

**DUST DIOXIN CONCENTRATIONS: Weighted TEQ<sub>DF17-1998</sub> by region**

Number of Participants: 764

Sample Type: dust

Notes: TEQ is the TEF-weighted average of the 17 dioxin congeners (excluding the PCBs) based on WHO 1998 TEFs

Survey Sampling Weight: wt\_final\_dust

Zone	N	TEQ <sub>DF17-1998</sub> (ppt)						
		Mean	S.E.	Median	75th %ile	95th %ile	Min.	Max.
Overall	764	27.2	3.3	13.5	23.9	83.1	1.2	1743
M/S FP	207	36.4	6.9	15.1	28.3	111.5	2.2	1743
M/S Near FP	159	14.8	1.5	9	17.7	37.9	1.2	181.6
M/S Out FP	163	28	5.5	14.9	20.5	75.8	1.3	1355.2
M/S Plume	37	31.3	4.3	26.9	36.6	90.9	7.7	98.7
Jackson/Calhoun	198	26.2	4.2	11.1	24.2	91.9	1.6	1038.2

M/S: Midland/Saginaw

FP: Floodplain

SAS program: Get\_table1\_figure1.sas

Created by: BH &amp; XJ

Last Update: XZ 06/05/2008

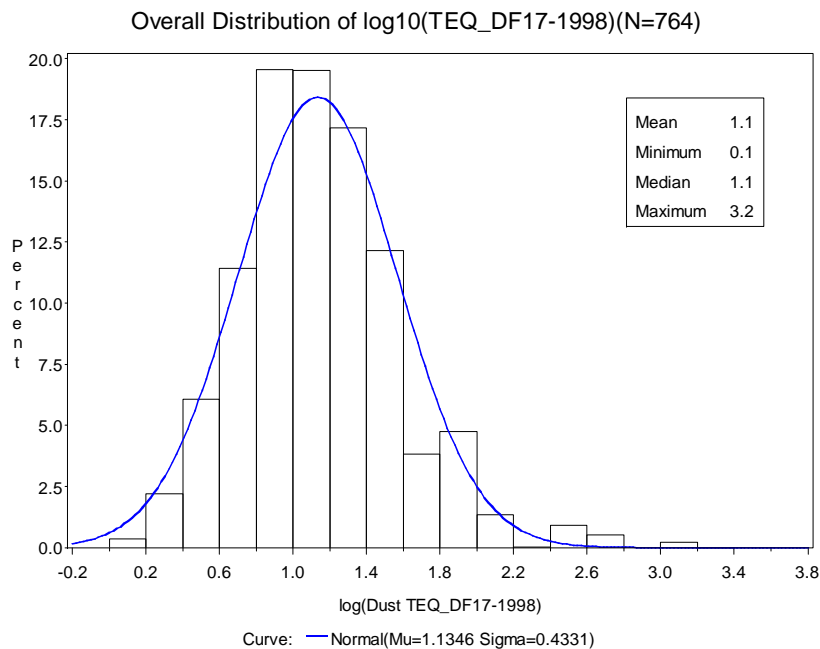
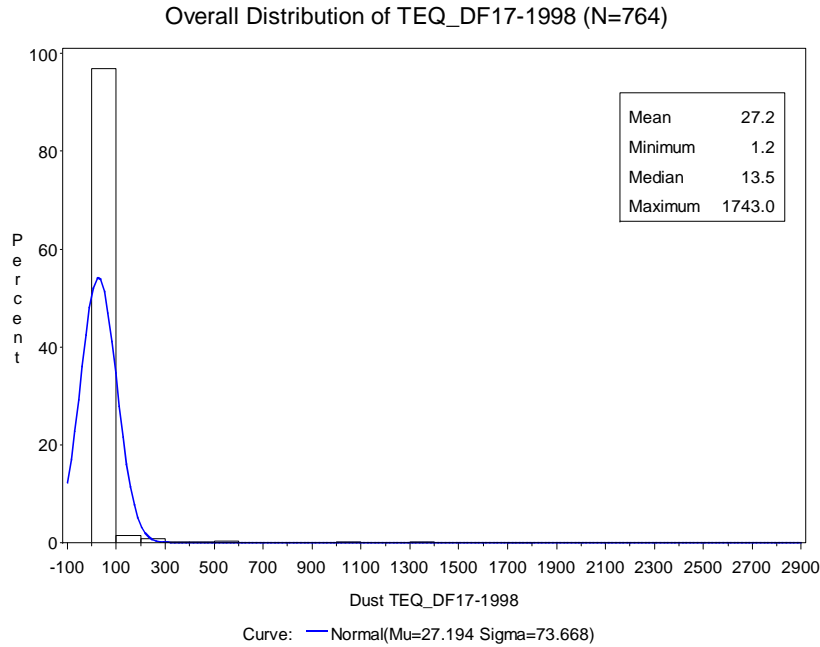
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SAS program: Get\_table1\_figure1.sas

