MOUND LABORATORY HISTORICAL INTERNAL DOSE RECONSTRUCTION,\* J.L. Anderson, <u>C.W. Bloom</u>, E.M. Brackett, D.A. Dooley, (MJW Corporation, 338 Harris Hill Rd., Suite 208, Williamsville, NY 14221)

Due to concerns raised by workers at the Mound Laboratory, the Department of Energy (DOE) undertook to make several improvements to the Mound Radiological Safety Program. One of these tasks was to perform internal dose assessments for all individuals who were estimated to have received greater than 20 rem committed effective dose equivalent (CEDE) from all intakes that occurred prior to 1989. MJW began work in June 1997 and finished in September 2001. The work process was divided into two phases, the first consisting of data assembly, interpretation and screening, and the second consisting of individual intake and dose assessments. Approximately 2400 doses from a number of radionuclides (primarily polonium-210 and plutonium) were assessed for about 1550 individuals. Bioassay records consisted of data collected from 1944 to 1988, many of them in the form of paper records and logbook entries. This presentation will show the reconstruction process, some of the problems and pitfalls encountered, and offer suggestions for avoiding such problems in future dose reconstruction projects.

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