## Addendum 07 Revision 01

# Coliseum Boulevard Plume Investigation



May 29, 2002

Submitted to:
The Alabama Department of Environmental Management
Montgomery, Alabama



#### ADDENDUM 07—Revision 01

EVALUATION OF RECHARGE BETWEEN
THE ALDOT CENTRAL COMPLEX
AND THE MONTGOMERY ZOO
MAY 29. 2002

This following is a proposed revision to Addendum 07 (submitted December 13, 2001) which provided for continual measuring and recording of the ground-water levels within selected piezometers and monitoring wells within the Coliseum Boulevard Plume Site. These measurements will be used to evaluate the hydraulic effects of recharge from rainfall, the Zoo pond, and drainage ways on ground-water levels generally in the area of the ground-water divide that is between the ALDOT Complex and the Montgomery Zoo. This information will be used to develop and refine the ground-water model for the site-wide evaluations of the Coliseum Boulevard Plume.

In the December 13, 2001 Addendum 07, mini-trolls were proposed to be installed in piezometers PZ5, PZ12, PZ13, PZ14, and in monitoring wells 101, 130 and 131. Locations of these piezometers and monitoring wells are shown on Figure 1. Revision 01 to Addendum 07 comprises the installation of mini trolls in existing two-inch diameter monitoring wells in place of the initially proposed piezometers because available mini-troll equipment is too large to install within the piezometers. The inside diameter of the piezometers is approximately 0.75 foot which does not allow sufficient space for installation of the 0.72 foot diameter mini-troll probe. The approximately oneinch outside diameter of the piezometers does not allow for proper installation of a locking cap and accompanying docking ring from which the mini-troll cable suspends. Thus, this revision proposes installation of mini-trolls in monitoring well MW113, which is about 500 feet east of the initially proposed piezometer PZ5, and in monitoring well 115, which is about 80 feet south of the initially proposed piezometer PZ12 (see Figure 1). This revision also includes construction of a new two-inch diameter piezometer inside the Montgomery Zoo in place of the initially proposed piezometer PZ14 (see Figure 1). A list of the monitoring wells and the newly constructed piezometer in which the minitrolls are proposed to be installed is compiled in the attached Table 1.



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#### **Construction of Piezometer (Montgomery Zoo)**

Construction of the piezometer is tentatively scheduled for May 30, 2002. A CME-75 truck-mounted drill equipped with 4-1/4-inch ID hollow-stem augers will be used to drill the borehole of the piezometer to approximately 25 feet below land surface. The piezometer will be constructed by removing the augers and inserting approximately 10 feet of two-inch diameter 0.010-inch slotted PVC screen connected to a 15 feet long, two-inch diameter PVC riser into the borehole. A graded filter sand will be placed to within two feet of the top of the screened interval. A two-foot bentonite plug will be placed on top of the sand pack. A cement/bentonite grout will be placed on top of the bentonite plug. A flush-mounted well cover will be installed. The piezometer will be developed using standard well development techniques (i.e., submersible pumping, surge block, etc...). The land surface and the top of the casing of the piezometer will be surveyed.

#### Installation Schedule

Installation of the mini-trolls will begin the week of June 3, 2002.

 Table 1. Proposed locations for installation of mini-trolls; Addendum 07-Revision 1.

### **Proposed Mini-troll Locations**

December 13, 2001Addendum 07	May, 2002Addendum 07-Revision 1
Piezometer PZ 5	Monitoring Well 113
Piezometer PZ 12	Monitoring Well 115
Piezometer PZ 13	Newly Constructed Piezometer (Montgomery Zoo)
Piezometer PZ 14	
Monitoring Well 101	Monitoring Well 101
Monitoring Well 130	Monitoring Well 130
Monitoring Well 131	Monitoring Well 131

