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GE Corporate
Environmental Programs

John G. Haggard
Engineering Project Manager
Hudson River

General Electric Company
1 Computer Drive South, Albany, NY 12205
*518 458-6619 Dial Comm: 8*920-9000*
Fax: 518 458-9247

May 18, 1993

Douglas J. Tomchuk
Emergency and Remedial Response Division
U.S. Environmental Protection Agency
26 Federal Plaza, Room 747
New York, NY 10278

RE: TRANSMITTAL OF DATA COLLECTED BY GE - HUDSON RIVER

Dear Mr. Tomchuk:

At the meeting of March 17, 1993, the General Electric Company (GE) summarized PCB data collection efforts undertaken on the Hudson River. This data was collected by GE to understand the significance of PCBs in the various media in the river and was primarily collected due to the concern that the Environmental Protection Agency (EPA) would rely only on the existing data to make a remedy decision in the Superfund Hudson River Reassessment Remedial Investigation/Feasibility Study (RRI/FS). As articulated in comments submitted by GE on various EPA project documents, the existing database was deficient in a number of ways, including the following:

1. The existing data on PCB's in fish did not include detailed information on PCB composition. While the New York Department of Environmental Conservation (NYDEC) has collected a large, useful database on PCB levels in fish in the Hudson River, it includes almost entirely PCB data reported as Aroclors. Given that the PCBs in the sediments have been biologically altered, and no longer are properly quantified as commercial Aroclor mixtures, it is necessary to determine in greater detail the composition of PCBs contained in the fish (i.e., congeners and homologs). This type of data in fish, combined with knowledge of the types of PCB in the various sources (i.e., "old" sediments, remnant deposits, water column - Bakers Falls source, etc.) allows an understanding of which sources of PCBs are impacting fish by use of the source's PCB "fingerprint".

2. The data on water column PCBs did not include information on the composition of the PCB's. Also, the location and frequency of samplings limited. The historical water column PCB levels have been obtained by the U.S. Geological Survey and the NYDEC. This data has proven useful in determining time trends in PCB loading in the Hudson River. However, the data was limited by the fact it was analyzed by packed column GC/ECD techniques and reported as total PCBs. Given the presence of the biologically altered PCBs in the sediments in the upper Hudson River, the contribution of PCBs from the altered sediments versus those present in the water column prior to entering the Thompson Island Pool, was difficult to determine. In addition, the frequency of monitoring was limited and did not allow a full understanding of temporal changes in PCB levels or composition.

3. The sediment PCB composition was poorly characterized and the PCB levels were last determined approximately 10 years ago. The PCB levels in the sediments were initially determined in the late 1970's for the entire upper Hudson River. In the early 1980's a more detailed PCB sediment study was conducted in a 5 mile portion of the river (Thompson Island Pool). Given the amount of time that had transpired and the fact that limited capillary column GC/ECD data had indicated the sediment composition was altered, there was a need to determine PCB levels and composition as a function of depth in the sediment for the entire river.

4. The existing data is insufficient to characterize the newly identified PCB source (i.e., Bakers Falls source) and to understand it's impact on the river system. During water column monitoring conducted by GE, a previously unidentified source of PCB was detected above the remnant deposits. This is now referred to as the Bakers Falls source. Extensive investigations of this have been undertaken by GE to isolate and characterize this source and to determine its impact on the river. GE conitunes to work closely with the NYDEC on this investigation and will take approprite action to remedy this source if it is from GE.

To rectify these deficiencies, GE undertook a large data collection process. GE is still in the process of evaluating this new information and has presented to EPA, NYDEC and others a number of the significant findings, including the following:

1. The "old" sediments are supplying ever-decreasing amounts of degraded PCB's to the system -- those with dramatically reduced bioaccumulation potential;

2. The Bakers Falls PCB source is recontaminanting the surface sediments with bioavailable, non-degraded PCBs; and

3. The Bakers Falls PCB source is and has been controlling PCB fish levels in the upper Hudson River, not the PCBs from the "old" sediments.

GE will continue to evaluate this significant data and requests that the EPA incorporate this new information into the RRI/FS. It is clear that any consideration of remedial alternatives for the river must include the evalaution of the Bakers Falls source of PCBs. GE requests that during your review that periodic meetings (e.g., monthly) be held with GE (and other interested parties) to discuss the evaluation of this data. To facilitate your evaluation, as previously discussed, the data is being supplied to EPA and NYDEC in a highly usable form. Enclosed is a 3 1/2 inch computer disk (formatted with MS-DOS version 5.1) that contains this data. On the disk you will find a compressed file called GE051893.ZIP. When "unzipped" the following files will be found:

- GE051893.DBF (dBase IV): Various sampling information, total PCB values and homolog distributions.

- CP051893.DBF (dBase IV): 118 peaks from the DB-1 capillary column (e.g., congener data base)

- GE051893.WP (Word Perfect): File structure table

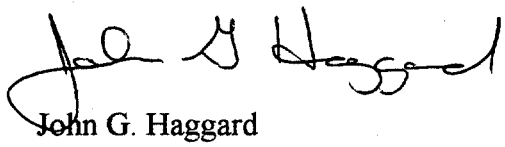
- CP051893.WP (Word Perfect): File structure table

Attachment 1 contains a hard copy of the two file structure tables. Attachment 2 lists the data sets included in the electronic data bases (Note: The hydrographic data is not included in the PCB data bases but is availabe in seperate data files).

In addition to the electronic data, under separate cover within the next 2 weeks you will receive reports that summarize each of the data sets including a description of sample collection and analytical techniques. The appendices to these reports contain all of the associated laboratory analytical results, including quality assurance and quality control data. As mentioned previously, these laboratory reports are available for immediate viewing in Albany. Additionally, validation reports for the many data sets are being prepared and will be submitted in the near future. Due to the volume of the material, in excess of 70 linear feet, you will be contacted prior to shipment in order that you may specify the location to which the data should be delivered. This information will be shipped directly from GE's consultant, O'Brien & Gere Engineers. A listing of the reports is contained in Attachment 2. You will note that a number of the data sets identified in the March 30, 1993 summary are not included on this list. These smaller data sets are currently being compiled and will be submitted in the near future.

