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OFFICE OF R
RESEARCH AND DEVELOPMENT

November 24, 2009

MEMORANDUM

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

FROM: Candida C. West *ccw*
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TO: Steven A. Owens
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NERL scientists have completed their analysis of subsurface soil samples collected by Region 4 at the Decatur, AL, site in March 2009. Surface and subsurface 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. Soil samples were also collected at one background field, an area where sludge had not been applied.

The results of analysis of the surface soils samples for selected perfluorinated chemicals (PFCs) and fluorotelomer compounds (FTCs) were provided in an earlier report. In this second report, we summarize results of PFC and FTC analyses for the subsurface soils.

Subsurface soil samples from the sludge-applied fields had soil concentrations of perfluorooctanoic acid (PFOA) at least 14-times that of the background field. The contrast in [PFOA] between sludge-applied and background subsurface soils exceeded that for most other perfluorocarboxylic acids (PFCAs). Perfluorooctane sulfonate (PFOS) concentrations in the subsurface soils of the sludge-applied fields ranged from about equal to background values to nearly 100-times that of the background field.

Please contact me (706-355-8001) or Mac Long (706-355-8200) if you have any questions.

Attachment

Results of the Analyses of Soil Samples from Near Decatur, Alabama for
Fluorinated Organic Compounds II: Subsurface Soils