Supporting Information for

A Novel Approach for the Simultaneous Determination of Iodide, Iodate and Organo-iodide for ¹²⁷I and ¹²⁹I in Environmental Samples Using Gas Chromatography-Mass Spectrometry

S. Zhang^a, K.A. Schwehr^a, Y.-F. Ho^a, C. Xu^a, K. Roberts^b, D.I. Kaplan^b, R. Brinkmeyer^a, C.M. Yeager^b, P. H. Santschi^a

- Department of Oceanography and Marine Science, Texas A&M University, Galveston, TX 77551
- b. Savannah River National Laboratory, Aiken SC.

This supporting information has 5 pages and includes 4 figures

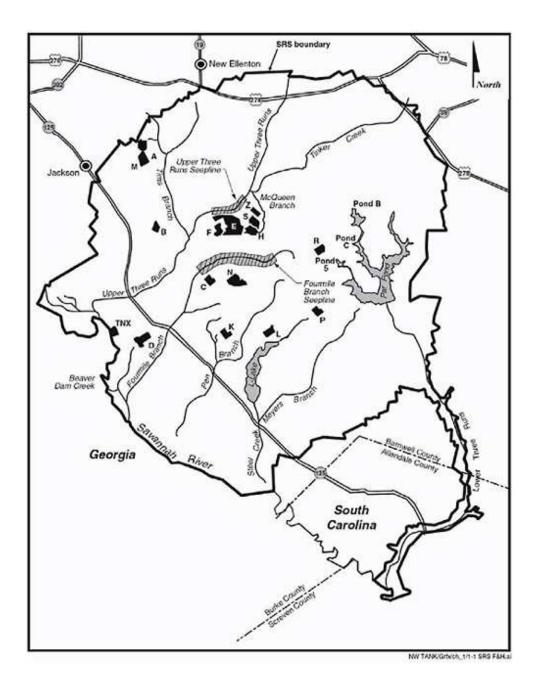


Fig.S1 Map of Savannah River Site (SRS, shaded). Letters represent locations of waste sites at SRS.

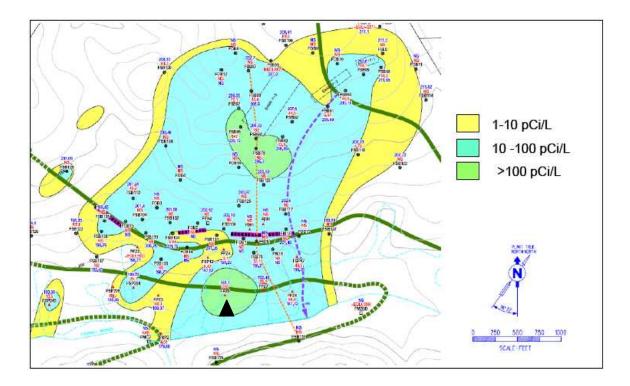


Fig.S2 Map of ¹²⁹I in groundwater of F-area. The sampling site for groundwater was well FPZ6A (solid triangle) where is highly ¹²⁹I contaminated.

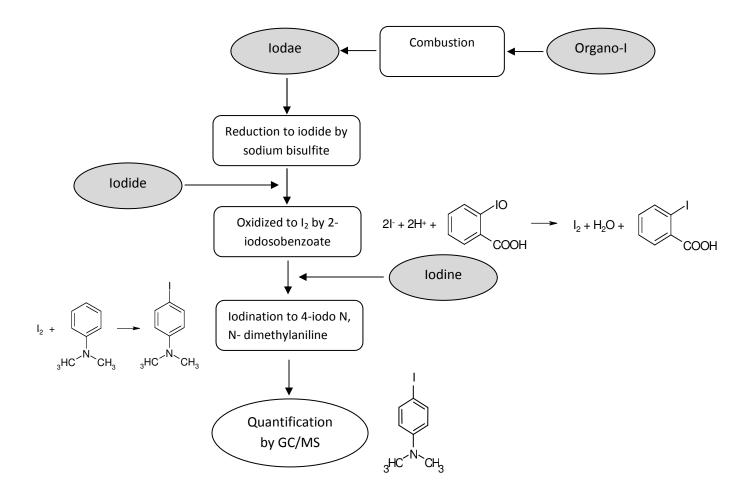


Fig. S3 Derivatization flowchart of iodine species to 4-iodo-N, N –dimethylaniline. The four iodine species were highlighted in the shaded circles. Each species was quantified by GC/MS after final derivatization to 4-iodo N, N- dimethylaniline.

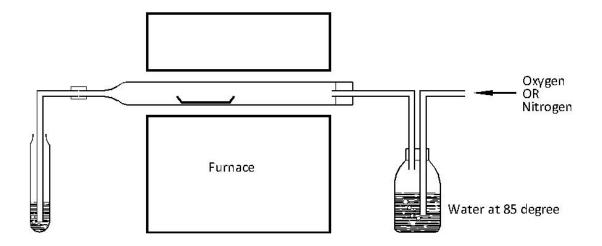


Fig. S4 Skeleton for combustion of aqueous samples or soils to analyze total iodine in environmental samples