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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Hazardous Materials Response and Assessment Division
Coastal Resources Coordination Branch
7600 Sand Point Way N.E. — Bin C15700
Seattle, Washington 98115

TO: Doug Tomchuk, Project Manager
New York/Caribbean Superfund Branch II
Emergency and Remedial Response Division
U.S. Environmental Protection Agency
290 Broadway
New York, NY 10007

Helen Chernoff
TAMS Consultants, Inc.
655 Third Avenue
New York, NY 10017

CC: Diane Wehner

FROM: Jay Field

DATE: January 22, 1996

SUBJECT: Hudson River Data Release 3.1 Fish Data

We have conducted a brief review of the validated fish sample data in Release 3.1 of the Hudson River database. A comparison of PCB congener concentrations and qualifier data in our database with Release 3.1 values for both the NOAA fish samples and the EPA fish samples revealed a number of inconsistencies that should be resolved prior to the release of the final database. At the present time, we have not reviewed either of the other Eco-assessment data sets (sediment or benthic invertebrates).

NOAA fish data

The concentration values in the NOAA database are consistent with the Release 3.1 Value 1 concentrations, with the following two exceptions. Both of these values were for dilution samples and in both cases the Release 3.1 value represents an "E" qualified (estimated concentration above calibration range) result, rather than the dilution value.

SAMPLE #	SPECIES	PCB	NOAA	Release 3.1
EC-F02-0003	TESS	BZ#40	17.3UJ	160UJ
EC-F03-0002	YP	BZ#60	23.3UJ	672UJ

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The number of "B" qualified (less than 5 times blank concentration detected in the corresponding blank) data records for NOAA fish samples in the NOAA database differ considerably from Release 3.1:

A total of 257 records were qualified with "B" in data validation, which results in "U" (below detection) as the final NOAA data qualifier. A total of 362 records were qualified with "B" in the "QA_Comment" field of Release 3.1 and were assigned an "U" in the final Qualifier field.

A total of 8 records that were qualified with "B" in NOAA's data validation and "U" as the final NOAA data qualifier, but were qualified as "J" in Release 3.1. (Listed in Attachment 1)

One record that was qualified with a "U" in Release 3.1, but the NOAA qualifier for that sample record did not include either "U" or "B". (Listed in Attachment 1)

EPA/TAMS fish data

We have identified 18 sample records where target congener Value 1 concentrations were changed from the values reported in Release 2.4 (and the laboratory). (Listed in Attachment 2)

In addition, 4 non-target congener concentrations for sample 'EC-F02-0004 YP', which are consistent with the Release 2.4 values, differ from the raw data values reported by the lab (adjusted by the conversion factor). (Listed in Attachment 2)

A much larger percentage (1596/17355 or 10%) of the EPA/TAMS fish sample data records were qualified with "B" in Release 3.1 compared to 2% (257/16675) of the NOAA fish sample data records. It is important to determine whether this observed difference is due to actual differences in the amount of blank contamination, data validation methodology, or data handling.

B.TAMSID	SPECIES	B.CHEMCODE	VALUE1	QUALIFIER	B.SAMPLEID	B.CONC	B.LABQUAL	B.VALQUAL	B.QUALCODE
EC-F01-0002N	TESS	PCB097	0.6520	J	205081	0.65200	J P B	B	U
EC-F01-0003N	TESS	PCB052	1.3200	J	205082	1.32000	J P B	B	U
EC-F01-0003N	TESS	PCB070	0.7810	J	205082	0.78100	J P B	B	U
EC-F01-0003N	TESS	PCB099	0.4700	J	205082	0.47000	J P B	B	U
EC-F02-0002N	LMB	PCB209	0.5800	JN	205253	0.58000	J P	G,B	UJ
EC-F02-0003N	LMB	PCB165	0.8140	JN	205254	0.81400	J P	G,B	UJ
EC-F02-0003N	LMB	PCB209	0.6230	JN	205254	0.62300	J P	G,B	UJ
EC-F17-0004N	WP	PCB165	1.2100	JN	204643	1.21000	J P	B,G	UJ

Above: Records where validation qualified the analytical results with "B". NOAA/EVS used the final qualifier of "U" (or "UJ"), but Gradient/TAMS did not use "U".