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Last Update: XZ 06/05/2008

**DUST DIOXIN CONCENTRATIONS: Test results for comparing weighted TEQ among regions**

Number of Participants: 764

Sample Type: Dust

Notes: TEQ is the TEF-weighted average of the 17 dioxin congeners (excluding the PCBs) based on WHO 1998 TEFs

Survey Sampling Weight: wt\_final\_dust

**Summary statistics for household dust weighted TEQ concentration for region comparisons**

Region	Mean of log <sub>10</sub> TEQ	% > Jackson/Calhoun's 75 <sup>th</sup> percentile, which is 24.2 ppt	% > Jackson/Calhoun's 95 <sup>th</sup> percentile, which is 91.9 ppt
1-M/S FP (n=207)	1.2267	29.0%	7.0%
2-M/S Near FP (n=159)	1.0230	15.4%	<1%
3-M/S Out FP (n=163)	1.1506	22.2%	4.2%
4-M/S Plume (n=37)	1.4157	58.0%	4.0%
5-Jackson/Calhoun (n=198)	1.1007	24.5%	4.5%

M/S: Midland / Saginaw;

FP: Floodplain

**Pair-wise comparisons for household dust TEQ between regions (Each cell contains the p-value and effect direction)**

This table shows the results of 1) t-tests (SAS PROC Surveyreg) for comparisons of the means of log<sub>10</sub>TEQ between each combination of two regions; 2) Wald chi-square tests (SAS PROC Surveylogistic) for comparisons of the odds of subjects being above the 75<sup>th</sup> percentile TEQ for Jackson/Calhoun Counties between each combination of two regions; and 3) Wald chi-square tests (SAS PROC Surveylogistic) for comparisons of the odds of subjects being above the 95<sup>th</sup> percentile TEQ for Jackson/Calhoun Counties between each combination of two regions.

"+" after p-value: the row-region has higher mean or higher odds of being above the selected cut-point than the column-region.

"-" after p-value: the row-region has lower mean or lower odds of being above the selected cut-point than the column-region.

P-value	1-M/S FP	2-M/S Near FP			3-M/S Out FP			4-M/S Plume			5-Jackson/Calhoun		
		Mean of log <sub>10</sub> TEQ	%>J/C's 75 <sup>th</sup>	%>J/C's 95 <sup>th</sup>	Mean of log <sub>10</sub> TEQ	%>J/C's 75 <sup>th</sup>	%>J/C's 95 <sup>th</sup>	Mean of log <sub>10</sub> TEQ	%>J/C's 75 <sup>th</sup>	%>J/C's 95 <sup>th</sup>	Mean of log <sub>10</sub> TEQ	%>J/C's 75 <sup>th</sup>	%>J/C's 95 <sup>th</sup>
1-M/S FP		0.0003 +	0.0242 +	0.0027 +	0.1754 +	0.2299 +	0.2736 +	0.0030 -	0.0156 -	0.5922 +	0.0180 +	0.4116 +	0.4213 +
2-M/S Near FP					0.0314 -	0.2563 -	0.0285 -	<0.0001 -	0.0004 -	0.1660 -	0.1674 -	0.1264 -	0.0352 -
3-M/S Out FP								0.0001 -	0.0030 -	0.9677 +	0.3808 +	0.6858 -	0.9236 -
4-M/S Plume											<0.0001 +	0.0054 +	0.9266 -

