

QUARTERLY PROGRESS REPORT

April 1, 2004 to June 30, 2004

PROJECT TITLE: Extent of CCA-Treated Wood Used for Commercial Mulch

PRINCIPAL INVESTIGATOR: Dr. Helena Solo-Gabriele, Ph.D., P.E.

AFFILIATION: University of Miami, Dept. of Civil, Arch., and Environ. Engrg.

ASSOCIATE INVESTIGATOR: Dr. Timothy Townsend, Ph.D., P.E.

AFFILIATION: University of Florida, Dept. of Environ. Engrg. Sci., Solid & Haz. Wst. Prog.

COMPLETION DATE: November 15, 2004

“YEAR 6” Research

Title: Environmental Impacts of CCA-Treated Wood

(September 1, 2001 to May 31, 2003)

Project Administration

1. The final report for this project has been finalized. Comments on the report have been addressed and responses were sent to the groups that provided the comments. The final version has been posted under the “publications” link at www.ccaresearch.org. The title of the report is, “Arsenic and Chromium Speciation in Leachates from CCA-Treated Wood.”

RCRA Sponsored Project

Title: Management and Disposal Options for CCA-Treated Wood Waste

(July 1, 2003 to June 30, 2003)

Project Administration

1. The final report for this project has been drafted. The title of the report is, “Management and Disposal Options for CCA-Treated Wood Waste.” This report will be revised in the near future and will include information obtained from the FCES conference held February 2004.

“YEAR 7” Research

Title: Extent of CCA-Treated Wood Used for Commercial Mulch

(July 1, 2002 to June 30, 2004)

Project Administration

1. The final report for this project has since been completed and posted on the web. The report is open for comments through November 2004.

“YEAR 8” Research

Title: Environmental Impacts of CCA Contaminated Mulch

(July 1, 2003 to November 15, 2004)

Project Administration

1. Arrangements have been initiated to host our upcoming TAG meeting in Gainesville on October 22, 2004. The agenda has been distributed to the TAG members and to interested parties. A “paper” mail-out was also sent to TAG members and the

“administration” page on ccaresearch.org has been updated to include information concerning the upcoming TAG meeting.

Research Activities

1. Sample collection and sample ashing have been completed for this project. All 90 samples have been visually inspected, analyzed for particle size distribution, and analyzed for SPLP. Of the 90 samples, roughly 70 have been analyzed for total metals. The remaining 20 samples will be shipped to U.Florida by early next week. These samples will be analyzed for total metals during the upcoming reporting period. Results obtained to date are currently being compiled.
2. The mulch leaching study is continuing as part of phase II for this project. The vessels for experimentation were placed outside in January 2004. The samples collected through May 2004 have been analyzed and plotted.
3. We have started to draft the final report for the project.

Information Dissemination

1. The web site: www.ccaresearch.org continues to be updated.
2. Tomoyuki Shibata provided a presentation on August 1, 2004 as part of the ACHMM (Academy of Certified Hazardous Materials Managers) 2004 National Conference, in Las Vegas, Nevada. The title of his presentation was “Risk Assessment of the Impact of Arsenic Contamination Associated with Wood Treated with Chromated Copper Arsenate (CCA) to Children.” This presentation was invited and expenses were paid by the conference sponsor as part of an award received by Mr. Shibata for his research.
3. The following manuscript has been published.

Khan, B.I., Solo-Gabriele, H.M., Dubey, B., Townsend, T.G., and Cai, Y., 2004. Arsenic Speciation of Solvent-Extracted Leachate from New and Weathered CCA-Treated Wood. *Environmental Science and Technology*, 38: 4527-4534.

“YEAR 9” Research

Title: Arsenic-Specific Stain for Identifying CCA-Treated Wood
(July 1, 2004 to October 31, 2005)

1. Notice of award for this project was received from the FCSHWM. The main contract is pending. Dr. Tim Townsend’s sub-contract will be issued once the main contract is executed.
2. A student, Amy Omae, has since been hired to work on this project. Another student, Michael Laas, has volunteered to work on this project as part of a course he is taking.

COURTESY REPORT
For Complimentary Studies

Project Administration

1. Dr. Solo-Gabriele continues to work on the project funded by Florida International University (FIU) and the National Institutes of Environmental Health Sciences (NIEHS). The title of the project is, "Impacts of arsenic from CCA-treated wood within marine and terrestrial environments." Work from this study is currently being written up for publication.
2. Dr. Solo-Gabriele is currently collaborating with Dr. Stuart Shalat of Rutgers University and Dr. Lora Fleming of the University of Miami Medical School on an epidemiologic study evaluating the impacts of CCA-treated playgrounds on children. Sampling of playgrounds and children has been completed. The final report is currently being drafted.
3. Drs. Solo-Gabriele and Townsend assisted with the planning of a conference titled, "Environmental Impacts of Preservative-Treated Wood." The web page for this conference was completed through FDOS. Tim Townsend and Helena Solo-Gabriele are currently working on an edited book from material presented at this conference. So far they have received drafts for 10 chapters.
4. A proposal was submitted in collaboration with the Town of Medley to the FDEP Innovative Recycling Grants Program. The title of the proposal is, "Augmented Sorting of Recovered Wood Waste Using Stain and X-ray Technologies." This proposal has since been funded through the FDEP. Contracts are pending. A loaner XRF unit has been received from Innov-X.
5. Helena Solo-Gabriele is currently collaborating with Dr. Rick Maas of the University of South Carolina – Asheville to develop educational materials concerning CCA-treated wood. This project was funded through the Public Health Trust located in California.
6. Helena Solo-Gabriele and Martin Grosell of the University of Miami Marine School and Yong Cai of Florida International University are collaborating on a project focusing on toxicity testing of leachate from wood treated with chromated copper arsenate (CCA). This project will evaluate the effects of salinity on the toxicity of CCA-treated wood to a fish species.