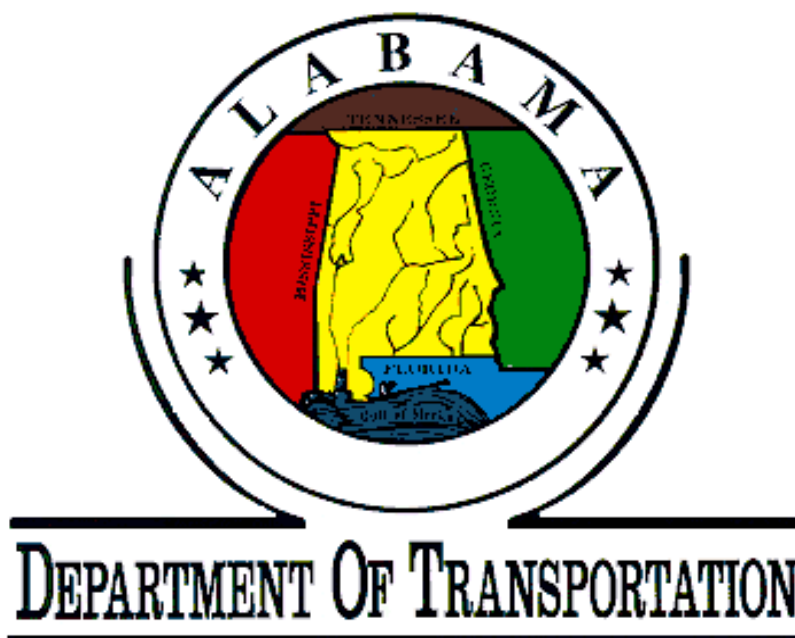


Addendum 04

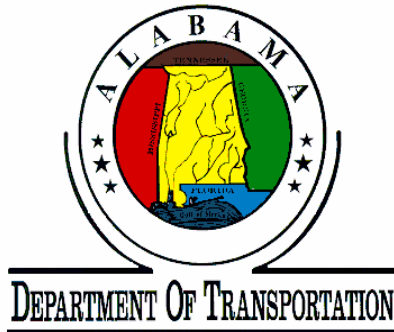
Work Plan for Rapid Response Interim Corrective Measures & Comprehensive Site Assessment

Investigation of Low-Lying Areas



August 17, 2001

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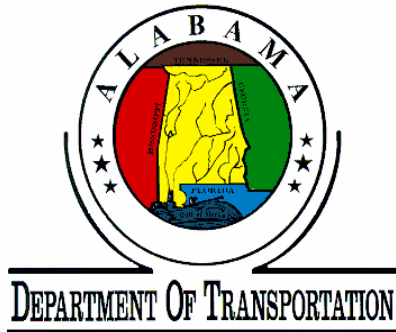
ADDENDUM 04
INVESTIGATION OF
"LOW-LYING AREAS"
JULY 9, 2001

Introduction

The following Scope of Work is an addendum to the Work Plan for Rapid Response Interim Corrective Measures and Comprehensive Site Assessment which was approved on June 8, 2001. The "low-lying areas" (shown on Figure 1) will be investigated for the presence of trichloroethylene (TCE) in the surface water and sediments and to define the extent of TCE. Previous data collected by ADEM in January 2001 and ALDOT in March, April, May 2001, June, and July indicated that TCE was present in the low lying areas west of Three Mile Branch. Only one sample collected in Three Mile Branch (SW-13 3/30/01) contained detectable TCE (3.4ppb) and has not contained detectable TCE in April, May, June or July. Therefore, Three Mile Branch is considered the eastern boundary of the assessment. The area to be assessed will be expanded as required to define the extent of TCE in the low-lying areas. The following Work Plan provides work elements to collect surface water and sediment samples at 10 to 20 locations for analyses for VOCs (volatile organic compounds) to evaluate the extent of TCE in these areas. Samples will be collected along the northern and southern boundaries of each area as shown on the attached figure. Additionally, samples will be collected along the east/west axis of each area. Sediment sample collection will be biased toward inflow/outflow areas and topographically low areas where sediments accumulate. The number and locations of the sample locations will be selected after surface water migration pathways, seeps, and discharge points have been identified. Field personnel will select the locations based on site conditions (depth of water, vegetation cover, and accessibility).