J/C: Jackson/Calhoun

SAS program: Get\_dust\_region\_compare.sas

Created by: BH & WC

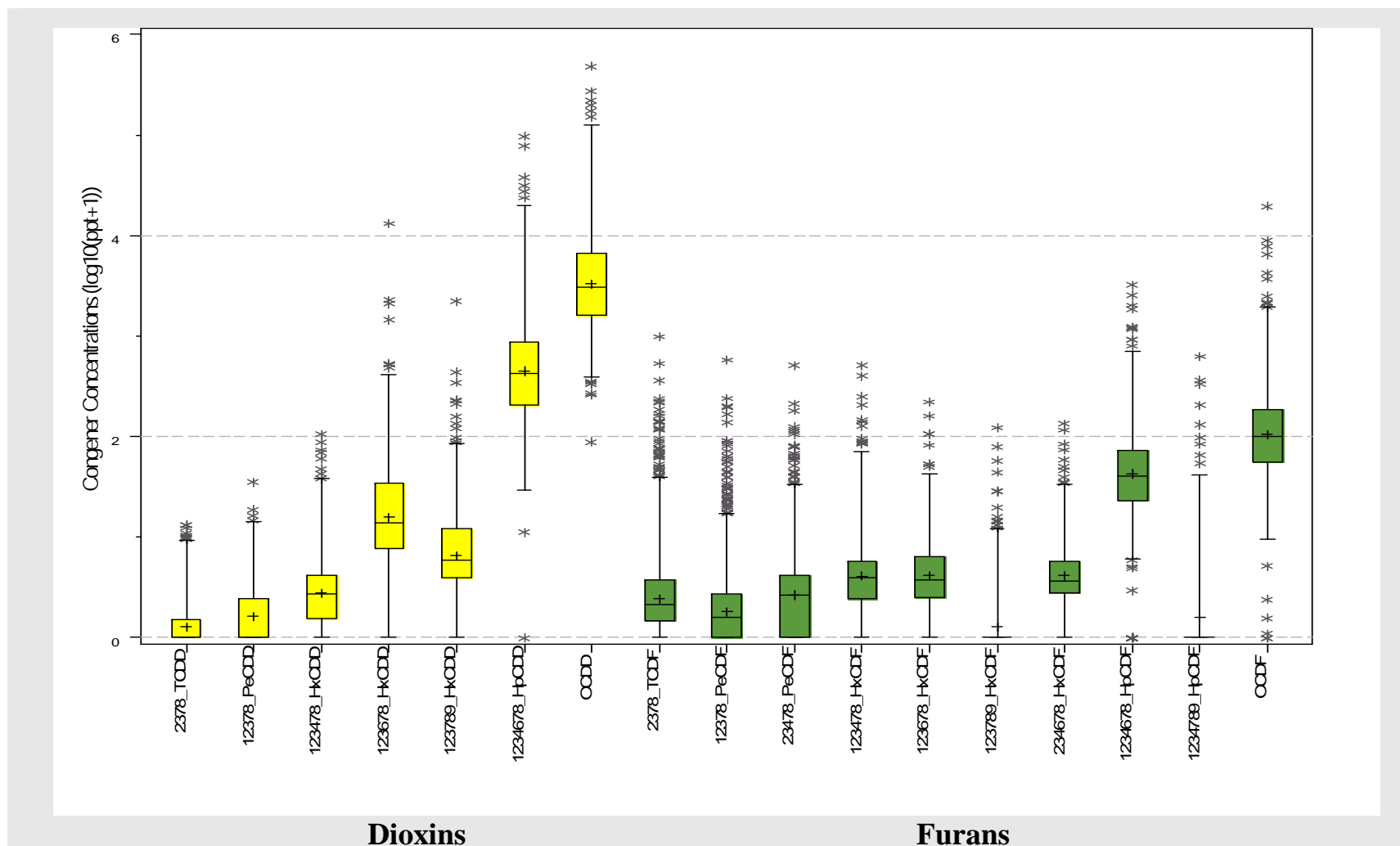
Last Update: XZ 06/17/2008

**WEIGHTED DUST CONCENTRATIONS: Distribution of each dioxin and furan congener concentration, shown using box plots on the log<sub>10</sub> scale.**