GE requests that the supplied data and associated documentation be included in the official Administrative Record of the EPA's on-going Hudson River RRI/FS. If during your review you find any documentation incomplete or have any questions concerning methods by which the data was collected or analyzed, please contact us. GE requests that EPA acknowledge receipt of this information and inform GE when it has been entered into the Administrative Record. If you have any questions, please contact me at (518) 458-6619.

Yours truly,



John G. Haggard
Engineering Project Manager

Attachments

cc: Bill Ports, NYDEC (with attachments)
Frank Bifera, NYDEC
Paul Simon, U.S. EPA
Bill McCabe, U.S. EPA
Bob Montione, NYDOH (with attachments)
Ron Sloan, NYDEC (with attachments)
David Merrill, Gradient Corp. (with attachements)
Gordon Johnson, NY Attorney General's Office
Dean Sommer, NY Attorney General's Office

ATTACHMENT 1

FILE STRUCTURE TABLES
ENVIRONMENTAL SAMPLES DATA BASE AND
CONGENER PEAK DATA BASE

HUDSON RIVER PROJECT

GE HUDSON RIVER PROJECT ENVIRONMENTAL SAMPLE DATABASE - dBASE III FILE STRUCTURE TABLE

Field	Field Name	Units	Length	Dec	Type **	Entry Types			Comments
						Sediment *	TWCS *	Other	
1	ID		12	0	CHARACTER	25	10037		The unique sample identifier assigned in the field to each environmental sample collected or tested. If a sample is collected and archived, a unique identifier will be given to it and the sample will be entered into an Archive Database. This is the DATABASE KEY field. Each record in the database has a unique ID. This ID is used to relate into the QA/QC database.
2	LOCATION		10	0	CHARACTER	8A-22 For a composite enter: COMPOSITE	B.F.Br. Rt.197 Br. TID-West Rt.29 Br. S.W.Br. Rt.4 Br. Hoosic R. Bat. Kill BFI AREA		Sampling location. The actual location where the sample was collected. Each location is unique. Several samples can be collected from the sample location. For composite sediment samples: Place "COMPOSITE" in the location field and enter the locations of samples that make up the composite in the DESC field. TWCS Sample location: B.F.Br.=Baker Falls Bridge, Rt.197.Br.=Rt. 197 Bridge, T.I.D.=Thompson Island Dam, Rt.29.Br.=Rt. 29 Bridge, S.W.Br.=Stillwater Bridge, Rt.4.Br.=Rt. 4 Bridge, Hoosic.R.=Hoosic River, Bat.Kill.=Batten Kill
3	MEDIA		1	0	CHARACTER	f,w,a,b,p,s	f,w,a,b,p,s		Type of matrix: f=fish, w=water, a=air, b=biota, p=pore water, s=sediment
4	INVEST		3	0	CHARACTER	OBG	OBG	DEC, LAW, EPA, etc.	The organization that collected the sample

Note: * NA = Not Applicable
** Numeric fields containing zeros (0) may indicate either a "zero value" or a "null value". See comments to identify individual numeric fields where zero entries reflect "null values".

Field	Field Name	Units	Length	Dec	Type **	Entry Types			Comments
						Sediment *	TWCS *	Other	
5	DESC		150	0	CHARACTER	ST/CL - 8A-1, 8A-12,8A-2, 8A-3,8A-5, 8A-7,8A-15, 8A-6,8A-13, 8A-4			Sample description. The following list includes the possible sediment descriptions: CS=coarse sand, MS=medium sand, FS=fine sand, G=gravel, ST=silt, CL=clay, FS/ST=fine sand/silt, ST/CL=silt/clay, WC=wood chips, PD=plant debris, SH=shells (there may be additions). For composites: Enter the description of the composite sample along with the locations of each sample involved in the composite.
6	MILE	mi	5	1	NUMERIC				River Mile The river mile for the Batten Kill and Hoosic River Temporal Water Column Sampling locations were estimated at the confluent. The river mile entered for the Float Survey sampling locations are also estimated. In addition, the river mile was estimated at the midpoint of each of the sampling reaches for the Sediment Survey.
7	NORTHING	ft	9	1	NUMERIC	1189500.0	1185467.0		Northing coordinate according to the 1927 State Plane Coordinate System, this coordinate will be estimated for the Temporal Water Column Sampling Program
8	EASTING	ft	9	1	NUMERIC	699400.0	699450.0		Easting coordinate according to the 1927 State Plane Coordinate System, this coordinate will be estimated for the Temporal Water Column Sampling Program
9	ELEV	ft	5	1	NUMERIC	950.0	950.0		River Elevation, this value will be estimated for the Temporal Water Column Sampling Program and the Sediment Survey.
10	DATE_COL		8	0	DATE	03/09/91	04/12/91		Date of sample collection (MMDDYY)

Note: * NA = Not Applicable
** Numeric fields containing zeros (0) may indicate either a "zero value" or a "null value". See comments to identify individual numeric fields where zero entries reflect "null values".

