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Supplemental Material

Human Health Benefits from Fish Consumption vs. Risks from Inhalation Exposures Associated with Contaminated Sediment Remediation: Dredging of the Hudson River

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Figure S4. Stochastic health benefit-risk comparison for the Hudson River PCBs Superfund Site Environmental Dredging (ED) remediation: Sensitivity analysis including worker impacts. Results were generated via Monte Carlo simulations accounting for parameter variability and uncertainty. A) Induced Health Burden ($IB_{ED,sensitivity}$) = total health burden of ED from increased air emissions of PCBs, primary and secondary PM_{2.5}, and fatal occupational incidents; B) Net Avoided Health Burden (Net health benefit_{ED}) = $AB_{ED} - IB_{ED,sensitivity}$, with AB_{ED} being the Avoided Health Burden of ED as defined in the main text (Figure 4A). Dotted or dashed vertical lines correspond to the fifth, 10th, 25th, 50th, 75th, and 90th percentiles when read from left to right. The solid (red) vertical line through zero denotes a net of 0 avoided DALYs (i.e., benefits = risks). Values to the left of this line represent net risks while values to the right of this line represent net benefits.

References