B.TAMSID	SPECIES	B.CHEMCODE	VALUE1	QUALIFIER	B.SAMPLEID	B.CONC	B.LABQUAL	B.VALQUAL	B.QUALCODE
EC-F15-0001N	BB	PCB087	105.0000	UJ	205631	105.00000	EX H		J

Above: Record which Gradient/TAMS qualified with "U" but NOAA/EVS did not.

Attachment 1: NOAA FISH SAMPLES

EPA Samples TAMS value <> NOAA value (target congeners). 1/15/95

TAMS ID	SPECIES	RTRIM(parameter)	TAMS R3.1 VALUE1	QUALIFIER	B.SAMPLEID	NOAA B.CONC	B.LABQUAL	TAMS R2.4 G.VALUE1	G.QUALIFIER
EC-F01-0004	YP	BZ#138	21.0000	J	203038	10.20000	S	10.2000	S
EC-F02-0001	YP	BZ#15	250.0000	J	203007	67.50000	X	67.5000	X
EC-F02-0004	YP	BZ#15	133.0000	J	203008	93.80000	X	93.8000	X
EC-F02-0004	YP	BZ#17	216.0000	JN	203008	209.00000	S	209.0000	S
EC-F02-0005	YP	BZ#138	782.0000	J	203055	684.00000	S	684.0000	S
EC-F04-0001	YP	BZ#15	251.0000	J	203011	115.00000	X	115.0000	X
EC-F04-0001	YP	BZ#4	970.0000	J	203011	581.00000	S N	581.0000	S N
EC-F04-0003	YP	BZ#4	193.0000	U	203009	234.00000	S H N	234.0000	S H N
EC-F04-0004	YP	BZ#4	182.0000	J	203065	140.00000	S	140.0000	S
EC-F08-0001	YP	BZ#138	25.0000		203003	255.00000		255.0000	
EC-F08-0004	YP	BZ#15	167.0000	J	203013	10.80000	JX	10.8000	JX
EC-F08-0004	YP	BZ#17	308.0000	JN	203013	243.00000	S	243.0000	S
EC-F08-0004	YP	BZ#85	248.0000	JN	203013	197.00000	N	197.0000	N
EC-F10-0001	YP	BZ#4	212.0000	U	203001	96.80000	S H N	96.8000	S H N
EC-F10-0002	YP	BZ#138	8.0000	J	203051	166.00000	S	166.0000	S
EC-F13-0001	WP	BZ#4	116.0000	U	203005	91.80000	S H N	91.8000	S H N
EC-F13-0002	SPOT	BZ#138	16.0000	J	203046	37.70000	S	37.7000	S
EC-F16-0001	SPOT	BZ#138	12.0000	J	203110	56.20000	S	56.2000	S

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EPA Samples TAMS value <> NOAA value (nontarget congeners) VALUE REPORTED by QUATTRO 1/5/95

TAMS ID	SPECIES	RTRIM(parameter)	TAMS R3.1 VALUE1	QUALIFIER	B.SAMPLEID	NOAA B.CONC	B.LABQUAL	NOAA * Conversion (CONCENTRATION ADJUSTED BY CONVERSION FACTOR) B.conc*Convert2.conversion	TAMS R2.4 H.VALUE1
~~EC-F01-0001~~	~~CYPD~~	~~BZ#114NT~~	~~0.1100~~	~~JN~~	~~203079~~	~~0.15500~~	~~J P N~~	~~0.110050000~~	~~0.1100~~
~~EC-F01-0002~~	~~YP~~	~~BZ#32NT~~	~~0.2722~~	~~JN~~	~~203120~~	~~0.27500~~	~~JS N~~	~~0.272250000~~	~~0.2722~~
~~EC-F01-0003~~	~~CYPD~~	~~BZ#32NT~~	~~0.1435~~	~~JN~~	~~203081~~	~~0.14500~~	~~JS N~~	~~0.141550000~~	~~0.1435~~
EC-F02-0004	YP	BZ#114NT	84.4900		203008	67.11600		47.652360000	84.4900
EC-F02-0004	YP	BZ#32NT	266.3100		203008	242.36900		239.945310000	266.3100
EC-F02-0004	YP	BZ#60NT	711.2000	J	203008	711.20000	S	398.272000000	711.2000
EC-F02-0004	YP	BZ#64NT	1469.7000	J	203008	1194.39000	S	840.016900000	1469.7000
~~EC-F02-0003~~	~~WP~~	~~BZ#80NT~~							

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Attachment 2: EPA/TAMS FISH SAMPLES

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