Field	Field Name	Units	Length	Dec	Type **	Entry Types			Comments
						Sediment *	TWCS *	Other	
11	HRCOL	hours	2	0	NUMERIC	NA	14		This value represents the hour of the day that the sample was collected.
12	MINCOL	minutes	2	0	NUMERIC	NA	45		This value represents the minute of the day that the sample was collected.
13	WTR_DPTH	ft	5	1	NUMERIC	8.4	18.0		Depth of water at sample location
14	ST_DPTH	cm or ft	5	1	NUMERIC	0.0	0.0		Starting depth of sediment core (cm) or composite water sample (ft)
15	END_DPTH	cm or ft	5	1	NUMERIC	5.0	18.0		Ending depth of sediment core (cm) or composite water sample (ft)
16	LAB		8	0	CHARACTER	NEA	NEA		The laboratory that performed the sample analysis
17	TOT_SOL	%	4	1	NUMERIC	78.3	NA		Total percent solids for core composite samples only
18	VOL_SOL	%	4	1	NUMERIC	45.6	NA		Volume solids for core composite samples only
19	DENSITY	g(dry)/ml(wet)	4	2	NUMERIC	1.3	NA		Bulk density for core composite samples only
20	MOIST	%	4	1	NUMERIC	92.4	NA		Percent moisture for core composite samples only
21	TOC	mg/kg or mg/l	6	0	NUMERIC	23000	50		Total organic carbon in core composite samples (mg/kg) or water composite samples (mg/l)
22	AGE	yr	1	0	CHARACTER	NA	NA	1	Age of fish in years
23	SPP		4	0	CHARACTER	NA	NA	BB	Fish Species: Largemouth Bass, Brown Bullhead, Smallmouth Bass, Pumpkinseed.
24	PCLPD	%	5	2	NUMERIC	NA	NA	34.56	Percent lipids
25	LEN	mm	6	1	NUMERIC	NA	NA	14.1	Fish length
26	WGT	grams	9	2	NUMERIC	NA	NA	3.34	Fish weight
27	SEX		1	0	CHARACTER	NA	NA	M,F	Sex of fish: m=male, f=female, U=undetermined

Note: * NA = Not Applicable

** Numeric fields containing zeros (0) may indicate either a "zero value" or a "null value". See comments to identify individual numeric fields where zero entries reflect "null values".

Field	Field Name	Units	Length	Dec	Type **	Entry Types			Comments
						Sediment *	TWCS *	Other	
28	PREP		3	0	CHARACTER	NA	NA	F,W	Preparation method: f=fillet, w=whole fish
29	OBG_ID		8	0	CHARACTER	M2241	M2241		O'Brien and Gere sample identification for fields 30 to 34. If this field is blank then there will be no data available for entry into fields 30 to 34, and zeros can be regarded as "null values".
30	TSS	mg/l	5	0	NUMERIC	NA	6		Total suspended solids in water samples only
31	TDS	mg/l	5	0	NUMERIC	NA	59		Total dissolved solids in water samples only
32	SP_COND	umho/cm	6	0	NUMERIC	NA	89		Specific conductivity in water samples only
33	TOT_ALK	mg/l as CaCO3	5	0	NUMERIC	NA	11		Total alkalinity in water samples only
34	TOC_F	mg/l	5	0	NUMERIC	NA	15		Total organic carbon in filtered water samples only
35	FTEDFLOW	cubic ft/sec	8	0	NUMERIC	NA	7150		United States Department of the Interior (USGS) average mean flow data for the Hudson River at Fort Edward, NY.
36	WTFDFLOW	cubic ft/sec	8	0	NUMERIC	NA	8400		United States Department of the Interior (USGS) average mean flow data for the Hudson River at Waterford, NY.
37	SWTRFLOW	cubic ft/sec	8	0	NUMERIC	NA	3520		United States Department of the Interior (USGS) average mean flow data for the Hudson River at Stillwater, NY.
38	WTR_TMP	Degrees Celsius	4	0	NUMERIC	NA	9		Water temperature for water samples only
39	PCB_WM	ppm	12	7	NUMERIC		0.0000126		Total PCB concentration by Webb & McCall Method, this entry will be reported as a "zero value" if the sample concentration is less than the detection limit. See field 45 to distinguish a below detection limit entry from a "null value".

Note: * NA = Not Applicable
** Numeric fields containing zeros (0) may indicate either a "zero value" or a "null value". See comments to identify individual numeric fields where zero entries reflect "null values".

Field	Field Name	Units	Length	Dec	Type **	Entry Types			Comments
						Sediment *	TWCS *	Other	
40	PCB_USGS	ppm	12	7	NUMERIC		0.0000025		Total PCB concentration by USGS Method, this entry will be reported as a "zero value" if the sample concentration is less than the detection limit. See field 44 to distinguish a below detection limit entry from a "null value".
41	PCB_CAP	ppm	12	7	NUMERIC	65.7800000	0.0000198		Total PCB concentration by Capillary Column Method, this entry will be reported as a "zero value" if the sample concentration is less than the detection limit. See field 46 to distinguish a below detection limit entry from a "null value".
42	AROC_ID		20	0	CHARACTER	A1242 Altered A1242 A1248 None	A1242 Altered A1242 A1248 None		Visually identified nominal Aroclor pattern reported by NEA for Webb & McCall analyses.
43	TOT_DISS		1	0	CHARACTER	T,D	T,D		Total or Dissolved (derived from a filtered water sample)
44	DL_USGS		7	0	CHARACTER		<11PPT		USGS method detection limit. This field will be blank if the sample was not analyzed by this method and will indicate that a zero in field 40 is a "null value".
45	DL_WM		7	0	CHARACTER		<11PPT		Webb & McCall method detection limit. This field will be blank if the sample was not analyzed by this method and will indicate that a zero in field 39 is a "null value".
46	DL_CAP		7	0	CHARACTER	<1PPM	<11PPT		Capillary Column method detection limit. This field will be blank if the sample was not analyzed by this method and will indicate that a zero in field 41 is a "null value". It should be noted that the method detection limit for pore water analyses will be <100PPB.

Note: * NA = Not Applicable
** Numeric fields containing zeros (0) may indicate either a "zero value" or a "null value". See comments to identify individual numeric fields where zero entries reflect "null values".

