspections will occur throughout the year and will involve selecting random properties to perform these inspections. Groundwater use restrictions will be monitored by the City (or its consultant) through inspections required when building permits or property transactions occur. The results of these inspections will be reported to ADEM as part of future RA progress reports. No well permits will be issued by the City Building Permits Department.”

- **ADEM Specific Comment #18– Page 5-1 Section 5:** *The DEA proposes to select up to four existing groundwater monitoring wells to evaluate groundwater concentrations. Please note that monitoring wells should be selected to determine whether or not migration or expansion of the plume is occurring. Please provide which wells the DEA proposes to sample as well as the sampling/reporting frequency and analytical parameters to be monitored.*

Response: The DEA will revise Section 5 to identify the wells the DEA proposes to sample as well as the sampling/reporting frequency and analytical parameters to be monitored.

We look forward to receiving your review of these responses to comments. Should you have any questions regarding this document, please contact JP Martin with DEA at 334.215.9036, or j.p.martin@DEA.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Strange', written in a cursive style.

Todd Strange
Mayor, City of Montgomery

c: Downtown Alliance Members
Samantha Downing/ADEM
J.P. Martin/DEA
Stephanie Park/DEA
Glen S. Davis/DEA

Institutional Controls Plan Downtown Environmental Assessment Project, Montgomery, Alabama

Prepared for
Alabama Department of Environmental
Management by the
Downtown Environmental Alliance

July 2019



PE Certification

This Institutional Controls Plan was prepared under the supervision of a Professional Engineer licensed by the Alabama Board of Licensure for Professional Engineers and Land Surveyors.



Glen S. Davis
Alabama PE No. 26705



Date 7/25/19

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PE Certification

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Appendix

A	Capital Trailways Correspondence
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Acronyms and Abbreviations

AA	alternatives analysis
ADEM	Alabama Department of Environmental Management
AG	Attorney General
Annex	County Annex III
AOI	Area of Interest
ARAR	applicable, relevant, and appropriate requirement
ARBCA	Alabama Risk-Based Corrective Action
ATSDR	Agency for Toxic Substances and Disease Registry
CH2M	CH2M HILL Engineers, Inc.
City	City of Montgomery
COG	Community Outreach Group
COC	chemical of concern
COPC	chemical of potential concern
DCE	dichloroethene
DEA	Downtown Environmental Alliance
DEAP	Downtown Environmental Assessment Project
DU	Decision Unit
EC	Environmental Covenant
EI	Environmental Investigation
EPA	U.S. Environmental Protection Agency
FYR	Five-year Review
HHRA	human health risk assessment
IC	institutional control
ICP	Institutional Controls Plan
MCL	maximum contaminant level
MWWSSB	Montgomery Water Works and Sanitary Sewer Board
PCE	tetrachloroethene
RA	remedial action
RAO	remedial action objective
RSA	Retirement Systems of Alabama
RSL	Regional Screening Level
SLERA	screening-level ecological risk assessment
TCE	trichloroethene
VI	vapor intrusion
VIMS	vapor intrusion monitoring system
VISL	vapor intrusion screening level

Introduction

This Institutional Controls Plan (ICP) is being submitted to the Alabama Department of Environmental Management (ADEM) by the Downtown Environmental Alliance (DEA) to detail the Institutional Controls (ICs), Five-year Reviews (FYRs), and Monitoring that were selected as the recommended remedial action (RA) alternative for the Downtown Environmental Alliance Project (DEAP), in accordance with the ADEM-approved *Risk Assessment/Alternatives Analysis Report* (CH2M, 2019). Tetrachloroethene (PCE) in groundwater originally was discovered in former public water supply well PW-09W in 1991 and during the construction of the Retirement Systems of Alabama (RSA) Tower Energy Plant (hereinafter referred to as the RSA Energy Plant) in 1993. Figure 1-1 presents the DEAP investigation area boundary and investigation locations.

Since the discovery of PCE-impacted groundwater, the site has been the subject of numerous investigations (see Section 2.1.3). A human health risk assessment (HHRA), screening level ecological risk assessment (SLERA), and RA alternatives analysis (AA) were performed to assess potential risks to human health and the environment and evaluate alternatives to mitigate those potential risks. The assessments were performed using the results of the supplemental environmental investigation (EI) conducted by the DEA in 2016 and 2017 (CH2M, 2017). The results of these assessments indicated minimal potential future risks to human health exist due to PCE in groundwater and soil vapor. The selected controls in this document provide risk management approaches to eliminate potential risks.

DEAP Details

2.1 DEAP Description

The DEAP covers approximately 30 city blocks in downtown Montgomery and includes groundwater and soil vapor potentially impacted by the PCE discovered in PW-09W in 1991 and during the construction of the RSA Energy Plant in 1993 (Figure 2-1). Prior to completing construction of the RSA Energy Plant, impacted soil was excavated as an emergency removal action. Following the removal action, concentrations of PCE exceeding the U.S. Environmental Protection Agency (EPA) Regional Screening Level (RSL) were not identified in soil, indicating that the source was removed. Therefore, surface and subsurface soil are not considered media of interest at the DEAP site. This information was discussed in the Final Technical Work Plan (CH2M 2016)¹.

2.1.1 Land Use

The DEAP is in a downtown commercial, residential, municipal, and industrial area. The area is covered primarily with private and public buildings, paved streets, and parking areas, with few areas of open space. A land use assessment within the DEAP boundary was performed to determine building use type, as shown on Figure 2-1. The land use assessment (conducted in November 2018 based on ADEM comments received during October 2018 meetings) included a review of the City's geographical information system, parcel boundaries, parcel land use codes (residential, hotel, retail, etc.), basement locations, and ownership information for state, city, and RSA parcels. Most of the buildings were identified as governmental (i.e., municipal, state, or RSA) or industrial/commercial.

A windshield survey of parcels classified in the records as residential was conducted in November 2018 to identify which parcels included first-floor residential occupancy. In addition, properties identified with second floor apartments or lofts were called to confirm whether any apartments were occupied on the first floor.

Three first-floor residential properties, one vacant residentially-zoned lot without buildings, one school, and a child care facility were identified within the assessment boundary; however, these properties (Figure 2-1) are outside the extents of PCE concentrations exceeding the maximum contaminant level (MCL) in groundwater (plume areas). No parcels located within the plume areas, or within a 100-foot buffer of the plume areas, are currently used as first-floor residential properties. The current land use is not expected to change significantly in the future within the DEAP boundary.

2.1.2 Groundwater Use

In response to the 1991 discovery of PCE in well PW-09W, the Water Works and Sanitary Sewer Board of the City of Montgomery, Alabama (MWWSSB), discontinued use of the North Well Field, which is located near the north border of the DEAP boundary. PW-09W was located within the North Well Field just north of the plume area. All water supply wells within the North Well Field were abandoned in 2011, except PW-09W, which was retained for environmental monitoring and abandoned in January 2019. Potable water throughout the DEAP boundary is currently served by the MWWSSB. The primary surface water source for the MWWSSB is from the Tallapoosa River, a tributary to the Alabama River, located several miles upstream of the DEAP boundary. Potable water is also obtained from supply wells located at MWWSSB's West and Southwest well fields, located generally 4 to 5 miles from the DEAP boundary, respectively.

¹ This conclusion is also supported by several ADEM and/or EPA-approved documents from 1993 through 2011.

MWWSSB is not aware of any domestic wells in use at the DEAP boundary (ATSDR, 2004). Additionally, the City enacted an ordinance (City of Montgomery Code of Ordinances Chapter 5, Article VIII, Section 5-483) in 2003 to prohibit the digging of any wells within a specifically-defined area that includes the DEAP boundary.

One industrial well was known to exist within the site boundary at the Capital Trailways bus station on North Court Street (Figure 1-1). The industrial well was historically used for bus washing and was never used as a potable source. The power and plumbing connected to the well and the water storage tank used to supply the bus washing system were removed in February 2017, rendering the well unusable. Capital Trailways notified ADEM that the well would not be used in any capacity in the future (Appendix A). Subsequently, the City notified Capital Trailways in January 2019 that, according to City of Montgomery Code of Ordinances Chapter 14, Article IV, Sec. 14-138, Capital Trailways must keep the unused well completely filled or securely closed with a 6-inch cement cap. A February 2019 inspection report from the City of Montgomery Inspections Department (Appendix A) documented that Capital Trailways has complied with the City ordinance and capped the well. The well is no longer being used, is not useable in its current state, and there are no plans by Capital Trailways to use it in the future.

2.1.3 History and Chemicals of Potential Concern

Following the 1993 emergency removal at the RSA Energy Plant and prior to the DEA's involvement, multiple investigations were conducted in the area to assess the nature and extent of remaining contamination, and other investigations were conducted as environmental site assessments for commercial and industrial properties within downtown Montgomery. These investigations evaluated soil, groundwater, sewer water, soil vapor, and tree core samples through 2012.

Over the course of these investigations, a PCE plume in groundwater emanating from the former RSA Energy Plant location was identified and subsequently monitored; however, no residual PCE contamination was identified in vadose zone soil.

Investigation results also concluded that multiple sources of contamination likely exist within the downtown Montgomery area. However, as previously noted, the DEAP evaluation consists of groundwater and soil vapor potentially impacted by the PCE discovered in PW-09W in 1991 and during the construction of the RSA Energy Plant in 1993. Therefore, although other chemicals that are commonly found in industrial or commercial areas were observed during the historical investigations, chemicals of potential concern (COPCs) for the DEAP were initially identified as PCE in groundwater, identified at the RSA Energy Plant and former public water supply well PW-09W, and associated degradation products, namely trichloroethene (TCE), cis-1,2-dichloroethene (DCE), trans-1,2-DCE, and vinyl chloride. A summary of this historical investigation information can be found in the Final Technical Work Plan (CH2M 2016).

In 2016 and 2017, the supplemental EI conducted by the DEA included groundwater and soil vapor sampling to assess the nature and extent of site COPCs in groundwater and to provide sufficient data to evaluate vapor intrusion (VI) potential. Soil vapor sampling included evaluation of the County Annex III (Annex) and Attorney General (AG) Buildings to address EPA concerns of indoor air quality. The EI also included a transducer study to evaluate groundwater/surface water interaction along the segment of Cypress Creek adjacent to the site (CH2M, 2017). Key results are summarized as follows:

- Groundwater
 - Only PCE and TCE exceed their respective EPA RSLs; however, TCE does not exceed the MCL.
 - PCE in groundwater exists as shown on Figure 2-1.
 - PCE concentrations generally increase in the downgradient areas of the plumes, with the highest concentration reported at the farthest downgradient well, TMPZ-1/MW-13S.

