

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Mel Carnahan, Governor • Stephen M. Mahood, Director

DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176SLDS
Administrative
Record
9810201014

March 6, 1998

Mr. Louis A. Dell'Orco
Project Manager, USACE
FUSRAP Office
9170 Latty Avenue
Berkeley, MO 63134

RE: St. Louis Downtown Site, Radionuclide concentration in Crushed Building Debris

Dear Mr. Dell'Orco:

The U.S. Army Corps of Engineers (USACE) transmitted the radionuclide concentrations from samples collected during crushing operations at the St. Louis Downtown Site (SLDS). The following buildings were demolished at SLDS: 700, 116, 117, 219, and 704 through 708. The crushing operations were conducted from October 1, 1997, through November 12, 1997. The Federal Facilities Section reviewed the submitted data and developed the following comments:

- 1) Building 219 was listed as being demolished and crushed but the results don't include samples from building 219. Building 219 was also not listed in the "1997 Remedial Action Plan for Building Demolition at the St. Louis Downtown Site, July 1997" as to be demolished at this time. Please clarify. Was building 219 demolished, why sampling results for the building were not included, and location of building 219 on Mallinckrodt's property?
- 2) Why was the analysis limited to uranium 238, radium 226, thorium 232, and thorium 230? Other radionuclides could have been included in the analysis, e.g., actinium 227, protactinium 231, etc.
- 3) How could gamma spectroscopy effectively detect thorium 230? Explain how gamma spectroscopy could be used to detect thorium 230 and other alpha emitting particles.
- 4) What sample size was collected for analysis?
- 5) When and how were samples were taken for a specific day?

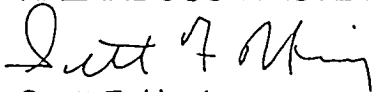
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If you have any questions or need additional information, please contact Scott Honig at (573) 751-3087.

Thank you for the opportunity to comment.

Sincerely,

HAZARDOUS WASTE PROGRAM



Scott F. Honig
Environmental Engineer
Federal Facilities Section

SH:lg

c: Dan Wall, U.S. EPA, Region VII