Field	Field Name	Units	Length	Dec	Type **	Entry Types			Comments
						Sediment *	TWCS *	Other	
47	COL_TYP1		1	0	CHARACTER	P,C	P,C		Type of column used to generate Webb & McCall data: P=packed column, C=capillary column
48	COL_TYP2		1	0	CHARACTER	P,C	P,C		Type of column used to generate homolog values: P=packed column, C=capillary column ** If a packed column was used to generate homolog values, the homolog values are estimates...
49	NEA_FILE		12	0	CHARACTER	910606F or N/A	910566F or 910878X		NEA file identification as reported on PCB summary report sheet. An "X" is only included in the NEA_FILE field if the sample is a Temporal Water Column sample analyzed for dissolved PCBs.
50	CUSTOMER		20	0	CHARACTER	O'BRIEN & GERE	O'BRIEN & GERE		NEA Customer identification as reported on the PCB summary report sheet
51	NEA_DESC		40	0	CHARACTER	8A-F1(0-5)	BAKER FALLS BRIDGE (DISSOLVED)		NEA file description as reported on PCB summary report sheet
52	NEA_COM		40	0	CHARACTER	1991 HUDSON RIVER SEDIMENT SURVEY COC:7/16/91	1991 HUDSON RIVER H2O SURVEY COC:5/3/91		NEA comment as reported on PCB summary report sheet
53	NEA_TOT	ppm	12	7	NUMERIC	67.8900000	0.0000182		NEA total PCB concentration as reported on PCB summary report sheet. Value is equal to the value reported for "PCB_CAP" in field 41.
54	MONO_WT	%	5	2	NUMERIC	17.40	50.00		Weight % of monochlorinated PCB by Capillary Column Chromatography
55	DI_WT	%	5	2	NUMERIC	17.90	0.0		Weight % of dichlorinated PCB by Capillary Column Chromatography
56	TRI_WT	%	5	2	NUMERIC	27.00	18.47		Weight % of trichlorinated PCB by Capillary Column Chromatography

Note: * NA = Not Applicable
** Numeric fields containing zeros (0) may indicate either a "zero value" or a "null value". See comments to identify individual numeric fields where zero entries reflect "null values".

Field	Field Name	Units	Length	Dec	Type **	Entry Types			Comments
						Sediment *	TWCS *	Other	
57	TERA_WT	%	5	2	NUMERIC	25.20	30.62		Weight % of terachlorinated (tetrachlorinated) PCB by Capillary Column Chromatography
58	PENTA_WT	%	5	2	NUMERIC	9.30	17.63		Weight % of pentachlorinated PCB by Capillary Column Chromatography
59	HEXA_WT	%	5	2	NUMERIC	2.10	14.62		Weight % of hexachlorinated PCB by Capillary Column Chromatography
60	HEPTA_WT	%	5	2	NUMERIC	0.90	15.32		Weight % of heptachlorinated PCB by Capillary Column Chromatography
61	OCTA_WT	%	5	2	NUMERIC	0.10	3.34		Weight % of octachlorinated PCB by Capillary Column Chromatography
62	NONA_WT	%	5	2	NUMERIC	0.10	0.00		Weight % of nonachlorinated PCB by Capillary Column Chromatography
63	DECA_WT	%	5	2	NUMERIC	0.10	0.00		Weight % of decachlorinated PCB by Capillary Column Chromatography
64	MONO_ML	%	5	2	NUMERIC	23.00	0.00		Mole % of monochlorinated PCB by Capillary Column Chromatography
65	DI_ML	%	5	2	NUMERIC	19.90	0.00		Mole % of dichlorinated PCB by Capillary Column Chromatography
66	TRI_ML	%	5	2	NUMERIC	26.10	22.98		Mole % of trichlorinated PCB by Capillary Column Chromatography
67	TERA_ML	%	5	2	NUMERIC	21.60	33.29		Mole % of terachlorinated (tetrachlorinated) PCB by Capillary Column Chromatography
68	PENTA_ML	%	5	2	NUMERIC	7.20	16.92		Mole % of pentachlorinated PCB by Capillary Column Chromatography
69	HEXA_ML	%	5	2	NUMERIC	1.50	12.43		Mole % of hexachlorinated PCB by Capillary Column Chromatography

Note: * NA = Not Applicable
** Numeric fields containing zeros (0) may indicate either a "zero value" or a "null value". See comments to identify individual numeric fields where zero entries reflect "null values".

Field	Field Name	Units	Length	Dec	Type **	Entry Types			Comments
						Sediment *	TWCS *	Other	
70	HEPTA_ML	%	5	2	NUMERIC	0.60	12.01		Mole % of heptachlorinated PCB by Capillary Column Chromatography
71	OCTA_ML	%	5	2	NUMERIC	0.10	2.36		Mole % of octachlorinated PCB by Capillary Column Chromatography
72	NONA_ML	%	5	2	NUMERIC	0.10	0.00		Mole % of nonachlorinated PCB by Capillary Column Chromatography
73	DECA_ML	%	5	2	NUMERIC	0.10	0.00		Mole % of decachlorinated PCB by Capillary Column Chromatography
74	ORTHO_CL		4	2	NUMERIC	1.39	1.55		Mole ratio of ortho chlorines per biphenyl
75	MP_CL		4	2	NUMERIC	1.38	2.09		Mole ratio of meta and para chlorines per biphenyl
76	TOT_CL		4	2	NUMERIC	2.77	3.64		Mole ratio of total chlorines per biphenyl
77	VERIFIED		3	0	CHARACTER	YES	YES		Verified data has been checked for accuracy and validated
78	QL_WM		2	0	CHARACTER	U,J,UJ	U,J,UJ		Data Validation Qualifier for the Webb & McCall PCB results: J=approximate sample result U=approximate the detection limit UJ=approximate the sample result and the detection limit R=reject the sample result or the detection limit
79	QL_USGS		2	0	CHARACTER	U,J,UJ	U,J,UJ		Data Validation Qualifier for the USGS PCB results: J=approximate sample result U=approximate the detection limit UJ=approximate the sample result and the detection limit R=reject the sample result or the detection limit

Note: * NA = Not Applicable
** Numeric fields containing zeros (0) may indicate either a "zero value" or a "null value". See comments to identify individual numeric fields where zero entries reflect "null values".