- Where sufficient data exists for time-series evaluation, concentrations in wells where PCE exceeds the MCL are decreasing.
- Soil Vapor
 - Only PCE and TCE exceed their respective vapor intrusion screening levels (VISLs).
 - The highest PCE concentrations in soil vapor (above VISLs) were reported at MW-02S, downgradient of the RSA Energy Plant where PCE also is present in groundwater.
 - Soil vapor TCE concentrations exceeding VISLs were reported at MW-08S and from the 10- and 50-foot vapor intrusion monitoring system (VIMS) points (VIMS-10 and VIMS-50, respectively), installed by the U.S. Geological Survey at the northeast corner of Washington Avenue and North Lawrence Street across from the Annex Building (note the VIMS system is not within the DEAP boundary). Based on the EI results:
 - TCE in soil vapor at these locations is not related to the PCE groundwater plume at the DEAP site.
 - TCE in soil vapor at these locations is attributed to historical vadose zone releases from other sources.
 - TCE in soil vapor in concentrations exceeding VISLs does not extend to the Annex Building located within 100 feet of the VIMS.
- Surface Water
 - Surface water and porewater of the Alabama River communicates directly with, and is the primary influence of, the movement of surface water in the downstream portion of Cypress Creek (connected via an open culvert) and groundwater at TMPZ-1/MW-13S, respectively.
 - Influence on groundwater from the Alabama River occurs as porewater exchange, the cycling of water between the river’s surface and the associated sediments.
 - Because of the large volume of flow in the Alabama River near Montgomery (over 37 billion liters per day), porewater from the Alabama River acts as a hydraulic barrier that limits the migration of the PCE plume into the creek and dilutes concentrations of PCE at the downgradient edge.

2.2 Risk Assessment Summary

Because PCE and TCE in groundwater and PCE in soil vapor were identified in 2018 as site-related chemicals at concentrations exceeding their appropriate screening levels, a HHRA and SLERA were conducted to assess potential risks to human health and the environment, respectively. To evaluate alternatives to mitigate those potential risks, an AA was also conducted. Results of the HHRA, SLERA, and AA are included in the RA/AA report (CH2M, 2019). Figure 2-2 summarizes the exposure pathways that were considered potentially complete for the DEAP boundary, based on the current and likely future land uses (i.e., primarily industrial/ commercial and potential future residential) and the potential sources and migration pathways associated with the plume areas. The chemicals of concern (COC) (PCE in groundwater and soil vapor; TCE in soil vapor only) sources and fate and transport pathways are summarized in the conceptual exposure model, presented on Figure 2-2.

PCE and TCE concentrations exceeding the tap water RSLs and PCE concentrations exceeding the MCL were identified in groundwater. Although groundwater exposures for a potable use scenario are highly unlikely, in accordance with ADEM guidance, the HHRA conservatively assumed that potable groundwater use may occur in the future. The estimated potential risks for hypothetical potable use of

groundwater exceeded ADEM-acceptable risk levels at three monitoring wells (MW-08S, MW-12S, and TMPZ-1/MW-13S). However, there is no potable use of groundwater in the DEAP boundary and an existing ordinance, Montgomery City Ordinance 58-2003, prohibits drilling of new wells within a boundary that encompasses the DEAP boundary.

The elevated concentrations of TCE and/or PCE in soil vapor at the VIMS, MW-08S, and MW-02S were identified as posing potential future risks to human health through the VI exposure pathway. In particular, potential future industrial and commercial risk was identified at the VIMS and MW-08S but only potential future residential risk was identified at MW-02S. However, no VI exposure concerns were identified under current site conditions. No unacceptable risks were identified for the groundwater discharge to surface water exposure scenario and the potential commercial use of wash water at the Capital Trailways bus station (CH2M, 2019). However, it should be noted that this well has since been capped (see Appendix A).

The results of the SLERA indicated little potential for significant risk to receptor populations associated with the potential discharge of COCs in groundwater into Cypress Creek. In addition, because of development within most of the Cypress Creek watershed upstream of the DEAP site, the habitat in the reach of Cypress Creek at the downgradient boundary of the DEAP site is considered to be poor to very poor (CH2M, 2012). As a result, no further risk assessment or consideration of remedy was recommended for ecological receptors (CH2M, 2019).

2.3 Alternatives Analysis Summary

RA alternatives were evaluated to address potential risks identified in the HHRA (CH2M, 2019). Remedial action objectives (RAOs) establish the goals of the proposed RA and provide the basis for the RA alternatives. Based on the results of the site investigations, HHRA, and SLERA, the RAOs are:

- Protect human health and the environment from exposure to COCs in groundwater at concentrations above their respective MCLs.
- Protect human health from potential future exposure to PCE and TCE in soil vapor within the plume areas.
- Minimize disruptions to property owners and business from activities related to the implementation of the RA.

RA alternatives were initially screened based on satisfaction of the two threshold criteria established by EPA (overall protection of human health and the environment and compliance with applicable, relevant, and appropriate requirement (ARARs), as well as implementability, technical effectiveness, safety, and security. Following the initial screening, four RAs were considered potentially applicable to the DEAP site:

- Alternative 1 – No Action
- Alternative 2 – ICs with Five-Year Reviews (FYRs)
- Alternative 3 – ICs with FYRs and Monitoring
- Alternative 4 – ICs with FYRs and Monitored Natural Attenuation

These RA alternatives were evaluated further using the five “balancing criteria” established by EPA. The “balancing” criteria evaluate the balance between the relative effectiveness and reduction of toxicity, mobility, or volume through treatment, implementability, and cost. Based on the results of the evaluation against the balancing criteria, Alternative 3 – ICs with FYRs and Monitoring was recommended. Use of ICs are effective in the short term by immediately preventing direct exposure of human health to groundwater contaminants at the site and notifying current property owners of the potential for VI and building alternatives to mitigate potential VI. In the long term, ICs mitigate the potential for VI through building codes and construction alternatives. If needed, FYRs will confirm that

protections remain in-place and include the evaluation of updated plume data to assess when the remedy can be terminated. ICs with FYRs and Monitoring are readily implemented, as there are well-established processes for implementing ICs, monitoring, and conducting FYRs. The monitoring aspects of the plan are discussed further in Sections 4 and 5 of this document.

Proposed Institutional Controls

Institutional controls are non-engineered instruments that help to minimize human exposure to contamination. ICs are typically presented in the form of administrative, informational, and/or legal tools. They can, but are not required to, mandate engineered controls, if necessary. This section presents the ICs proposed to address potential risk within the DEAP plume areas. The DEA will use a two-tiered approach for the implementation of these ICs for the project: 1) Environmental Covenants (ECs) and 2) Institutional Control Tools. This approach is detailed in the following sections.

3.1 Environmental Covenants

The DEA will employ ECs in a tiered approach, based on locations within the PCE plume areas and 100-foot radius of the groundwater plume (Figure 3-1) with associated potential future human health risk. In general, ECs that are obtained will restrict the use of groundwater for properties within a 100-foot radius of the PCE Groundwater Plume, while property-specific ECs will apply to areas of interest (AOIs) for known soil vapor risk. As explained in the RA/AA Report (CH2M, 2019), an AOI is defined by a 100-foot radius from a potential soil vapor risk exceedance, which includes soil vapor sample locations within the plume areas near MW-02S, MW-08S, and one area outside the DEAP boundary, the VIMS (see Figure 3-1). Two of these three AOIs will be part of the initial ECs for the DEAP (MW-08S and the VIMS). To address the potential residential risk at MW-08S, the City will file an EC on the City-owned property to restrict its use by permanently maintaining its current use as parking only. The City also proposes to file an EC on the portion of the VIMS AOI that it owns; this includes a sidewalk and right-of-way. The City will declare in the EC that the current use will be maintained permanently.

The DEA and ADEM will continue to evaluate the site conditions and provide future RA progress reports (i.e., Initially, reports to address groundwater monitoring and effectiveness of institutional controls will be submitted annually for 3 years, and will likely transition to FYR Reports when the groundwater monitoring frequency is reevaluated (See Section 5), and approval from ADEM to make this transition is received) to ADEM. There are approximately 100 properties located within the 100-foot radius of the groundwater plume, with many of them being owned by various private entities. Also, EC information and an example will be made available to private property owners via the DEAP website and will be presented as part of the public notice process. In the event that the DEA and ADEM deem that these efforts (i.e., posting ECs on the DEA website and public notice activities) to obtain an executed covenant for a property within the DEA Overlay (see Figure 3-1) are likely futile (through the FYR process), the DEA will propose alternative land use controls for those parcels subject to ADEM's review and approval, if necessary. In future RA progress reports, the DEA will review, obtain copies of and summarize any ECs that have been recorded within the DEA site. The basis of this information will be through communicating with ADEM, and any other information on EC's in progress, which the City has been made aware of through its interaction with property owners and through the DEAP website. These RA progress reports will initially be submitted annually and will include inspection results, groundwater results, progress on voluntary ECs executed from the public notice/website during the effectiveness period, etc. For more information on the contents of RA Progress Reports, please refer to Section 6 of this Plan. Additionally, the DEA proposes to employ other IC tools described in Section 3.2.

3.2 Institutional Control Tools

Additional ICs are proposed to serve as protective measures that can be readily implemented and enforced under the City of Montgomery's existing governing authority. The DEA will employ ICs in a tiered approach, based on locations within the PCE plume areas and 100-foot radius of the groundwater

plume (Figure 3-1) with associated potential future human health risk. Specifically, some ICs apply within the entire DEAP, while others only apply to an AOI and/or Decision Unit (DU), which is consistent with Alabama Risk-Based Corrective Action (ARBCA) guidance. A DU is defined as any building wholly or partially within the AOI. Currently, there is no exposure risk from soil vapor (Figure 3-1) because:

- There are no residential buildings within the AOI at the soil vapor sample site near MW-02S.
- There are no buildings within the AOI at the soil vapor sample site near MW-08S or the VIMS.

The ICs presented in this ICP will apply to two Overlay areas (shown on Figure 3-1). Overlays are areas where the City will implement ICs, as follows:

- Informational Tools (across DEAP Overlay; see the "Downtown Environmental Overlay" on Figure 3-1) will notify downtown property owners about the ICs within the DEAP Overlay and the existing well drilling ordinance.
- Special restriction regarding residential use (within the AOI Overlay near MW-02S only), which will be achieved through adding special restrictions to the zone in addition to SmartCode. (see the "2S AOI Overlay" on Figure 3-1).

