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ST. LOUIS DOWNTOWN SITE - RESULTS OF ANALYSES OF HALL ST. EXCAVATION SPOILS

Enclosed is a table with the results of laboratory analyses of the spoils from the August 23, 1994 water main excavation along Hall Street just north of Destrehan Street. The results show that the levels of contamination in the soil which was sampled are below levels that would require a cleanup under Department of Energy (DOE) guidelines, and are, in fact, barely distinguishable from the levels of radionuclides found naturally in all soils (i.e., background concentrations) in the St. Louis area.

The portion of Hall Street that was excavated runs through the Mallinckrodt plant which has some areas of low-level radioactive contamination as a result of activities undertaken at the plant for the Atomic Energy Commission, a DOE predecessor. Cleanup of the contamination is being addressed by DOE's Formerly Utilized Sites Remedial Action Program (FUSRAP).

Repairs on the water main were started before FUSRAP staff in St. Louis arrived at the site to support the repair work. The general area affected had been sampled previously and some scattered pockets of contamination had been detected. Consequently, FUSRAP staff members advised the work crew of the possibility of the presence of radioactive contamination. Unfortunately, some of the spoils had already been hauled to the city landfill on Hall Street. Samples were taken from both the spoils still at the excavation site and the spoils at the landfill and, as previously stated, were found to be below levels which would require cleanup by DOE. It is important to note, though, that the Missouri Department of Natural Resources does not recognize the DOE cleanup guidelines as absolute standards for determination of "clean" soil.

If you have any questions, please contact me through the DOE Information Center in Hazelwood at (314) 524-4083 or at my office in Oak Ridge at (615) 576-9634.

Sincerely,

David G. Adler, Site Manager
Former Sites Restoration Division

Enclosure

cc: Bob Boland, Mallinckrodt
Jerry Lampkin, Terminal Railroad Association
Charles Heinzman, Missouri Department of Natural Resources
Bobby Holly, St. Louis Street Department
Dan Tschirgi, Missouri Department of Natural Resources
Dan Wall, Region VII Environmental Protection Agency

RESULTS OF ANALYSES OF HALL ST. SOILS**HALL STREET SPOILS**

Analyte	Result	Error	Units
Uranium-238	3.80	+ 1.30	picoCuries/gram (pCi/g)
Radium-226	1.00	+ 0.48	pCi/g
Thorium-228	0.82	+ 0.28	pCi/g
Thorium-230	2.50	+ 0.60	pCi/g
Thorium-232	0.66	+ 0.25	pCi/g

LANDFILL SPOILS

Analyte	Result	Error	Units
Uranium-238	3.30	+ 1.00	pCi/g
Radium-226	2.80	+ 0.51	pCi/g
Thorium-228	1.00	+ 0.30	pCi/g
Thorium-230	2.30	+ 0.53	pCi/g
Thorium-232	0.94	+ 0.29	pCi/g

BACKGROUND RADIONUCLIDE CONCENTRATIONS IN ST. SOILS (AVERAGE)

Analyte	Result	Error	Units
Uranium-238	1.1	+ 0.2	pCi/g
Radium-226	0.9	+ 0.4	pCi/g
Thorium-228	not avail	--	--
Thorium-230	1.3	+ 0.4	pCi/g
Thorium-232	1.0	+ 0.5	pCi/g

DOE SOIL GUIDELINES

Uranium-238	50 picoCuries/gram (pCi/g) above background
Thorium-230, Thorium-232, Radium-226	5 pCi/g above background in the top 6 inches; 15 pCi/g above background in any subsequent 6-inch layer.