Field	Field Name	Units	Length	Dec	Type **	Entry Types			Comments
						Sediment *	TWCS *	Other	
80	QL_CAP		2	0	CHARACTER	U,J,UJ	U,J,UJ		Data Validation Qualifier for the Capillary Column PCB results: J=approximate sample result U=approximate the detection limit UJ=approximate the sample result and the detection limit R=reject the sample result or the detection limit
81	PROGRAM		20	0	CHARACTER	TWCMP, HIGHFLOW, BFI, PCRDMP	SEDIMENT, FOOD CHAIN, BFI	FOOD CHAIN	This field indicates the sampling program under which the sample was collected.

Note: * NA = Not Applicable
** Numeric fields containing zeros (0) may indicate either a "zero value" or a "null value". See comments to identify individual numeric fields where zero entries reflect "null values".

GE HUDSON RIVER PROJECT CONGENER PEAK DATABASE - dBASE III FILE STRUCTURE TABLE

Field	Field Name	Length	Dec	Type	Entry Types Temporal Water Column, Sediment & Pore Water	Comments
1	NEA_FILE	7	0	CHARACTER	911606F or 911345X	NEA file identification as reported on the PCB Congener Amount Report. An "X" is only indicated in the NEA_FILE field if the sample is a Temporal Water Column sample analyzed for dissolved PCBs.
2	NEA_DESC	50	0	CHARACTER	8A-F1(0-5) or BAKER FALLS BRIDGE (DISSOLVED)	NEA file description as reported on PCB summary report sheet
3	REACH	20	0	CHARACTER	8A	River reach where sediment samples were collected.
4	SAMPSED	20	0	CHARACTER	F1	Sediment sample texture and ordinal descriptor.
5	ST_DPTH	8	0	NUMERIC	0	Starting depth of sediment core (cm) or composite water sample
6	END_DPTH	8	0	NUMERIC	5	Ending depth of sediment core (cm) or composite water sample (ft)
7	DATE_COL	8	0	DATE	08/17/91	Date of sample collection
8	ID	12	0	CHARACTER	25	The unique sample identifier assigned in the field to each environmental sample collected.
9	LOCATION	25	0	CHARACTER	8A-22 or B.F.Br. Rt.197 Br. TID-West Rt.29 Br. S.W.Br. Rt.4 Br. Hoosic R. Bat. Kill COMPOSITE	Sampling location. The actual location where the sample was collected. Each location is unique. Several samples can be collected from the sample location. "COMPOSITE" refers to samples from more than one location which were composited. TWCS Sample location: B.F.Br.=Baker Falls Bridge; Rt.197.Br.=Rt. 197 Bridge, T.I.D.=Thompson Island Dam; Rt.29.Br.=Rt. 29 Bridge; S.W.Br.=Stillwater Bridge; Rt.4.Br.=Rt. 4 Bridge; Hoosic.R.=Hoosic River; Bat.Kill.=Batten Kill
10	MEDIA	1	0	CHARACTER	f,w,a,b,p,s	Type of matrix: f=fish, w=water, a=air, b=biota, p=pore water, s=sediment
11	MIX_TYPE	1	0	CHARACTER	S	The type of mixed peak deconvolution as reported on the PCB Congener Amount Report.
12	PK1_AMT	16	11	NUMERIC	0.00000	Amount of PCB (ppm) detected in Peak #1 as reported on the PCB Congener Amount Report.
13	PK2_AMT	16	11	NUMERIC	1.35323	Amount of PCB (ppm) detected in Peak #2 as reported on the PCB Congener Amount Report.
14	PK3_AMT	16	11	NUMERIC	0.21430	Amount of PCB (ppm) detected in Peak #3 as reported on the PCB Congener Amount Report.
15	PK4_AMT	16	11	NUMERIC	2.03247	Amount of PCB (ppm) detected in Peak #4 as reported on the PCB Congener Amount Report.

GE HUDSON RIVER PROJECT CONGENER PEAK DATABASE - dBASE III FILE STRUCTURE TABLE

Field	Field Name	Length	Dec	Type	Entry Types Temporal Water Column, Sediment & Pore Water	Comments
16	PK5_AMT	16	11	NUMERIC	0.01879	Amount of PCB (ppm) detected in Peak #5 as reported on the PCB Congener Amount Report.
17	PK6_AMT	16	11	NUMERIC	0.14898	Amount of PCB (ppm) detected in Peak #6 as reported on the PCB Congener Amount Report.
18	PK7_AMT	16	11	NUMERIC	1.59697	Amount of PCB (ppm) detected in Peak #7 as reported on the PCB Congener Amount Report.
19	PK8_AMT	16	11	NUMERIC	0.23654	Amount of PCB (ppm) detected in Peak #8 as reported on the PCB Congener Amount Report.
20	PK9_AMT	16	11	NUMERIC	0.00000	Amount of PCB (ppm) detected in Peak #9 as reported on the PCB Congener Amount Report.
21	PK10_AMT	16	11	NUMERIC	0.56981	Amount of PCB (ppm) detected in Peak #10 as reported on the PCB Congener Amount Report.
22	PK11_AMT	16	11	NUMERIC	0.25781	Amount of PCB (ppm) detected in Peak #11 as reported on the PCB Congener Amount Report.
23	PK12_AMT	16	11	NUMERIC	0.56984	Amount of PCB (ppm) detected in Peak #12 as reported on the PCB Congener Amount Report.
24	PK13_AMT	16	11	NUMERIC	0.00254	Amount of PCB (ppm) detected in Peak #13 as reported on the PCB Congener Amount Report.
25	PK14_AMT	16	11	NUMERIC	0.05671	Amount of PCB (ppm) detected in Peak #14 as reported on the PCB Congener Amount Report.
26	PK15_AMT	16	11	NUMERIC	0.23681	Amount of PCB (ppm) detected in Peak #15 as reported on the PCB Congener Amount Report.
27	PK16_AMT	16	11	NUMERIC	0.00004	Amount of PCB (ppm) detected in Peak #16 as reported on the PCB Congener Amount Report.
28	PK17_AMT	16	11	NUMERIC	0.00045	Amount of PCB (ppm) detected in Peak #17 as reported on the PCB Congener Amount Report.
29	PK18_AMT	16	11	NUMERIC	0.25981	Amount of PCB (ppm) detected in Peak #18 as reported on the PCB Congener Amount Report.
30	PK19_AMT	16	11	NUMERIC	0.25874	Amount of PCB (ppm) detected in Peak #19 as reported on the PCB Congener Amount Report.
31	PK20_AMT	16	11	NUMERIC	0.12584	Amount of PCB (ppm) detected in Peak #20 as reported on the PCB Congener Amount Report.
32	PK21_AMT	16	11	NUMERIC	0.40014	Amount of PCB (ppm) detected in Peak #21 as reported on the PCB Congener Amount Report.
33	PK22_AMT	16	11	NUMERIC	0.25804	Amount of PCB (ppm) detected in Peak #22 as reported on the PCB Congener Amount Report.
34	PK23_AMT	16	11	NUMERIC	0.84621	Amount of PCB (ppm) detected in Peak #23 as reported on the PCB Congener Amount Report.
35	PK24_AMT	16	11	NUMERIC	0.25041	Amount of PCB (ppm) detected in Peak #24 as reported on the PCB Congener Amount Report.
36	PK25_AMT	16	11	NUMERIC	0.21430	Amount of PCB (ppm) detected in Peak #25 as reported on the PCB Congener Amount Report.
37	PK26_AMT	16	11	NUMERIC	2.03247	Amount of PCB (ppm) detected in Peak #26 as reported on the PCB Congener Amount Report.
38	PK27_AMT	16	11	NUMERIC	0.01879	Amount of PCB (ppm) detected in Peak #27 as reported on the PCB Congener Amount Report.