3.2.1 Regulatory/Legal Elements

To prevent future use of groundwater as a drinking water source, the Montgomery City Council passed Ordinance 58-2003 on September 16, 2003, which has been codified in the Montgomery Code of Ordinances Chapter 5, Article VIII, Sec. 5-483 (Wells Prohibited in Capital City Plume Site) and prohibits the drilling of water wells (see Figure 3-1 – "Current Groundwater Well Drilling Ban Ordinance"). The City will amend this 2003 ordinance by referencing the ADEM agreement with the DEA. The DEAP is located within the City's current area of applicability.

3.2.1.1 DEAP Overlay Ordinance

The boundaries of the current Ordinance banning groundwater well digging exceeds the boundaries of the properties in the Downtown Environmental Overlay (Figure 3-1). The Ordinance will be amended to include provisions for specific overlays or special restricted zones within the DEAP Overlay which will allow specific characteristics or requirements to affect a specifically-defined boundary. The City will add the 2S AOI Overlay (Figure 3-1) through the current City Ordinance related to well drilling restrictions.

As part of this ICP, the DEA assessed the current and proposed City ordinances to determine if the requirements should be enhanced to ensure current and future exposure to groundwater would be sufficiently impeded. The amended ordinance language will be submitted to ADEM under a separate cover. It will include the existing well drilling prohibition, as well as adding a groundwater use restriction, a requirement to comply with International Building Code requirements related to vapor barriers/retarders, the special restricted zone near MW-02S defined and prohibiting ground floor residential use, and reference this ICP Plan required by the ADEM Agreement.

3.2.1.2 2S AOI Overlay – Special Restrictive Zone

As previously discussed, within the proposed DEAP Overlay, there are two AOIs for which potential exposure risk to soil vapor exists (the VIMS is not within the DEAP overlay). Those are the soil vapor sample locations near MW-08S and MW-02S. The AOI near MW-02S is due to a potential residential risk related to potential VI.

To address the potential residential risk at MW-02S, the City will add a special restricted zone ("2S AOI Overlay," Figure 3-1) to restrict the properties in the AOI by permanently prohibiting ground floor residential use (including schools or daycares).

3.2.2 Informational Tools and Outreach

Informational tools are ICs that are used to communicate information about a site and alert property owners, potential property owners, tenants, and others about the potential risks that may be present. These will apply to parcels that are within the "Downtown Environmental Overlay" shown on Figure 3-1.

3.2.2.1 Public Notice Methods

Although potential VI risk within the plume areas is present only at the 8S AOI and 2S AOI (the VIMS is not within the plume areas), the DEA will inform parties within the DEAP Overlay of potential risks; relevant, proposed land use restrictions (including those related to the AOIs); and the availability of ECs for use by private property owners. The DEA/City (or its consultant) will mail letters upon finalizing the ICP, after new property ownership is available from the County Tax Appraisers, typically in October 2019, to each property owner within an Overlay with information regarding any restrictions that apply to each respective property within each overlay notification area. These letters are expected to be mailed within the fourth quarter of 2019, after the information is available from the County Tax Appraisers. The letters will also include City personnel contact information. An example of these notification letters will be provided to ADEM for review under a separate cover.

Additionally, the dissemination of information regarding the DEAP will occur based on the following events within the DEAP Overlay:

1. Sale of City-owned property
2. Sale of privately-owned property (i.e., change in ownership through tax assessment records, which typically are posted annually in October each year)
3. Submittal of a building permit application, including renovations
4. Submittal of a well drilling permit application (which would not be issued/allowed in the DEAP Overlay)

To continuously notify property owners in the Overlay, the DEA/City (or its consultant) will send out notices to each annually after new property ownership is available from the County Tax Appraisers, typically in October of each year. These letters are expected to be mailed in the fourth quarter of each year, after the information is available from the County Tax Appraisers. Interested parties will also be informed during property and zoning searches because the DEAP Overlay will direct them to the relevant City department(s) as well as the DEAP website (<http://www.montgomeryal.gov/live/about-montgomery/capital-city-plume-information>).

The City -maintained a DEAP website is populated with reports, sampling results, contact information, maps and photographs, information regarding the Community Outreach Group (COG), and other pertinent information. The website will continue to be maintained and updated with any new information and data. The effectiveness of these public notice methods will be documented in future RA progress reports in the form of website visits, requests for information, etc.

Periodic meetings with members of the community (through the COG) are held to update interested parties on the status of any work being performed in conjunction with the DEAP. These meetings will continue to be held to report the ongoing effectiveness of this ICP as well as any future monitoring results. These COG meetings will be held in conjunction with post-Remedial Action Report activities, such as annual groundwater monitoring events, and FYRs to update the community on the continued activities of the project.

3.2.2.2 Education of City Personnel

To ensure the proper information is disseminated as necessary, City personnel will be educated about the relevant requirements and restrictions within each Overlay and the need for them. Furthermore, personnel will be given instructions for how and when to transmit the information. This training would be implemented as part of the City employees on-the-job training process.

Institutional Controls Enforcement

Enforcement of the ICs presented in this ICP will largely be carried out through the legal and administrative processes adopted by the City. The City is given the authority to adopt and implement ordinances within its city limits by Alabama Code Section 11-45-1 (“Adoption and enforcement authorized”). The Montgomery City Council is authorized to propose new ordinances and amend existing ordinances when necessary. Ordinance adoption includes public notice, public participation through public hearing, and ultimately passing and approving a new ordinance or amendment by a majority of the Council present at the time of the vote.

While existing City ordinances may generally be repealed or amended, some contain specific background information that explains the necessity of the ordinance (e.g., purchase/sale agreement, litigation settlement, consent order, state or federal law or regulation references) to inform future City Council members of the background and any restrictions/limitations to be reviewed in consideration of repealing or amending specific City ordinance. The ordinance described in this ICP will be permanent and annotated with references to this document and the ADEM Settlement Response Agreement such that any proposed changes to the ordinance would require notice and consent by ADEM before any City Council action.

4.1 Institutional Controls Monitoring

The DEA/City (or its consultant) will perform inspections to evaluate that the City ordinances and property use restrictions are still in-place (i.e., no wells are being installed, property zoning ordinances are being adhered to, environmental covenant requirements are being followed, etc.). These inspections will occur throughout the year and will involve selecting random properties to perform these inspections. Groundwater use restrictions will be monitored by the City (or its consultant) through inspections required when building permits or property transactions occur. The results of these inspections will be reported to ADEM as part of future RA progress reports. No well permits will be issued by the City Building Permits Department.

Any changes or modifications to the ICs or ECs proposed in this document must be reviewed and approved by ADEM prior to implementing these modifications.

Groundwater Monitoring

To demonstrate the effectiveness of the selected remedy, the DEA will conduct groundwater monitoring at six representative, existing wells within the DEAP monitoring well network and one new well. The existing wells and new well will be sampled and analyzed for PCE (the only groundwater COC). The six existing groundwater monitoring wells to be analyzed by the DEA are located downgradient (TMPZ-1/MW-13S and MW-12S), mid-plume (MW-2S and MW-8S), lateral (MW-3S), and upgradient (MW-1S) of the PCE groundwater plume (Figure 5-1). Also, one new well (tentatively identified as MW-14S) is proposed generally on the west side of the PCE plume extent and within the current groundwater well drilling ban ordinance (See Figure 5-1). The intent of the single, new well is to be a lateral monitoring point on the west side of the PCE plume. It is not a point-of-compliance or boundary well, but rather is to confirm that the conceptual site model is still valid and that the selected remedy is protective as outlined in this document.

The groundwater samples will be analyzed for PCE only using Method 8260B. The groundwater monitoring events at the seven proposed wells (six existing and one new well) initially will be conducted annually for at least 3 years, after which the monitoring frequency will be reevaluated. The DEA may elect to reduce the frequency of these monitoring events (subject to ADEM review and approval) if conditions are stable or decreasing after the first three events. The DEA will submit these annual groundwater results as part of their annual RA progress reports.

Remedial Action Progress Reports

As discussed in Section 3.1, the City/DEA (or its consultant) will submit RA Progress Reports initially on an annual basis after approval of the ICP. The RA Progress Reports are intended to demonstrate that the information collected supports the remedy for the site, and to update ADEM on post-ICP activities for the DEAP, such as groundwater monitoring results, IC notification progress, and IC inspections progress. At a minimum, the RA Progress Reports will include the following:

- Summaries of the overall effectiveness of, compliance with, and progress towards completing the RA/ICs, including any new or modifications to existing ECs and/or ordinances, and any changes in land use
- Details of inspections conducted in accordance with the ICP, including dates of the inspections, summaries of the findings, and copies of the inspection logs
- Details regarding dissemination of notices in accordance with the ICP, including annual search results from the Tax Appraisers Records, records of any building and/or well drilling permit applications received, and any revisions to the notice letter template
- Summaries of any updates or changes to the DEAP website, including website visit counts and requests for information
- Summaries and schedules of COG meetings
- Evaluation of groundwater plume concentrations with monitoring data, including tabulated sampling results, chain-of-custody records, field logs, laboratory analytical reports, groundwater elevations, plume isoconcentration map(s), and time versus concentration trend plots for each monitoring well

As stated in Section 3.1, the RA Progress Reports will be submitted annually for 3 years, and will likely transition to FYR Reports when the groundwater monitoring frequency is reevaluated and approval from ADEM to make this transition is received.