Number of Participants: 764

Sample Type: dust

Survey Sampling Weight: wt\_final\_dust



SAS program: Get\_boxplot\_figure2

Created by: BH

Last Update: XZ 07/01/2008

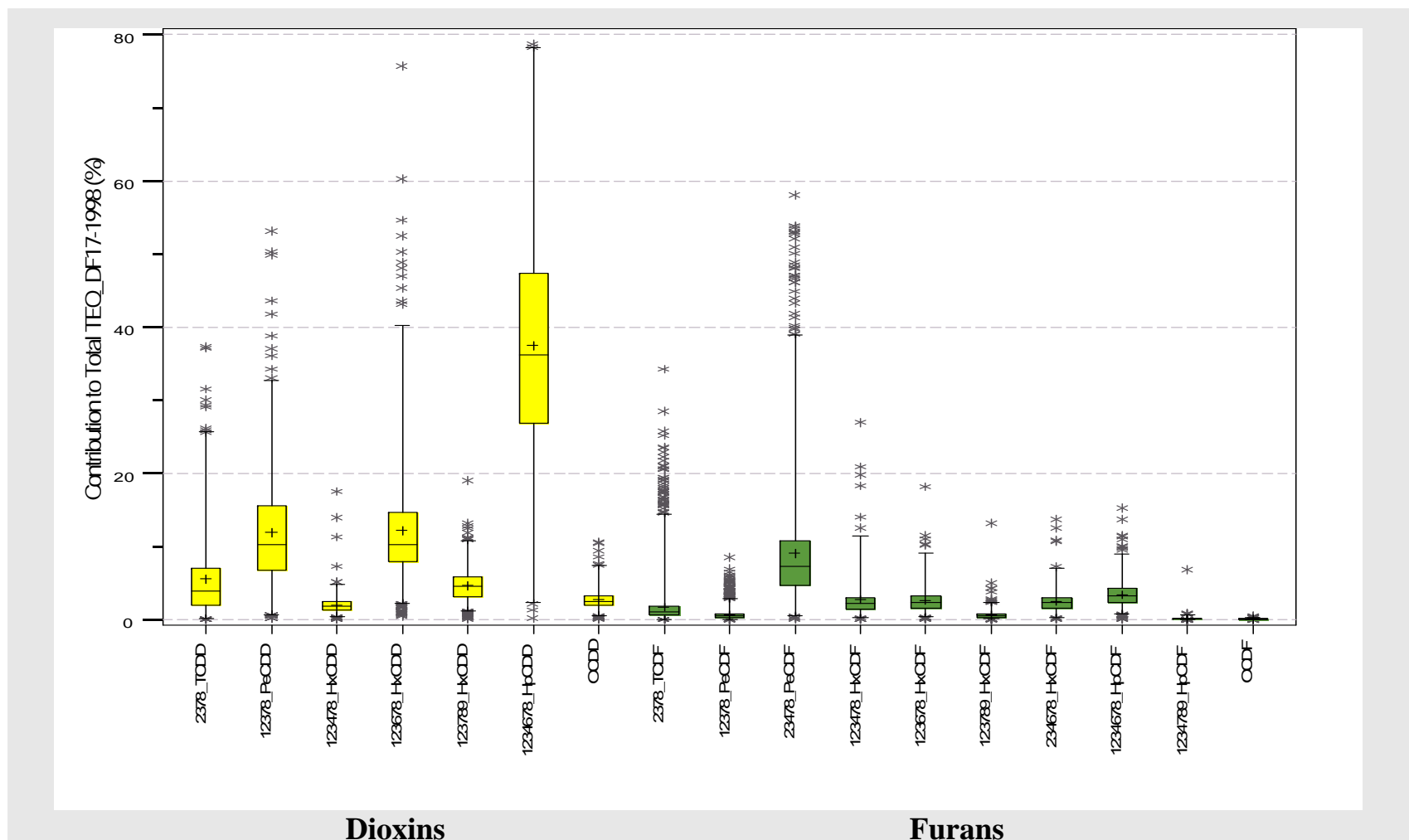
**WEIGHTED DUST CONCENTRATIONS: Contribution of each congener to the total TEQ, shown using box plots**

Number of Participants: 764

Sample Type: dust

Notes: TEQ is the TEF-weighted average of the 17 dioxin congeners (excluding the PCBs) based on WHO 1998 TEFs