Field	Field Name	Length	Dec	Type	Entry Types Temporal Water Column, Sediment & Pore Water	Comments
39	PK28_AMT	16	11	NUMERIC	0.14898	Amount of PCB (ppm) detected in Peak #28 as reported on the PCB Congener Amount Report.
40	PK29_AMT	16	11	NUMERIC	1.59697	Amount of PCB (ppm) detected in Peak #29 as reported on the PCB Congener Amount Report.
41	PK30_AMT	16	11	NUMERIC	0.23654	Amount of PCB (ppm) detected in Peak #30 as reported on the PCB Congener Amount Report.
42	PK31_AMT	16	11	NUMERIC	0.00000	Amount of PCB (ppm) detected in Peak #31 as reported on the PCB Congener Amount Report.
43	PK32_AMT	16	11	NUMERIC	0.56981	Amount of PCB (ppm) detected in Peak #32 as reported on the PCB Congener Amount Report.
44	PK33_AMT	16	11	NUMERIC	0.25781	Amount of PCB (ppm) detected in Peak #33 as reported on the PCB Congener Amount Report.
45	PK34_AMT	16	11	NUMERIC	0.56984	Amount of PCB (ppm) detected in Peak #34 as reported on the PCB Congener Amount Report.
46	PK35_AMT	16	11	NUMERIC	0.00254	Amount of PCB (ppm) detected in Peak #35 as reported on the PCB Congener Amount Report.
47	PK36_AMT	16	11	NUMERIC	0.05671	Amount of PCB (ppm) detected in Peak #36 as reported on the PCB Congener Amount Report.
48	PK37_AMT	16	11	NUMERIC	0.23681	Amount of PCB (ppm) detected in Peak #37 as reported on the PCB Congener Amount Report.
49	PK38_AMT	16	11	NUMERIC	0.00004	Amount of PCB (ppm) detected in Peak #38 as reported on the PCB Congener Amount Report.
50	PK39_AMT	16	11	NUMERIC	0.00045	Amount of PCB (ppm) detected in Peak #39 as reported on the PCB Congener Amount Report.
51	PK40_AMT	16	11	NUMERIC	0.25981	Amount of PCB (ppm) detected in Peak #40 as reported on the PCB Congener Amount Report.
52	PK41_AMT	16	11	NUMERIC	0.25874	Amount of PCB (ppm) detected in Peak #41 as reported on the PCB Congener Amount Report.
53	PK42_AMT	16	11	NUMERIC	0.12584	Amount of PCB (ppm) detected in Peak #42 as reported on the PCB Congener Amount Report.
54	PK43_AMT	16	11	NUMERIC	0.40014	Amount of PCB (ppm) detected in Peak #43 as reported on the PCB Congener Amount Report.
55	PK44_AMT	16	11	NUMERIC	0.25804	Amount of PCB (ppm) detected in Peak #44 as reported on the PCB Congener Amount Report.
56	PK45_AMT	16	11	NUMERIC	0.84621	Amount of PCB (ppm) detected in Peak #45 as reported on the PCB Congener Amount Report.
57	PK46_AMT	16	11	NUMERIC	0.25041	Amount of PCB (ppm) detected in Peak #46 as reported on the PCB Congener Amount Report.
58	PK47_AMT	16	11	NUMERIC	0.21430	Amount of PCB (ppm) detected in Peak #47 as reported on the PCB Congener Amount Report.
59	PK48_AMT	16	11	NUMERIC	2.03247	Amount of PCB (ppm) detected in Peak #48 as reported on the PCB Congener Amount Report.
60	PK49_AMT	16	11	NUMERIC	0.01879	Amount of PCB (ppm) detected in Peak #49 as reported on the PCB Congener Amount Report.
61	PK50_AMT	16	11	NUMERIC	0.14898	Amount of PCB (ppm) detected in Peak #50 as reported on the PCB Congener Amount Report.