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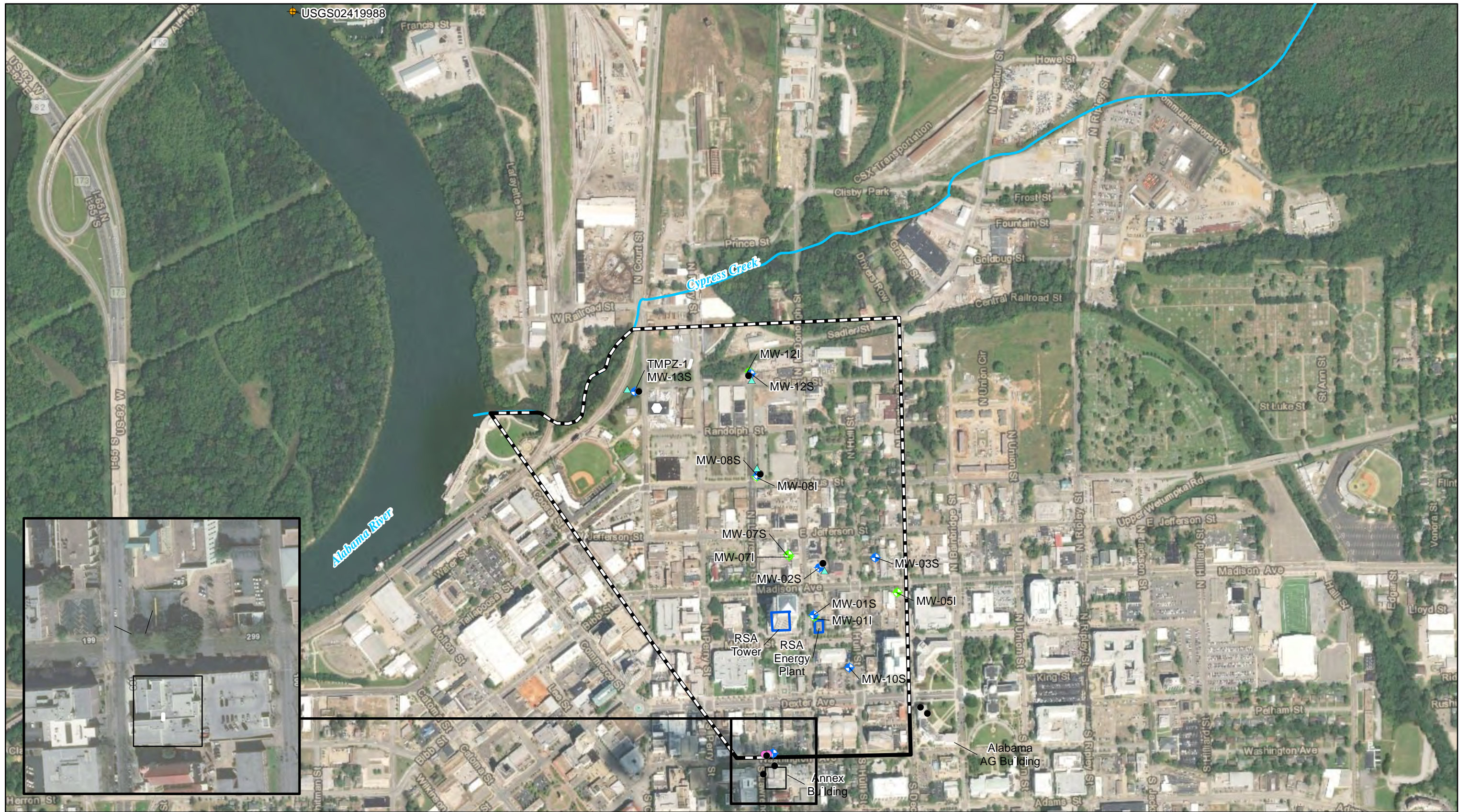
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Figures



LEGEND

- ◆ Shallow Monitoring Well
- ◆ Intermediate Monitoring Well
- VIMS
- Soil Vapor Sampling Location
- ▲ Geotechnical Sampling Location
- ◆ Alabama River Gauge Station
- Commercial Bus-Washing Station
- RSA Building
- Site Boundary

Notes:
 1. AG = Attorney General
 2. RSA = Retirement Systems of Alabama
 3. VIMS = Vapor Intrusion Monitoring System
 4. DigitalGlobe Aerial Imagery (September 26, 2017).
 5. Figure extent increased to show location of the Alabama River Gauge.

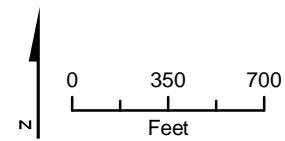
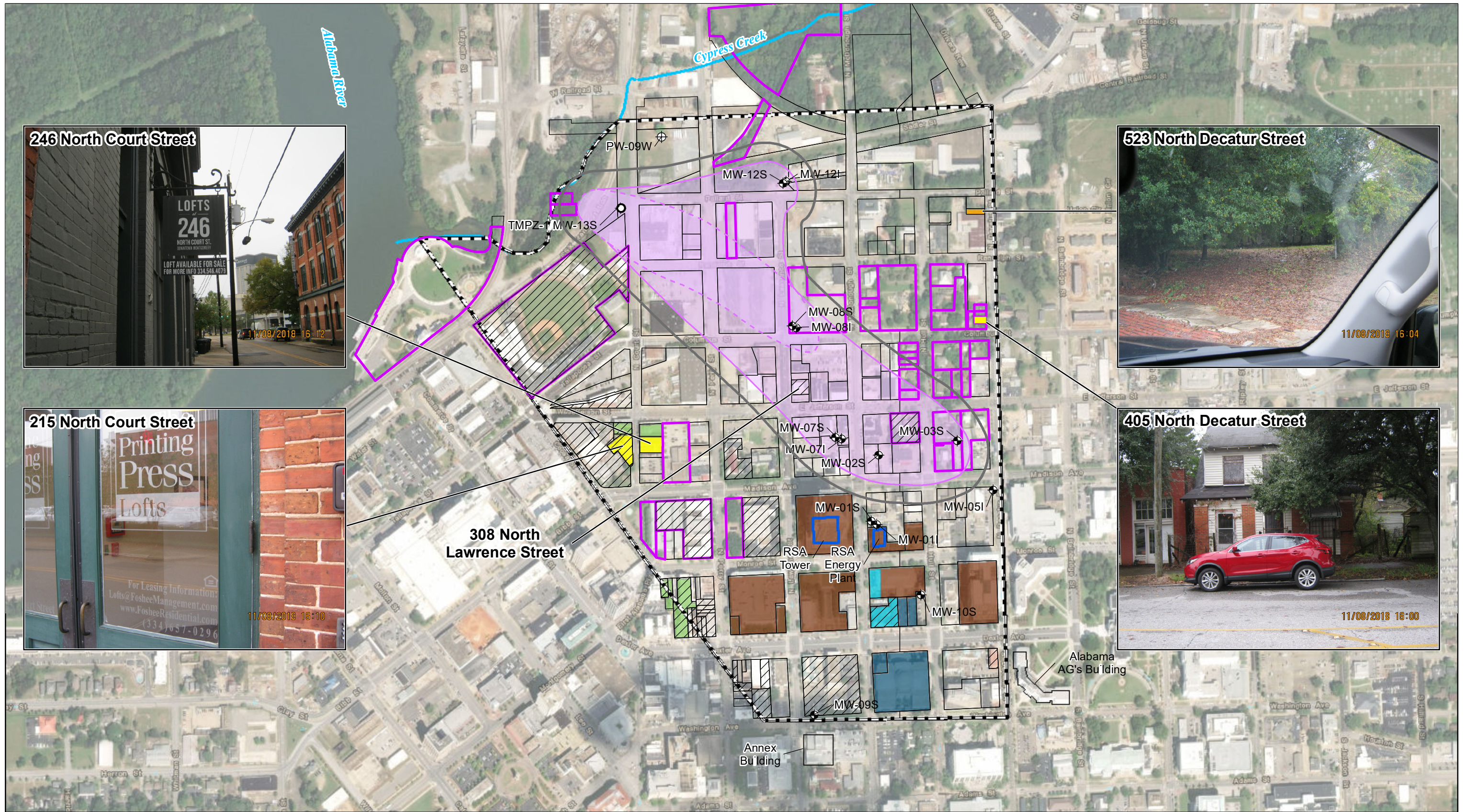


FIGURE 1-1
 Site Map with Investigation Locations
Institutional Controls Plan
 Downtown Environmental Assessment Project
 Montgomery, AL



LEGEND

- ◆ Monitoring Well
- ⊕ Former City Water Supply Well
- Temporary Piezometer
- ▭ RSA Building
- ▭ Site Boundary
- ▭ Approximate Extent of PCE > 5 µg/L
- ▭ PCE Plume 100-foot Buffer
- ▭ Parcel Boundary
- ▭ Property with Basement
- ▭ City-owned Property
- ▭ State Property
- ▭ RSA Property
- ▭ School/Daycare Property
- ▭ Residential (First Floor Commercial)
- ▭ Residential (First Floor Occupancy)
- ▭ Empty Residential Lot

- Notes:
1. AG = Attorney General
 2. PCE = tetrachloroethene
 3. RSA = Retirement Systems of Alabama
 4. µg/L = micrograms per liter
 5. Parcel is industrial/commercial use unless otherwise indicated.

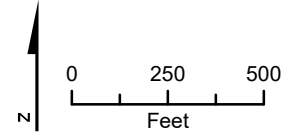
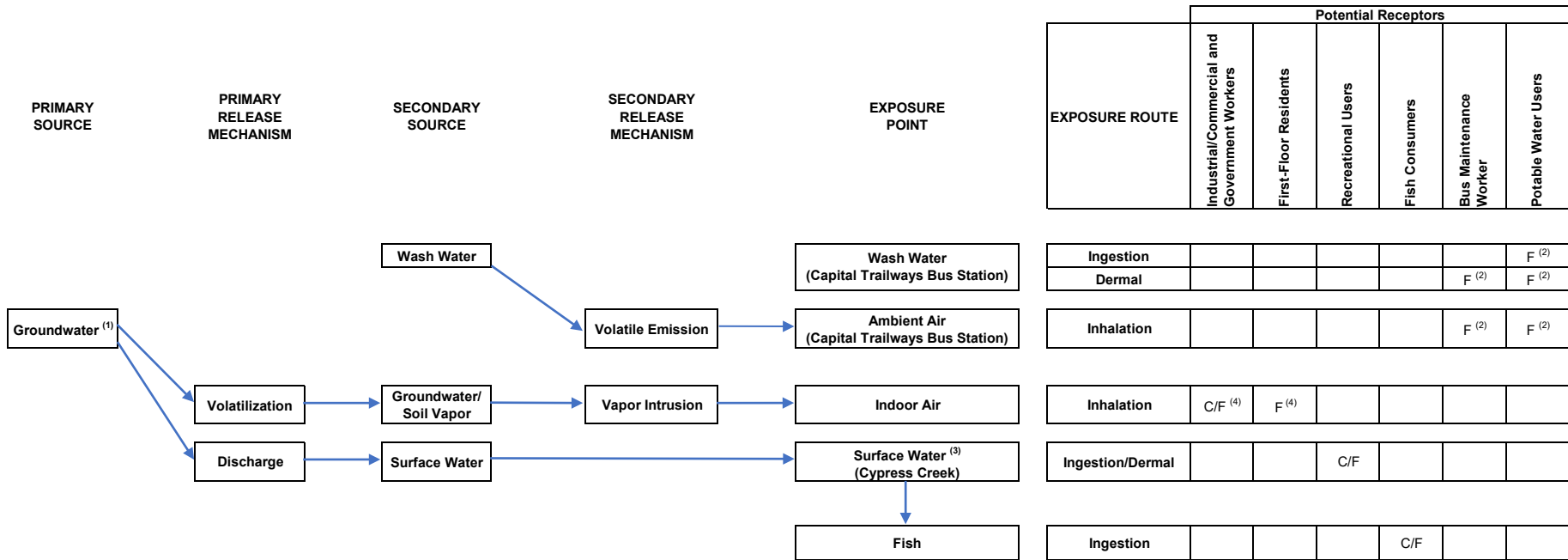


FIGURE 2-1
Extent of PCE Plume and Current Property Use Map
Institutional Controls Plan
Downtown Environmental Assessment Project
Montgomery, AL





Notes:

⁽¹⁾ Potable use of groundwater is an incomplete pathway under current and future site conditions. The DEAP site is currently served by the Montgomery Water Works and Sanitary Sewer Board. All public water supply wells from the former North Well Field were abandoned and there are no known domestic wells in use at the DEAP site. Additionally, the City enacted an ordinance in 2003 to prohibit future well drilling in the downtown area.

