UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL EXPOSURE RESEARCH LABORATORY
ECOSYSTEMS RESEARCH DIVISION
960 COLLEGE STATION ROAD : ATHENS, GA 30605-2700

OFFICE OF R
RESEARCH AND DEVELOPMENT

July 13, 2009

MEMORANDUM

SUBJECT: Final Report: "Results of the Analyses of Soil Samples from Near Decatur, Alabama for Fluorinated Organic Compounds"

FROM: Eric J. Weber
Acting Director, Ecosystems Research Division

THRU: Linda S. Sheldon
Acting Director, National Exposure Research Laboratory (MD 305-01)

TO: Steven A. Owens
Director, Office of Pollution Prevention and Toxics (7401M)

Suzanne M. Rudzinski
Deputy Office Director, Office of Science and Technology (4301T)

James D. Giattina
Director, Water Protection Division, US EPA Region 4

NERL scientists have completed their analysis of the soil and samples collected by Region 4 scientists at the Decatur, AL site in March 2009. Soil samples were collected from six agricultural fields near the Decatur area where sludge from the Decatur Utilities had been applied for more than 12 years. Two soil samples were also collected at one background field, an area where sludge had not been applied. Attached is a summary report that provides the analytical results for the soil and quality control samples. The quality control data demonstrate that exceptional care was taken in sampling, storing, and shipping the samples.

These samples were analyzed for a variety of perfluorinated chemicals (PFCs) and fluorotelomer alcohols (FTOHs). Samples from five of the sludge-applied fields had soil concentrations of PFCs and selected FTOHs exceeding the background sample levels. For example, perfluorooctanoic acid (PFOA) levels ranged from 50-320 ng/g soil (or parts per billion, ppb), two to three orders of magnitude above background levels. Perfluorooctane sulfonate (PFOS) levels ranged from 30-410 ng/g soil (ppb), one to two orders of magnitude above background.

Please contact me (706-355-8001) or Linda Sheldon (919-541-2106) if you have any questions.

Attachment

"Results of the Analyses of Soil Samples from Near Decatur, Alabama for Fluorinated Organic Compounds," July 13, 2009