Field	Field Name	Length	Dec	Type	Entry Types Temporal Water Column, Sediment & Pore Water	Comments
62	PK51_AMT	16	11	NUMERIC	1.59697	Amount of PCB (ppm) detected in Peak #51 as reported on the PCB Congener Amount Report.
63	PK52_AMT	16	11	NUMERIC	0.23654	Amount of PCB (ppm) detected in Peak #52 as reported on the PCB Congener Amount Report.
64	PK53_AMT	16	11	NUMERIC	0.00000	Amount of PCB (ppm) detected in Peak #53 as reported on the PCB Congener Amount Report.
65	PK54_AMT	16	11	NUMERIC	0.56981	Amount of PCB (ppm) detected in Peak #54 as reported on the PCB Congener Amount Report.
66	PK55_AMT	16	11	NUMERIC	0.25781	Amount of PCB (ppm) detected in Peak #55 as reported on the PCB Congener Amount Report.
67	PK56_AMT	16	11	NUMERIC	0.56984	Amount of PCB (ppm) detected in Peak #56 as reported on the PCB Congener Amount Report.
68	PK57_AMT	16	11	NUMERIC	0.00254	Amount of PCB (ppm) detected in Peak #57 as reported on the PCB Congener Amount Report.
69	PK58_AMT	16	11	NUMERIC	0.05671	Amount of PCB (ppm) detected in Peak #58 as reported on the PCB Congener Amount Report.
70	PK59_AMT	16	11	NUMERIC	0.23681	Amount of PCB (ppm) detected in Peak #59 as reported on the PCB Congener Amount Report.
71	PK60_AMT	16	11	NUMERIC	0.00004	Amount of PCB (ppm) detected in Peak #60 as reported on the PCB Congener Amount Report.
72	PK61_AMT	16	11	NUMERIC	0.00045	Amount of PCB (ppm) detected in Peak #61 as reported on the PCB Congener Amount Report.
73	PK62_AMT	16	11	NUMERIC	0.25981	Amount of PCB (ppm) detected in Peak #62 as reported on the PCB Congener Amount Report.
74	PK63_AMT	16	11	NUMERIC	0.25874	Amount of PCB (ppm) detected in Peak #63 as reported on the PCB Congener Amount Report.
75	PK64_AMT	16	11	NUMERIC	0.12584	Amount of PCB (ppm) detected in Peak #64 as reported on the PCB Congener Amount Report.
76	PK65_AMT	16	11	NUMERIC	0.40014	Amount of PCB (ppm) detected in Peak #65 as reported on the PCB Congener Amount Report.
77	PK66_AMT	16	11	NUMERIC	0.25804	Amount of PCB (ppm) detected in Peak #66 as reported on the PCB Congener Amount Report.
78	PK67_AMT	16	11	NUMERIC	0.84621	Amount of PCB (ppm) detected in Peak #67 as reported on the PCB Congener Amount Report.
79	PK68_AMT	16	11	NUMERIC	0.25041	Amount of PCB (ppm) detected in Peak #68 as reported on the PCB Congener Amount Report.
80	PK69_AMT	16	11	NUMERIC	0.21430	Amount of PCB (ppm) detected in Peak #69 as reported on the PCB Congener Amount Report.
81	PK70_AMT	16	11	NUMERIC	2.03247	Amount of PCB (ppm) detected in Peak #70 as reported on the PCB Congener Amount Report.
82	PK71_AMT	16	11	NUMERIC	0.01879	Amount of PCB (ppm) detected in Peak #71 as reported on the PCB Congener Amount Report.
83	PK72_AMT	16	11	NUMERIC	0.14898	Amount of PCB (ppm) detected in Peak #72 as reported on the PCB Congener Amount Report.
84	PK73_AMT	16	11	NUMERIC	1.59697	Amount of PCB (ppm) detected in Peak #73 as reported on the PCB Congener Amount Report.

Field	Field Name	Length	Dec	Type	Entry Types	Comments
					Temporal Water Column, Sediment & Pore Water	
85	PK74_AMT	16	11	NUMERIC	0.23654	Amount of PCB (ppm) detected in Peak #74 as reported on the PCB Congener Amount Report.
86	PK75_AMT	16	11	NUMERIC	0.00000	Amount of PCB (ppm) detected in Peak #75 as reported on the PCB Congener Amount Report.
87	PK76_AMT	16	11	NUMERIC	0.56981	Amount of PCB (ppm) detected in Peak #76 as reported on the PCB Congener Amount Report.
88	PK77_AMT	16	11	NUMERIC	0.25781	Amount of PCB (ppm) detected in Peak #77 as reported on the PCB Congener Amount Report.
89	PK78_AMT	16	11	NUMERIC	0.56984	Amount of PCB (ppm) detected in Peak #78 as reported on the PCB Congener Amount Report.
90	PK79_AMT	16	11	NUMERIC	0.00254	Amount of PCB (ppm) detected in Peak #79 as reported on the PCB Congener Amount Report.
91	PK80_AMT	16	11	NUMERIC	0.05671	Amount of PCB (ppm) detected in Peak #80 as reported on the PCB Congener Amount Report.
92	PK81_AMT	16	11	NUMERIC	0.23681	Amount of PCB (ppm) detected in Peak #81 as reported on the PCB Congener Amount Report.
93	PK82_AMT	16	11	NUMERIC	0.00004	Amount of PCB (ppm) detected in Peak #82 as reported on the PCB Congener Amount Report.
94	PK83_AMT	16	11	NUMERIC	0.00045	Amount of PCB (ppm) detected in Peak #83 as reported on the PCB Congener Amount Report.
95	PK84_AMT	16	11	NUMERIC	0.25981	Amount of PCB (ppm) detected in Peak #84 as reported on the PCB Congener Amount Report.
96	PK85_AMT	16	11	NUMERIC	0.25874	Amount of PCB (ppm) detected in Peak #85 as reported on the PCB Congener Amount Report.
97	PK86_AMT	16	11	NUMERIC	0.12584	Amount of PCB (ppm) detected in Peak #86 as reported on the PCB Congener Amount Report.
98	PK87_AMT	16	11	NUMERIC	0.40014	Amount of PCB (ppm) detected in Peak #87 as reported on the PCB Congener Amount Report.
99	PK88_AMT	16	11	NUMERIC	0.25804	Amount of PCB (ppm) detected in Peak #88 as reported on the PCB Congener Amount Report.
100	PK89_AMT	16	11	NUMERIC	0.84621	Amount of PCB (ppm) detected in Peak #89 as reported on the PCB Congener Amount Report.
101	PK90_AMT	16	11	NUMERIC	0.25041	Amount of PCB (ppm) detected in Peak #90 as reported on the PCB Congener Amount Report.
102	PK91_AMT	16	11	NUMERIC	0.56981	Amount of PCB (ppm) detected in Peak #91 as reported on the PCB Congener Amount Report.
103	PK92_AMT	16	11	NUMERIC	0.25781	Amount of PCB (ppm) detected in Peak #92 as reported on the PCB Congener Amount Report.
104	PK93_AMT	16	11	NUMERIC	0.56984	Amount of PCB (ppm) detected in Peak #93 as reported on the PCB Congener Amount Report.
105	PK94_AMT	16	11	NUMERIC	0.00254	Amount of PCB (ppm) detected in Peak #94 as reported on the PCB Congener Amount Report.
106	PK95_AMT	16	11	NUMERIC	0.05671	Amount of PCB (ppm) detected in Peak #95 as reported on the PCB Congener Amount Report.
107	PK96_AMT	16	11	NUMERIC	0.23681	Amount of PCB (ppm) detected in Peak #96 as reported on the PCB Congener Amount Report.