⁽²⁾ As discussed in Section 1.2.6 of the text, the Capital Trailways well has been decommissioned and it is unlikely to be reconstructed and used in the future. However, per ADEM's request, the following potential future exposure scenarios were evaluated:

- Bus maintenance workers were assumed to be exposed to water through dermal contact and inhalation exposure pathways.
- Potable water users were assumed to be exposed to water through ingestion, dermal contact, and inhalation exposure pathways.

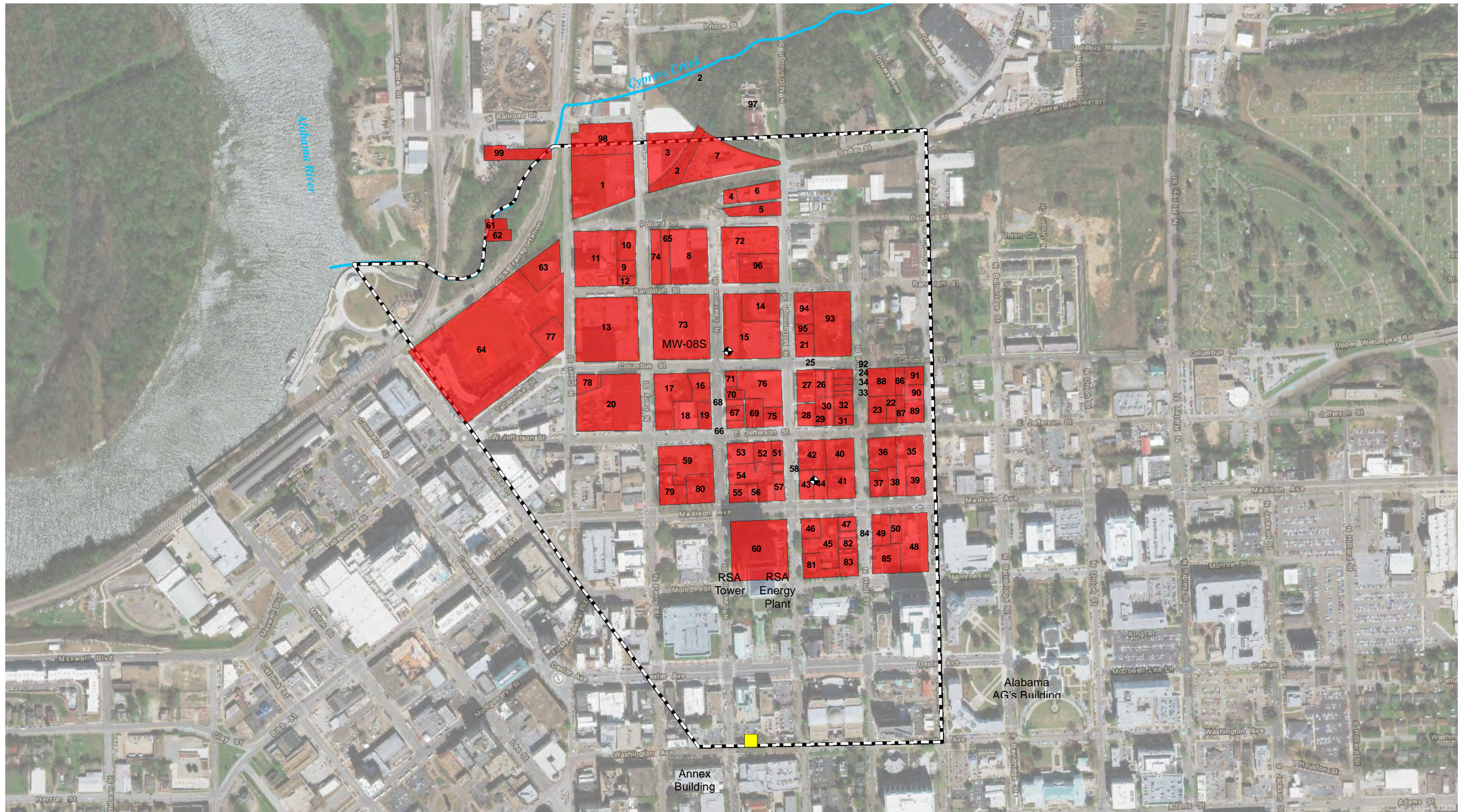
⁽³⁾ Potential surface water concentrations were estimated using groundwater concentrations from monitoring well TMPZ-1 and a site-specific attenuation factor.

⁽⁴⁾ Potential exposures to indoor air associated with vapor intrusion from groundwater were not evaluated because preference is given to the soil vapor data, which were collected at locations with groundwater concentrations greater than the vapor intrusion screening levels.

C/F - Potentially Complete Pathway under Current and Future Exposure Scenarios

F - Potentially Complete Pathway under Future Exposure Scenario

FIGURE 2-2
Conceptual Exposure Model
Institutional Controls Plan
Downtown Environmental Assessment Project, Montgomery, AL



- LEGEND**
- Site Boundary
 - PCE Plume 100-foot Buffer
 - Parcel Boundary
 - Blocks Intersecting Plume and 100-ft Buffer
 - Downtown Environmental Overlay/DEAP Boundary
 - 2S AOI Overlay

- Current Groundwater Well Drilling Ban Ordinance
- Areas of Interest (AOIs)
- Monitoring Well
- Vapor Intrusion Monitoring System

Notes:
 1. AG = Attorney General
 2. PCE = tetrachloroethene
 3. RSA = Retirement Systems of Alabama

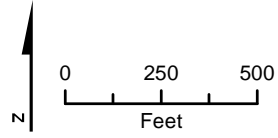
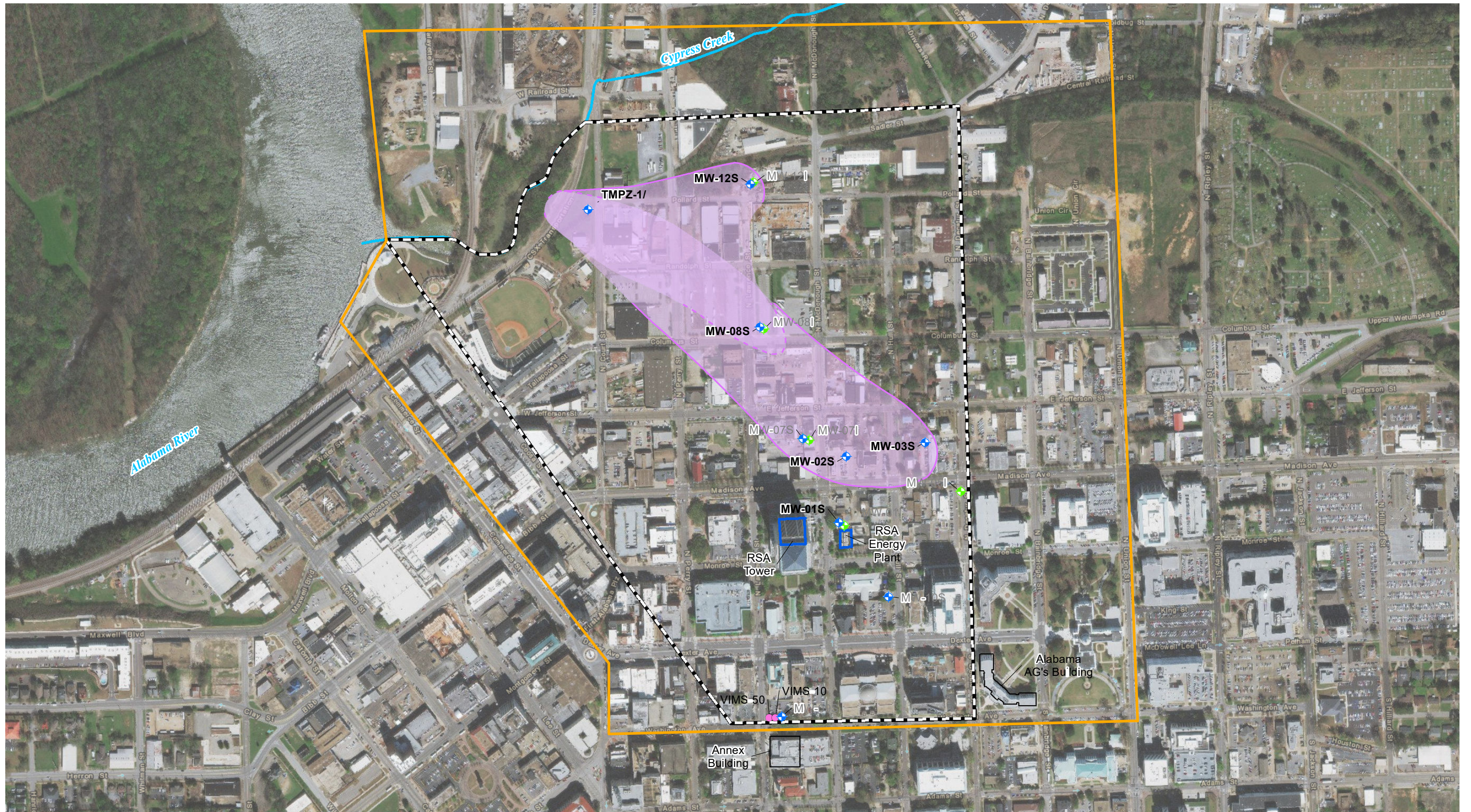


FIGURE 3-1
 DEAP Overlays and AOIs
 Institutional Controls Plan
 Downtown Environmental Assessment Project
 Montgomery, AL



LEGEND

- ◆ Shallow Monitoring Well
- ◆ Intermediate Monitoring Well
- Temporary Piezometer
- VIMS
- RSA Building
- Site Boundary
- Approximate Extent of PCE > 5 µg/L
- Current Groundwater Well Drilling Ban Ordinance

Notes:

1. AG - Attorney General
2. RSA - Retirement Systems of Alabama
3. VIMS - Vapor Intrusion Monitoring System
4. µg/L - micrograms per liter
5. Wells that are bold will be sampled during the annual monitoring program. Wells that are shaded will only be gauged for groundwater elevation.
6. New Well MW-14S will be located on the western side of the PCE plume extent and within the Well Drilling Ban Ordinance.