Collection of Sediment

- The sediment samples will be retrieved using a Wildco Hand Core Sediment sampler with 20-inch-long disposable plastic sleeves. Each sampling location will be flagged.
- Samples will be collected using 5-gram Encore samplers for analyses for VOCs. The Samples will be collected immediately above stiff silt or clay layers within each 20-inch-long plastic sleeve. Multiple samples may be collected from each location if there are multiple silty/clayey layers.



ADDENDUM 04
INVESTIGATION OF
"LOW-LYING AREAS"
JULY 9, 2001

Collection of Surface water Samples

- Where surface water is present, a surface water sample will be collected from each sediment sample location for analyses for VOCs. If the surface water is flowing, the surface water samples will be collected from the downstream direction to the upstream direction.
- The surface water sample will be collected by slowly lowering the upright VOC glass vial into the water body. Field personnel will avoid agitating the water and causing the mixing of sediments and vegetation when collecting the surface water sample.

Analytical

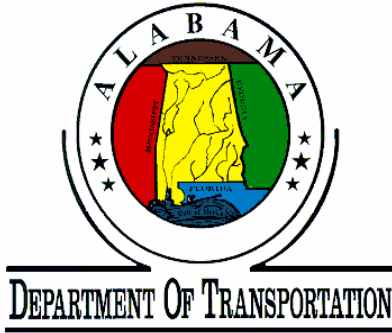
- Sediment and surface water samples will be placed on ice, in a cooler, and shipped to **TTL's** laboratory for VOC analyses. Analyses of the surface water samples will be in accordance with Method 8260 outlined in Test Methods for Evaluating Solid Waste Physical/ Chemical Methods, EPA, SW-846, 3rd Edition, November, 1986.

Quality Assurance/Quality Control

- Duplicate samples will be collected from 10 percent of the total number of sediment and surface water samples collected.
- An equipment rinsate will be collected each day.
- A trip blank will be placed in each cooler that contains aqueous VOC samples.

Decontamination

- A decontamination container (55-gallon drum) will be placed at the ALDOT Central Staging Area. The Wildco Hand Core Sediment sampler will be decontaminated prior to collection of each sediment sample. The fluids generated during decontamination will be collected in 5-gallon plastic buckets and transported to the Central Staging area.
- The following procedures will be used to clean the sampling equipment used to collect the soil/sediment and ground-water samples. The procedures are those



ADDENDUM 04
INVESTIGATION OF
"LOW-LYING AREAS"
JULY 9, 2001

published in: Environmental Investigations Standard Operating Procedures and Quality Assurance Manual, EPA, Region IV; May 1996; Athens, Georgia; Section 2.2.3., pages B-1 through 6.

- The Wildco Hand Core Sediment sampler will be cleaned after retrieval.
- Sampling equipment will be cleaned with tap water and soap using a brush, if necessary, to remove particulate matter and surface films. The tap water will be obtained from the Montgomery Water Works and Sanitary Sewer Board public-water supply. The soap will be a standard brand of phosphate-free laboratory detergent (such as Liquinox®).
- Equipment will be rinsed thoroughly with tap water; then rinsed thoroughly with organic/analyte free water (deionized water); and then thoroughly rinsed with isopropyl alcohol. After rinsing with the isopropyl alcohol, the equipment will again be rinsed with deionized water. PVC or plastic items will not be rinsed with alcohol.
- A sample of the deionized water will be analyzed using Method 8260 to ensure that the water contains no detectable volatile organic compounds.

Evaluation of Data

The results of this investigation will be reviewed to determine whether additional investigations are required to define the extent of TCE in the sediments and surface water. A report will be submitted within forty-five (45) days of completion of the work and receipt of all analyses. The report will summarize the results of the investigation and will include a recommendation for additional work or investigation or remediation, if any, and a proposed schedule for implementing and completing the same.

Schedule

- The field work, as outlined in this addendum, will be initiated within 14 calendar days of final decision on this Addendum 04. Field work will be completed within 60 days of initiation. If additional samples are required to define the extent of TCE in the "low-lying areas" a modified schedule will be submitted.
- The report will be completed within 45 days after sample collection

