

EFFECTS OF PARTICLE SIZE DISTRIBUTION IN THE ANALYSIS
OF BIOASSAY RESULTS FOR AIRBORNE EXPOSURE INCIDENTS

Richard Belanger and Eric Hope
SAIC, 10210 Campus Point Drive, San Diego, CA 92121

and

Patrick Papin
San Diego State University, San Diego, CA 92182

ABSTRACT

A study has been conducted of the variations in retention and dose predicted by the ICRP-30 model for whole-body counts and urinalysis. Various isotopes and chemical forms are examined and compared. The variation in retention and dose due to particle size distribution is examined in detail. Calculations are compared against the United States Nuclear Regulatory Commission UNIBIO code.