

QUARTERLY PROGRESS REPORT

December 1, 2004- February 28, 2005

PROJECT TITLE:

Impacts of wood ash and CCA-treated wood on arsenic concentrations in soils and plants

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COMPLETION DATE: 08/31/07

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WORK ACCOMPLISHED DURING THIS REPORTING PERIOD:

- On January 7 of 2005, we went on a sampling trip to Austin Cary site where hundreds of CCA-treated wood stakes were installed in 1950's;
- Soil (surface and profile), plant, wood and groundwater samples were collected from the Austin Cary site;
- Soil (surface and subsurface) and vegetables samples were collected from areas adjacent to CCA-treated wood;
- The plant samples collected in the area were sent for identification;
- Soil samples were air-dried, screened through a 2-mm sieve and digested for analyses;
- Plant samples were oven dried at 60°C and grinded.
- All samples were digested using USEPA method 3051 and analyzed using graphite furnace atomic absorption spectrophotometry.

WORKS TO BE ACCOMPLISHED DURING THE NEXT THREE MONTHS:

- Digest and analyze soil, plant, wood and groundwater samples;
- Total arsenic and well as water soluble arsenic will be analyzed in all samples;
- Selected soil properties such as pH, organic matter, and cation exchange capacity will also be analyzed;
- Relationship between arsenic concentrations in soil, plant, wood and groundwater samples will be analyzed.
- When possible mass balance of arsenic in different compartments will be carried out to determine the fate of arsenic leached out of woods.