Survey Sampling Weight: wt\_final\_dust



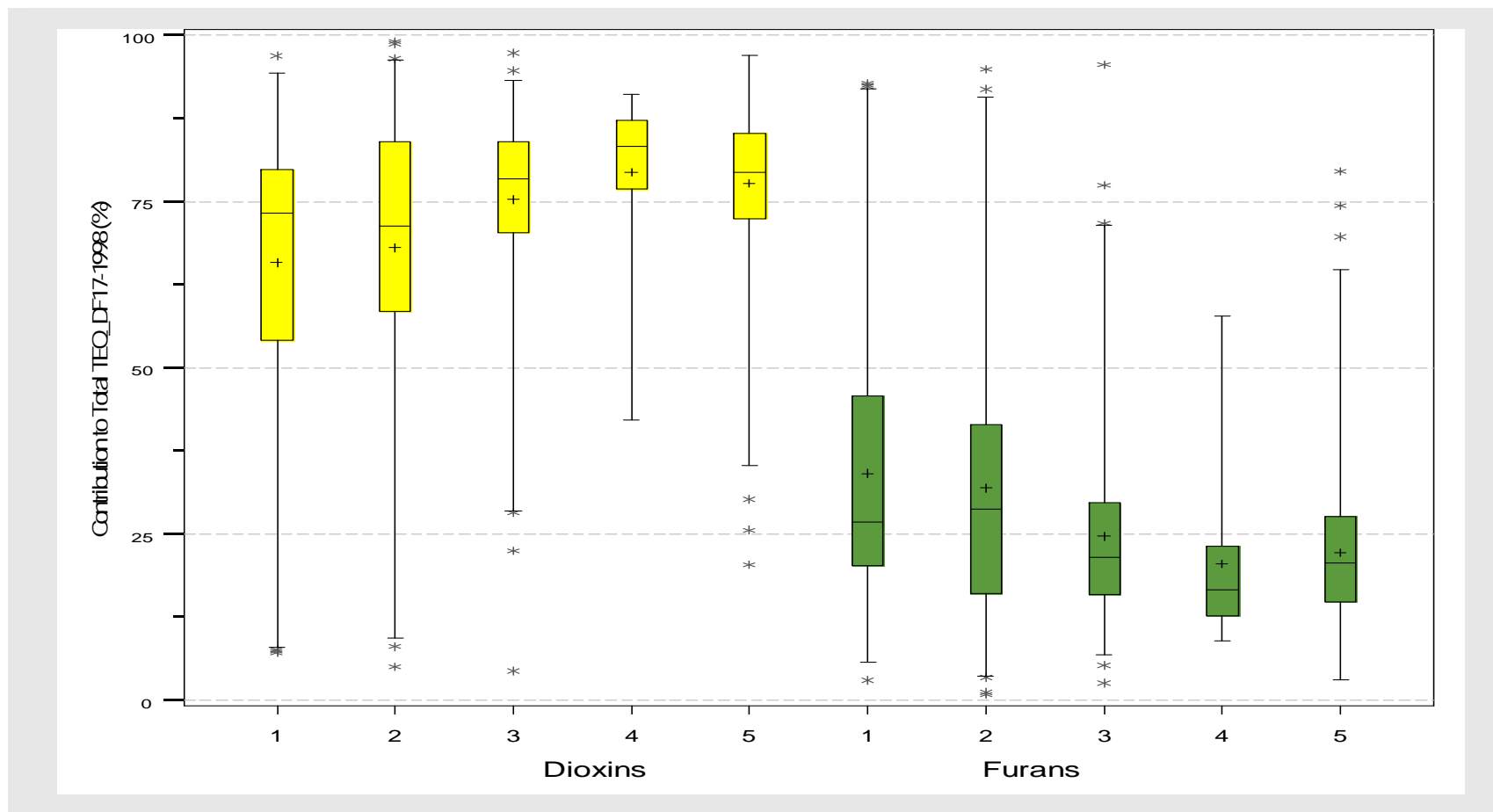
**WEIGHTED DUST CONCENTRATIONS: Percent contribution to total TEQ for dioxins and furans, by region, shown using box plots**

Number of Participants: 764

Sample Ttype: dust

Notes: TEQ is the TEF-weighted average of the 17 dioxin congeners (excluding the PCBs) based on WHO 1998 TEFs

Survey Sampling Weight: wt\_final\_dust



Region\* 1-Midland/Saginaw FP; 2-Midland/Saginaw Near FP; 3-Midland/Saginaw Out FP;  
 4-Midland/Saginaw Plume; 5-Jackson/Calhoun

SAS program: Get\_boxplot\_Figure3\_4\_TEQ98\_17.sas

Created by: BH

Last Update: XZ 07/07/2008