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Supplemental Material

Are Fish Consumption Advisories for the Great Lakes Adequately Protective from Chemical Mixture?

Nilima Gandhi, Ken G. Drouillard, George B. Arhonditsis, Sarah B. Gewurtz, and Satyendra P. Bhavsar

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that are considered popular among anglers (Awad 2006) are highlighted in bold. Walleye, Lake Whitefish, Lake Trout, Perch and Bass can be considered most popular among the First Nations communities around the Great Lakes (EAGLE 2001).

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Figure S1: Map of the North American Great Lakes (map created using R statistical software)

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Figure S4: Illustration of a comparison of advisories from the one-chem and multi-chem approaches. The comparison was block-, species- and population- (general and sensitive) specific. The yellow highlighted multi-chem advisories were classified as "more stringent", while the remaining multi-chem advisories were classified as the same.

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Figure S7: Contaminant-specific Hazard Quotient (HQ) calculated in the multi-chem advisory simulations. The line within the box indicates a median, the box indicates 25th and 75th percentile values, the whiskers indicate the highest and lowest values not classified as statistical outlier values more than 1.5 times away from the interquartile range. Red dotted line indicates an HQ of 1.

Figure S8:

Figure S9: Percent contribution of contaminant-specific Hazard Quotient (HQ) to the Hazard Index (HI) calculated in the multi-chem advisory approach. Maximum is for the highest contribution of an HQ to HI regardless of a contaminant. The solid circle indicates a mean, the line within the box indicates a median, the box indicates 25th and 75th percentile values, the

whiskers indicate the highest and lowest values not classified as statistical outlier values more than 1.5 times away from the interquartile range. Non-detect values were excluded. Similar results for a dataset that included non-detects are presented in Figure 2.