Field	Field Name	Length	Dec	Type	Entry Types Temporal Water Column, Sediment & Pore Water	Comments
108	PK97_AMT	16	11	NUMERIC	0.00004	Amount of PCB (ppm) detected in Peak #97 as reported on the PCB Congener Amount Report.
109	PK98_AMT	16	11	NUMERIC	0.00045	Amount of PCB (ppm) detected in Peak #98 as reported on the PCB Congener Amount Report.
110	PK99_AMT	16	11	NUMERIC	0.25981	Amount of PCB (ppm) detected in Peak #99 as reported on the PCB Congener Amount Report.
111	PK100AMT	16	11	NUMERIC	0.25874	Amount of PCB (ppm) detected in Peak #100 as reported on the PCB Congener Amount Report.
112	PK101AMT	16	11	NUMERIC	0.12584	Amount of PCB (ppm) detected in Peak #101 as reported on the PCB Congener Amount Report.
113	PK102AMT	16	11	NUMERIC	0.40014	Amount of PCB (ppm) detected in Peak #102 as reported on the PCB Congener Amount Report.
114	PK103AMT	16	11	NUMERIC	0.25804	Amount of PCB (ppm) detected in Peak #103 as reported on the PCB Congener Amount Report.
115	PK104AMT	16	11	NUMERIC	0.84621	Amount of PCB (ppm) detected in Peak #104 as reported on the PCB Congener Amount Report.
116	PK105AMT	16	11	NUMERIC	0.25041	Amount of PCB (ppm) detected in Peak #105 as reported on the PCB Congener Amount Report.
117	PK106AMT	16	11	NUMERIC	0.56981	Amount of PCB (ppm) detected in Peak #106 as reported on the PCB Congener Amount Report.
118	PK107AMT	16	11	NUMERIC	0.25781	Amount of PCB (ppm) detected in Peak #107 as reported on the PCB Congener Amount Report.
119	PK108AMT	16	11	NUMERIC	0.56984	Amount of PCB (ppm) detected in Peak #108 as reported on the PCB Congener Amount Report.
120	PK109AMT	16	11	NUMERIC	0.00254	Amount of PCB (ppm) detected in Peak #109 as reported on the PCB Congener Amount Report.
121	PK110AMT	16	11	NUMERIC	0.05671	Amount of PCB (ppm) detected in Peak #110 as reported on the PCB Congener Amount Report.
122	PK111AMT	16	11	NUMERIC	0.23681	Amount of PCB (ppm) detected in Peak #111 as reported on the PCB Congener Amount Report.
123	PK112AMT	16	11	NUMERIC	0.00004	Amount of PCB (ppm) detected in Peak #112 as reported on the PCB Congener Amount Report.
124	PK113AMT	16	11	NUMERIC	0.00045	Amount of PCB (ppm) detected in Peak #113 as reported on the PCB Congener Amount Report.
125	PK114AMT	16	11	NUMERIC	0.25981	Amount of PCB (ppm) detected in Peak #114 as reported on the PCB Congener Amount Report.
126	PK115AMT	16	11	NUMERIC	0.25874	Amount of PCB (ppm) detected in Peak #115 as reported on the PCB Congener Amount Report.
127	PK116AMT	16	11	NUMERIC	0.12584	Amount of PCB (ppm) detected in Peak #116 as reported on the PCB Congener Amount Report.
128	PK117AMT	16	11	NUMERIC	0.40014	Amount of PCB (ppm) detected in Peak #117 as reported on the PCB Congener Amount Report.
129	PK118AMT	16	11	NUMERIC	0.25804	Amount of PCB (ppm) detected in Peak #118 as reported on the PCB Congener Amount Report.

Field	Field Name	Length	Dec	Type	Entry Types	Comments
					Temporal Water Column, Sediment & Pore Water	
130	PCB_CONC	12	7	NUMERIC	11.542	Total PCB concentration as reported on the PCB Congener Amount Report.
131	MIC_MOLS	7	4	NUMERIC	0.04761	Total micromoles as reported on the PCB Congener Amount Report.
132	AVG_MWT	6	1	NUMERIC	242.3	Average molecular weight as reported on the PCB Congener Amount Report.
133	PEAKS	3	0	NUMERIC	107	The number of calibrated peaks detected as reported on the PCB Congener Amount Report.

ATTACHMENT 2

DATA SUMMARY REPORTS

Thompson Island Pool Total Suspended Solids Study

Hudson River Project 1991 Sampling and Analysis Program: Float Surveys

Hudson River Channel Characterization Program

Hudson River Project 1992 Sampling and Analysis Program: High Flow Water Column Monitoring Program

Hudson River Project 1991-1992 Sampling and Analysis Program: Temporal Water Column Monitoring Program

Hudson River Project: Food Chain-Study

Hudson River Project 1991 Sediment Sampling and Analysis Program

Hudson River Project Sampling and Analysis Program: Quality Assurance Project Plan

1991 Hydrographic Survey of the Upper Hudson River