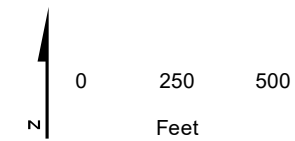


FIGURE 5-1
Groundwater Monitoring Program
Institutional Controls Plan
Downtown Environmental Assessment Project
Montgomery, AL



Appendix A
Capital Trailways Correspondence

CAPITAL - COLONIAL - SOUTHERN



520 North Court St.

Montgomery, AL. 36104

February 14, 2018

Mrs. Ashley Mastin

Alabama Department of Environmental Management

P.O. Box 301463

Montgomery, Al. 36130-1463

The well that is located at the Capital Trailways 520 North Court Street Montgomery, Alabama 36104 is no longer in use. The well was deactivated and taken out of service in February of 2017. Power lines and plumbing connected to the well have been removed and the water storage tank that the water was pumped into has also been removed. Capital Trailways has connected to the city water supply and will continue to wash our buses with the city water supply. The well was used only for washing buses and will not be used in any capacity in the future.

Regards,

A handwritten signature in blue ink that reads "Tom Fletcher".

Tom Fletcher

President of Capital/Colonial Trailways



City of **Montgomery**, Alabama

Inspections Department

Jerry Russell, Chief Building Official

Todd Strange, Mayor

City Council Members

Charles W. Jinright, President

Tracy Larkin – Pres. Pro Tem

Fred F. Bell

Richard N. Bollinger

Audrey Graham

William A. Green, Jr.

Arch M. Lee

Brantley W. Lyons

Glen O. Pruitt, Jr.

January 23, 2019

Tom Fletcher
President, Capitol/Colonial Trailways
520 North Court Street
Montgomery, AL. 36105

RE: Discontinued use of well located at 520 North Court Street

Mr. Fletcher,

Thank you for the information with regards to discontinued use of the well located at 520 North Court Street. In order to abate any potential hazardous condition the City of Montgomery Code of Ordinances, Section 14-138 requires that all such wells be completely filled or securely closed with six inch cement cap.

Please understand that as the responsible party, non-compliance with such request within 30 days may result in further action in accordance with City of Montgomery Code of Ordinances.

If I may be of further assistance, please contact me at 334-625-2080.

Sincerely,

Jerry Russell
City of Montgomery
Chief Building Official



City of **Montgomery**, Alabama

Inspections Department

Jerry Russell, Chief Building Official

Todd Strange, Mayor

City Council Members

Charles W. Jirright, President

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Brantley W. Lyons

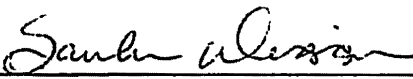
Glen O. Pruitt, Jr.

January 23, 2019

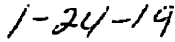
Tom Fletcher
President, Capitol/Colonial Trailways
520 North Court Street
Montgomery, AL. 36105

RE: Discontinued use of well located at 520 North Court Street.

Please sign and date as receipt of letter dated January 23, 2019. being delivered by the City of Montgomery, Inspections Department.



Signature



Date

*****PERMIT DEPARTMENT REPORT OF COMPLAINT INSPECTIONS***
CITY OF MONTGOMERY INSPECTIONS DEPARTMENT**

COMPLAINT: C01306
STATUS: CLOSE **COMPLAINT TYPE:** OTHER **COMPLAINT DATE:** 4/8/2019
LETTER SENT:

ADDRESS: 520 NORTH COURT ST **FILED BY:**
PHONE NO:

GENERAL LOC:
LEGAL DESC: SCOTT PLAT PLAT BK X PAGE 800 11 LESS E 100FT SCOTT PLAT BLK MONTGY MAP BK P 800
LOT: **SUBDIVISION:**
BLOCK: **ZONING:** T4-O **SECTION:**
FH: X - 500 / 0093 - J
OWNER: CAPITAL MOTOR LINES **PHONE:**

COMPLAINT REMARKS:
 COMPLAINT STATES UN-CAPPED WELL IN AREA OF CAPITOL CITY PLUME.

COMPLAINT ACTIVITIES / COMMENTS

Activity	Complaint Type	Sch Date	Comp Date	Inspector
Result Comments				
INSPECTION	OTHER	1/23/2019	2/13/2019	
01/23/19 VISITED LOCATION AND OBSERVED UN-CAPPED WELL. ALL UTILITY SERVICES TO WELL HAVE BEE TERMINATED. DELIVERED NOTICE TO REPAIR (CAP ABANDON WELL). 02/13/19 CONFIRMED WELL CAPPED AS REQUIRED FOR COMPLIANCE.				
REINSPECTION	OTHER			
PUBLIC HEARING	OTHER			

PRINTED ON: 4/8/2019
PRINTED BY: PATRICK M. MCGILBERRY
FIELD NOTES:

Attachment 4

**ADEM Recommendation for De-Proposal of the
Capitol City Plume Site from the NPL**

1400 Coliseum Blvd. 36110-2400 • Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 • FAX (334) 271-7950

May 22, 2020

ELECTRONICALLY TRANSMITTED

Ms. Carol Monell, Director
Superfund Division
USEPA Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303-8960

Re: **ADEM Recommendation for De-Proposal of the Capitol City Plume Site from the National Priorities List**
Capitol City Plume, Montgomery, Alabama
Facility I.D. No. AL0001058056

Dear Ms. Monell:

The Alabama Department of Environmental Management (ADEM or the Department) is providing additional documentation regarding its previous request that the U.S. Environmental Protection Agency (EPA) withdraw the proposal to list the Capitol City Plume (CCP) site on the National Priorities List (NPL). The Department's request for de-proposal was originally submitted on November 13, 2019. The request was provided in accordance with the Memorandum of Agreement (MOA) between EPA and the Department. Enclosed is a Technical Memorandum that summarizes all actions that have taken place at the CCP since its discovery in 1993. In addition, electronic copies of the decision documents for the project and a copy of the November 2019 de-proposal request are also enclosed.

Pursuant to the MOA, ADEM committed to ensure that response actions are taken at least as quickly, if not sooner than if EPA were expected to respond. Under EPA oversight, the site underwent multiple investigations and actions between 1993 and 2015. Under ADEM oversight since the deferral in 2015, the site has progressed from the investigative phase to final remedy implementation. The Department has not used any federal funding to conduct any response actions or to provide oversight for the CCP; all costs have been funded by the DEA. Community acceptance has been facilitated and demonstrated in accordance with the DEA's Community Involvement Plan (CIP), which includes the organization of the community outreach group (COG). The COG is made up of business and property owners within the CCP area. Additionally, the CIP established a public website to provide timely updates on the CCP and to serve as a repository of all submitted documents. Public notice periods have been held prior to approval of decision documents and modifications to the Settlement Agreement for Site Response between ADEM and the DEA.

During a meeting on January 23, 2020, and following a subsequent site visit on March 10, 2020, EPA Region 4 requested additional information to support the request for de-proposal, specifically regarding the evaluation of vapor intrusion risks. Based on modeling conducted to identify potential

areas at risk of vapor intrusion, two areas were found to pose a potential future risk for vapor intrusion. These are located in areas where buildings do not currently exist and have environmental covenants in place to restrict any type of construction. The information provided in the enclosed Technical Memorandum addresses EPA's questions.

The Department has fulfilled the requirements of the MOA. The MOA calls for a CERCLA-protective cleanup with response actions protective of human health and the environment that address site-related contamination in an appropriate manner and to the extent practicable. In complying with requirements of the MOA, response actions have been taken to ensure that the CCP no longer poses any unacceptable risks to human health and the environment. The response actions have been demonstrated to be protective of human and ecological receptors according to the risk assessment that was conducted by the Downtown Environmental Alliance (DEA). All environmental media and potential exposure routes were evaluated in the risk assessment. The response actions include: 1) the 1993 emergency soil excavation of the source area following its discovery at the RSA Energy Plant, 2) the permanent abandonment of all public water supply wells associated with the North Well Field in downtown Montgomery, 3) the installation of the phytoremediation plot in 2010 and ongoing maintenance of other trees in the downtown area, 4) the permanent closure of all private wells within the CCP site boundary, and 5) the implementation of institutional controls, including environmental covenants, within the CCP site area to prohibit groundwater use and to address future vapor intrusion risks.

The Department has determined the remedy to be protective of human health and the environment in accordance with its hazardous waste cleanup program authority. Therefore, withdrawal of the proposal to add the Capitol City Plume site to the NPL is now appropriate. The Department requests that EPA Region 4 submit a De-Proposal Memo to EPA Headquarters for final approval and that the De-Proposal of the Capitol City Plume be published in the Federal Register as part of the Fall 2020 updates to the NPL. Please note that future monitoring activities, enforcement of institutional controls, and five-year reviews will be conducted under the ongoing oversight of the Department in accordance with the ADEM/DEA Settlement Agreement for Site Response and the ADEM/EPA MOA.

If you have any questions regarding this matter, please contact Jason Wilson, Chief of the Governmental Hazardous Waste Branch via e-mail at jwilson@adem.alabama.gov or at (334) 271-7789.

Sincerely,



Stephen A. Cobb, Chief
Land Division

Enclosures

SAC/JJW/ATM/RSD/tp

cc: Lance LeFleur, ADEM
Ashley Mastin, ADEM
Rusty Kestle, US EPA Region 4
Sydney Chan, US EPA Region 4

Mary Walker, US EPA Region 4
Caroline Freeman, US EPA Region 4
Ben Bentkowski, US EPA Region 4
Norman Ahsanuzzaman, US EPA Region 4

Recommendation to De-propose from the National Priorities List (NPL) – Downtown Environmental Assessment Project (formerly the Capital City Plume)

May 13, 2020

Introduction

With this Technical Memorandum (TM), the Downtown Environmental Alliance (DEA) is providing documentation to support the de-proposal of the Downtown Environmental Assessment Project (DEAP; formerly the Capital City Plume) from the NPL. The original proposal was published in the Federal Register on May 11, 2000 (30489-30495 Federal Register, Vol. 65, No. 92). This request is supported by the Alabama Department of Environmental Management (ADEM), which is overseeing the site cleanup pursuant to the final Settlement Agreement for Site Response, which was revised and signed in October 2019 (originally signed on September 30, 2015) by ADEM and the DEA. This settlement agreement, along with other past documents referenced in this letter, are included on CD as an attachment. The purpose of this TM is to provide the reader with a complete overview of the project and describe the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)-equivalent process that was followed to support de-proposal of the DEAP.

Site History and Previous Remedial Action (Prior to DEA involvement; 1991-2011)

This section provides a brief description of the site history and remedial actions taken prior to the formation of the DEA. A more complete historical summary can be found in Section 2.1 of the final Technical Work Plan, which is included in Appendix A at the end of this TM.

- In 1991, tetrachloroethylene (PCE) was detected in former public water supply well PW-9W. The Montgomery Water Works and Sanitary Sewer Board of the City of Montgomery, Alabama (MWWSSB) closed the North Well Field (located north of the current plume footprint) wells in the early 1990s, eliminating the potential for consumption of potentially contaminated groundwater. The source of drinking water for the City of Montgomery (City) has since been supplied by surface water intakes from the Tallapoosa River (located several miles upstream of downtown Montgomery) or well fields southwest of Montgomery (located approximately 8 miles south of downtown Montgomery), and the western well field, which has been in existence for approximately 80 years. Based on groundwater flow and distance, these water sources are not within the plume nor threatened by the plume.
- PCE was also encountered during the construction of the Retirement Systems of Alabama (RSA) Energy Plant in 1993. An emergency removal action was conducted in 1993 by the contractors excavating at the RSA Energy Plant. The remedial action included the removal of contaminated soil and groundwater, and non-aqueous phase liquid. This action effectively eliminated the PCE source area at the RSA Energy Plant construction area (located one block east of the RSA Tower in downtown Montgomery) as supported by the significant decrease in PCE concentrations in Monitoring Well MW-1S (located adjacent to and downgradient of the RSA energy plant excavation) from greater than 607 ppb in 1993 to less than the MCL since 2010.

- In 1995, ADEM conducted a Preliminary Assessment of the soil and groundwater around the RSA Energy Plant. No specific sources of the PCE were identified; however, the report identified numerous historical drycleaners in the downtown area.
- In May 2000, the site was proposed by EPA for inclusion on the NPL because of the potential threat to the public water supply. This potential threat was based on the population potentially exposed to contaminated groundwater, based on EPA's Hazard Ranking System scoring of the site.
- Between 1999 and 2001, EPA contracted Black & Veatch to conduct a Remedial Investigation (RI) to evaluate the nature and extent of groundwater contamination because of the PCE discovered in downtown Montgomery groundwater. During this investigation, 16 permanent and 16 temporary wells were installed to monitor the vadose zone and the top and bottom of the uppermost aquifer, estimate hydraulic conductivity, and to evaluate the nature and extent of groundwater contamination. Sixty-six subsurface soil samples also were collected to characterize potential site source areas. The RI concluded that contaminants likely originated from multiple sources within the downtown Montgomery area and the groundwater exposure pathway to residents is incomplete.
- In October 2002, the City and EPA entered into an Administrative Order by Consent that called for the completion of the CERCLA activities associated with the project, including the completion of a Feasibility Study (FS), and selection of a final remedy for the project. In 2003, the City contracted Malcolm Pirnie to develop a FS for the project area. The FS evaluated potential remedial options. Institutional controls and groundwater monitoring were retained as remedial options for implementation.
- The City passed a groundwater ordinance on September 16, 2003 to prohibit well drilling in the downtown area. This action significantly reduces the potential for ingestion or dermal exposure pathways to groundwater for downtown employees and residents.
- In 2004, the Agency for Toxic Substances and Disease Registry (ATSDR) issued a Public Health Assessment Report for the site. ATSDR noted that because of the quick response by MWWSSB in removing the contaminated well from service and the dilution of any contaminants that may have been present due to blending in the Montgomery water supply system, the site represented "no apparent public health hazard."
- In September 2004, EPA drafted a Record of Decision (ROD) document for the Capital City Plume site. This draft ROD concluded that no CERCLA remedial action was necessary for the site and that monitoring would be conducted to verify that no unacceptable exposures to risks posed by the site would occur in the future. Also, a determination was made that no remedial action was necessary at the site due to previous actions conducted by the City and MWWSSB. The ROD was never finalized by EPA.
- In 2005 and 2006, the City developed a groundwater monitoring plan under EPA review. Using the available groundwater monitoring network (up to 14 wells), groundwater sampling was conducted in 2007, 2009, 2010, and 2011 by the City, U.S. Geological Survey (USGS), and EPA (2010 and 2011), in accordance with the conditions outlined in the draft ROD.
- In 2005 and 2011, the MWWSSB contracted a licensed well driller to decommission and abandon (i.e., permanently grout) the wells formerly associated with the North Well Field, thus completely eliminating the wells from future use. The MWWSSB retained Well PW-9W for future environmental monitoring purposes, until it was permanently abandoned in 2019.

- From 2008 to 2010, USGS and EPA conducted tree tissue, pore water, and groundwater surveys in the downtown Montgomery area as part of a technology assessment for the use of tree core data to assess groundwater quality. Chlorinated volatile organic compounds (VOCs) were detected in tree core samples collected from across the site, including four trees in the downgradient portion of the plume (three trees from near the Cypress Creek area and one tree near MW-12S). Detection of the chlorinated VOCs suggests phyto-uptake is occurring in the downgradient portion of the plume.
- In 2010, EPA and USGS sampled indoor air and collected soil vapor samples near the County Annex III and Attorney General (AG) buildings based on complaints of indoor air quality. Corrective measures were taken at both buildings to address the indoor air quality, including installation of a filtration system in the County Annex building and replacement of carpet in the subbasement of the AG building, which resolved the odor issues in these buildings. Neither of the indoor air issues at these two buildings were found to be related to the groundwater plume.
- In 2010, the City, in collaboration with EPA constructed a demonstration phytoremediation plot consisting of clonal cottonwood trees in the central area of the plume. This location was located within the footprint of the Capital City Plume and was intended to provide remediation of the PCE contaminated groundwater.

Proposed NPL Listing and Formation of the Downtown Environmental Alliance

In June 2012, the City developed a working group to complete the investigations needed to avoid final inclusion on the NPL. In November 2012, EPA sent a letter to the City of Montgomery requesting an Environmental Action Plan (EAP) to present the technical strategy for addressing the remaining environmental concerns related to potential contamination in the downtown portion of the City. The November 2012 letter also noted three main items of concern that should be addressed in such an EAP:

- Develop a strategy to evaluate the potential for soil vapor contamination within a 47-block area of downtown Montgomery.
- Further evaluate the presence of the soil vapor contamination previously identified in the vicinity of the County Annex III Building, at 101 South Lawrence Street.
- Further evaluate the need for additional environmental sampling in the vicinity of the current Alabama AG Building at 501 Dexter Avenue.

An EAP to address the issues identified in EPA's November 12, 2012 letter was submitted to EPA in February 2013. Following review, EPA identified additional technical issues in a response letter dated September 19, 2013. The three additional technical issues identified by the EPA were as follows:

1. Identify and delineate any contaminant source areas in order to evaluate the feasibility of eliminating or controlling ongoing impacts by soil vapor and groundwater at the site.
2. Evaluate the nature and extent of contaminated groundwater and surface water in Cypress Creek in support of the objectives to restore groundwater to beneficial use within a reasonable timeframe at the site.
3. Provide an assessment of the pathways and quantitative risks posed by the site, including potential exposure to contaminated groundwater and soil vapor linked to previously identified source areas.

The EAP was developed to address these concerns using both scientifically defensible methodologies and industry-accepted practices and testing methods. The City resubmitted a draft EAP to EPA in December 2013. The document was subsequently finalized in March 2014, and EPA concurred with it in May 2014.

Following acceptance of the EAP, the City facilitated the formation of a group of voluntary participants to respond to the environmental issues and concerns described in the November 2012 letter from EPA to the City. This group is known as the Downtown Environmental Alliance. The DEA consists of the following members:

- City of Montgomery–Facilitator
- Alabama Department of Education
- Alabama Department of Transportation
- Alabama Department of Public Safety
- The Advertiser Company
- County of Montgomery
- MWWSSB

On September 30, 2015, the DEA was formalized by the signing of the Site Participation Agreement by its members. Also, the regulatory management of the DEAP was formally deferred from EPA to ADEM oversight through the execution of a Memorandum of Understanding signed by EPA and ADEM. Also, on September 30, 2015, the DEA and ADEM signed the original version of the Settlement Agreement for Site Response, which established the regulatory steps and documents to complete the CERCLA-equivalent remedial process for de-proposal to be achieved.

Community Involvement and Outreach Plan

In November 2015, the DEA submitted its Capital City Plume Community Involvement and Outreach Plan (CIOP) to ADEM for review. The purpose of this CIOP was to serve as a guide for providing meaningful community involvement for efforts related to the Capital City Plume project. The CIOP also provided guidance for the formation of the Community Outreach Group (COG), which is a group of concerned citizens who live or work in the downtown area that provides external review and insight into the DEAP activities and documents. The DEA routinely provides the COG with updates on major milestones with the project. The CIOP also provided guidance for the DEAP's website, which contains updates on the status of the DEAP and final documents for the public to review. ADEM submitted its concurrence letter for the plan in February 2016.

Technical Work Plan

In May 2016, The DEA finalized the Technical Work Plan (TWP), which included a summary and evaluation of all known historical environmental sampling data (groundwater, surface water, soil, soil vapor, and indoor air) in the downtown area to identify the additional field work recommended to evaluate the DEAP. Additional proposed work included installation of an additional monitoring well, collection of groundwater samples, collection of soil vapor samples, a hydraulic study of Cypress Creek and evaluation of a private commercial well, all following typical CERCLA investigation approaches.

The TWP also included a site-wide Sampling and Analysis Plan (SAP) that established the sampling methodology, laboratory methods, and field documentation requirements for the above-mentioned field work. The work elements described in the TWP were later reported in the Supplemental Environmental Investigation Report.

Supplemental Environmental Investigation Report

From summer 2016 to winter 2017, the DEA conducted the field activities associated with the Supplemental Environmental Investigation (EI), which were prescribed in the TWP and SAP. The final Supplemental EI Report was submitted to ADEM in October 2017 and concurrence was received in March 2018. The objectives of the EI (which is equivalent to a CERCLA Remedial Investigation Report)

were to collect sufficient data to support the refinement of the conceptual site model (CSM), including the following:

- Assess the nature and extent of PCE in groundwater.
- Evaluate the potential for groundwater to impact surface water in Cypress Creek.
- Evaluate the vapor intrusion potential at the County Annex III and Attorney General buildings.
- Identify concentrations of soil vapor at locations where shallow groundwater concentrations exceeded EPA residential vapor intrusion screening levels (VISLs).
- Provide sufficient data to evaluate potential exposure risk.

Based on the results of the EI phase of the project, PCE and trichloroethylene (TCE) were the only chemicals in groundwater that exceeded the lower of the maximum contaminant levels (MCLs) and EPA Regional Screening Levels (RSLs). The extent of the PCE in groundwater was delineated (horizontally and vertically) based on PCE concentrations exceeding the MCL of 5 micrograms per liter. TCE did not exceed the MCL, but was present in concentrations exceeding the RSL in isolated areas within the site. The lateral extent of PCE in groundwater ends near Cypress Creek, where the influence of the Alabama River acts as a hydraulic barrier to impede further lateral migration.

The preliminary screening evaluation resulted in the need to perform a risk assessment and alternatives analysis for the shallow groundwater and shallow soil vapor in accordance with ADEM and EPA guidance.

Risk Assessment/Alternatives Analysis Report

Based on the recommendations of the preliminary risk evaluation in the final Supplemental EI Report, the DEA prepared a combined risk assessment and alternatives analysis (i.e., equivalent of a Risk Assessment and Feasibility Study) document. The final Risk Assessment/Alternatives Analysis (RA/AA) Report was submitted to ADEM in February 2019, and ADEM concurrence was received in March 2019. The Human Health Risk Assessment (HHRA) was performed using Alabama Risk-Based Corrective Action (ARBCA) Guidance (which provides an approach and risk estimates similar to a Superfund HHRA under CERCLA) and consisted of the 4-step process identified for a Superfund HHRA.

- Step 1 - Screened maximum detected site concentrations in groundwater and soil vapor with conservative screening levels (RSLs and VISLs based on a target risk of 1×10^{-6} and target hazard quotient of 0.1) to identify chemicals of concern (COCs)¹.
- Step 2 - Developed a site-specific conceptual exposure model, identifying potential current/future receptors and potential exposure scenarios, and estimated intakes for potentially complete exposure pathways using EPA's standard exposure equations and exposure factor values.
- Step 3 - Identified toxicity values from EPA's hierarchy of toxicity value sources.
- Step 4 - Calculated risk estimates for COCs and compared risk estimates to acceptable risk levels (for ADEM, an excess lifetime cancer risk of 1×10^{-5} and hazard index of 1).

In addition, a Screening Level Ecological Risk Assessment was prepared.

The HHRA indicates that soil vapor concentrations exceed EPA's residential and/or commercial VISLs at only three locations, and that soil vapor at two of the locations was not related to the groundwater plume. Currently, there are no residences in the areas of the exceedances. The only area of a

¹ The term "chemical of concern" (COC) is used in this step in ARBCA, rather than the Superfund HHRA term "chemical of potential concern" (COPC).

commercial exceedance (unrelated to the groundwater plume) is an existing parking lot/city right-of-way; thus, there are no current receptors. Soil vapor samples collected at the building nearest the area of commercial exceedance were within acceptable limits.

The Alternatives Analysis followed the CERCLA-like decision-making process, where potential remedial alternatives were screened against the two CERCLA threshold criteria and the five balancing criteria. While several active remedial alternatives were considered (i.e., pump-and-treat, in situ chemical reduction, in situ chemical oxidation, air sparge/soil vapor extraction, and/or enhanced bioremediation), these alternatives were deemed not feasible based on their ability to be implemented, technical effectiveness, and safety considerations. Also, based on the fact that considerable active remediation has already occurred at the site (i.e., North Well Field Abandonment, 1993 Soil source Removal during RSA construction, phytoremediation project, and abandonment of privately-owned bus washing well), the Alternatives Analysis concluded that further active remediation was not warranted for the DEAP.

Four potential remedial alternatives were carried forward to the final evaluation:

- Alternative 1 - No Action
- Alternative 2 - Institutional Controls (ICs) with Five-Year Reviews (FYRs)
- Alternative 3 - ICs with FYRs and Monitoring
- Alternative 4 - ICs with FYRs and Monitored Natural Attenuation (MNA)

Based on the review of this evaluation, it was determined that Alternative 1 (No Action) would not meet the threshold criteria of being protective of human health and the environment or compliant with applicable, relevant, and appropriate requirements (ARARs). Of the three remaining alternatives, it was concluded that no additional protectiveness is gained from the increased costs associated with Alternative 4 (which includes MNA; also, the aerobic state of the aquifer will not support MNA), and although Alternative 2 (ICs with FYRs) is less expensive, it does not provide the monitoring data required to support the FYR evaluation and address when the remedy can be terminated. Areas of remaining potential risk can be managed using ICs with monitoring. Therefore, Alternative 3 (ICs with FYRs and Monitoring) was the recommended alternative.

Institutional Controls Plan

After ADEM concurrence was received for the RA/AA Report on March 8, 2019, the DEA prepared an Institutional Controls Plan (ICP), which is equivalent to a Proposed Plan/Record of Decision. The Final ICP was submitted to ADEM in July 2019. ADEM concurrence with the ICP was received in August 2019 and a final Determination Letter was received in September 2019, once the 45-day public comment period was completed with no public comments received. The purpose of the ICP was to provide the planning-level details of the ICs that would be required for the DEAP. The ICP describes the following activities to be completed for the remedy to be considered completely implemented:

- Install one additional monitoring well located along the western edge of the plume footprint.
- Amend the City's well drilling ordinance to (1) prohibit groundwater use within the downtown area, (2) prohibit first-floor residential use for one block where soil vapor is a potential future concern, and (3) require property owners to follow the International Building Code regarding the use of vapor barriers for new construction.
- Implement environmental covenants on the City-owned property in areas where soil vapor is a potential future concern.
- Provide and encourage the use of environmental covenants to downtown property owners.

- Send IC Notification Letters to downtown property owners on an annual basis to describe the restrictions for groundwater use, the use of vapor barriers, the availability of environmental covenants, and the restriction of first-floor residential use (where applicable).
- Conduct random, annual inspections of downtown properties and interviews with property owners to ensure the ICs are being implemented and maintained in accordance with the ICP.
- Conduct annual groundwater monitoring at seven effectiveness monitoring wells.
- Provide annual Remedial Action Progress Reports to ADEM.

Remedial Action Report

The Remedial Action Report (RAR), the final document required by the Settlement Agreement for Site Response for de-proposal of the DEAP, was submitted by the DEA to ADEM in November 2019 and concurrence was received by ADEM in November 2019. The purpose of the RAR was to document that the items described in the ICP were completed or ready to implement. The RAR was developed in general accordance with the Remedial Action Report: Documentation for Operable Unit Completion (OSWER 9355.0-39FS; EPA, June 1992). The RAR was submitted to EPA Region 4 in November 2019 as part of ADEM's original de-proposal package for the DEAP.

Remedial Actions at the DEA Site

Several remedial actions have been performed over the history of the Capital City Plume site:

- Soil excavation of the source area at the RSA Energy Plant in 1993
- Permanent abandonment of all public supply wells associated with the North Well Field, including the final public water supply well 9W, which was the driver for the initial listing of the site
- Installation of the phytoremediation plot in 2010 and ongoing maintenance of other trees in the downtown area
- Permanent closure of the last remaining private well (the Capital Trailways bus washing well) in 2019

Based on discussions during the March 10, 2020 site visit with EPA and ADEM, the DEA has reconsidered the active remedial alternatives that were considered in the AA portion of the RA/AA Report (i.e., pump-and-treat, in situ chemical reduction, in situ chemical oxidation, air sparge/soil vapor extraction, and/or enhanced bioremediation). The in situ chemical reduction, was not considered because the ability to sustain a reductive zone in the highly aerobic aquifer is unlikely. The use of air sparge was not considered further as the physical act of stripping PCE from the aquifer would increase the likelihood of PCE vapor migration (and potentially increase the likelihood of a complete vapor intrusion pathway) for the downtown area. Two remaining active remedial alternatives (pump- and-treat and expanded phytoremediation) were evaluated after discussions with EPA and ADEM for further consideration. In order to evaluate these two remedial options, the DEA reviewed applicable information for the two alternatives, and it was determined that the cost associated with a potential pump-and-treat option would be significantly greater than the cost associated with an expanded phytoremediation option. It was also considered that the pump-and-treat option would involve pumping contaminated groundwater to the surface, thus creating a potential pathway for exposure that does not currently exist. Furthermore, based on general knowledge of the hydrology of the area and these remediation alternatives, it is believed that neither pump-and-treat nor expanded phytoremediation technology are expected to speed up the remediation to less than MCLs within a substantially shorter timeframe.

Conclusion

The final selected remedy for the DEAP is ICs with groundwater monitoring (which is consistent with the original 2004 draft ROD prepared by EPA). Given the restrictions on groundwater use and that downtown groundwater is not needed for potable use, the DEA and ADEM understand the length of time it will take for restoration of the aquifer for drinking water standards. Additionally, there are no other foreseeable beneficial uses for this aquifer at this time. The DEAP will continue to be managed by the DEA under the regulatory authority of the Alabama Department of Environmental Management. ADEM will continue to be the lead agency responsible for regulatory oversight of the site. ADEM believes that Superfund involvement at this site is not warranted and in a letter to EPA dated November 13, 2019, requested that the site be de-proposed from the proposed NPL.

Attachment
Relevant Historical Reports and
Documents (on CD)

- 1993 RSA Building Site Evaluation
- 1996 ADEM Preliminary Assessment Report
- 2002 Black & Veatch RI Report
- 2002 Consent Order between the City and EPA
- 2003 Malcolm Pirnie Feasibility Study
- 2004 ATDSR Public Health Assessment
- 2004 Draft Record of Decision
- 2012 USGS Determination of the Potential Source Areas, Contamination Pathways, and Potable Release History of Chlorinated-Solvent-Contaminated Groundwater at the Capital City Plume Site
- 2014 Environmental Action Plan
- 2015 Community Involvement and Outreach Plan
- 2016 Technical Work Plan (historical database tables included in Section 3)
- 2017 Supplemental EI Report
- 2019 RA/AA Report
- 2019 ICP
- 2019 RAR
- October 2019 Settlement Agreement for Site Response
- Responses to Comments; EPA De-proposal Comments dated December 23, 2019