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Subject: IPEC Fish Data Comparison

Attached is an Excel file with the results from all three labs sorted by location and species. All results for both the NRC lab (ORISE) and Entergy lab (AREVA) were below their respective Minimum Detectable Concentrations (MDC's).

The State results (Wadsworth Lab) are also below MDC for all but three samples.

All three labs have met or exceeded normal environmental level analytical detection limits.

For the gamma emitters Wadsworth showed two positive Cs-137 values, for both white perch and catfish in the northern most sampling area near the Village of Catskill.

Both values were positive at levels below the MDC for ORISE. AREVA was apparently only asked to perform gamma spec analysis on one sample from near the plant.

perch

NYS 6 +/- 3 pCi/kg

ORISE < 10 "

Catfish

NYS 9 +/- 3 "

ORISE < 10 "

For Sr-90 their one positive value was for the blue crab sample from the area of the river nearest to IPEC.

NYS 8 +/- 3 pCi/kg

ORISE < 5 "

AREVA < 7.1 "

2007 Data Comparison
Hudson River Fish Flesh
Sr-90 Concentrations

ELDARS/ORISE/region	sample type	collection date	pCi/kg			HpGe pCi/kg									
sample #'s			Sr90			Cs-137		Co-60		Cs-134		Co-58		K-40	
200720875252	4 - IPEC	blue crab	06/06-06/22/07	8 ± 3	< 3	< 4	< 3	< 3	< 3	< 3	< 3	2510	± 180		
1748M0002		blue crab		< 5	< 10	< 10	< 10	< 10	< 10	< 20	< 20	NR			
L12763-07		blue crab		< 7.1	< 18.89	< 23.93	< 23.06	< 38.1	< 38.1	< 38.1	< 38.1	3784	± 373.4		
200720875258	4 - IPEC	striped bass	"	< 4	< 2	< 2	< 1.9	< 2	< 2	< 2	< 2	2400	± 150		
1748M0016		striped bass		< 4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NR			
L12763-12		striped bass		< 6	< 15.72	< 17.84	< 20.53	< 25.95	< 25.95	< 25.95	< 25.95	3680	± 333.1		
200720875255	4 - IPEC	sunfish	"	< 6	< 2	< 2	< 2	< 2	< 2	< 3	< 3	2660	± 170		
1748M0010		sunfish		< 4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NR			
L12763-06		sunfish		< 14	< 22.58	< 22.88	< 24.63	< 29.86	< 29.86	< 29.86	< 29.86	7191	± 468.2		
200720875256	4 - IPEC	white perch	"	< 3	< 3.0	< 3	< 2.0	< 3.0	< 3.0	< 3.0	< 3.0	2750	± 170		
1478M0013		white perch		< 5	< 10.0	< 10	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	NR			
		white perch	* see note below	NA	< 17.6	< 29.67	< 23.5	< 26.5	< 26.5	< 26.5	< 26.5	4656	± 484.3		
L12763-09		white perch		< 8.6	< 24.0	< 30	< 29.0	< 43.0	< 43.0	< 43.0	< 43.0		±		
200720875264	4 - IPEC	catfish	"	< 4	< 2	< 2	< 1.9	< 3	< 3	< 3	< 3	2580	± 150		
1748M0015		catfish		< 4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NR			
L12763-10		catfish		< 7.7	< 17.48	< 17.92	< 17.77	< 26	< 26	< 26	< 26	3913	± 343.2		
200720875266	4 - IPEC	American eel	"	< 4	< 3	< 2	< 2	< 3	< 3	< 3	< 3	2320	± 150		
1748M0003		American eel		< 5	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NR			
L12763-11		American eel		< 6.6	< 25.76	< 28.84	< 22.76	< 21.56	< 21.56	< 21.56	< 21.56	3629	± 422.8		
200720875268	4 - IPEC	carp	"	< 5	< 2	< 1.8	< 1.7	< 3	< 3	< 3	< 3	2590	± 150		
1748M0018		carp		< 4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NR			
L12763-08		carp		< 6.8	< 15.65	< 23.47	< 17.87	< 29.47	< 29.47	< 29.47	< 29.47	4399	± 331.8		
NA - ** see note	7 - Roseton														
1748M0008		striped bass		< 4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NR			
NA - ** see note															
200720875253	7 - Roseton	sunfish	"	< 3	< 3	< 3	< 3	< 3	< 3	< 3	< 3	2590	± 170		
1748M0009		sunfish		< 6	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NR			
L12763-02		sunfish		< 7.2	< 15.15	< 20.79	< 16.48	< 21.33	< 21.33	< 21.33	< 21.33	3405	± 303.4		
200720875260	7 - Roseton	white perch	"	< 5	< 3	< 2	< 2	< 3	< 3	< 3	< 3	2440	± 160		
1748M0014		white perch		< 4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NR			
L12763-05		white perch		< 8.3	< 14.99	< 16.33	< 15.52	< 21.95	< 21.95	< 21.95	< 21.95	3751	± 280.4		
200720875254	7 - Roseton	catfish	"	< 3	< 2	< 1.9	< 1.8	< 2	< 2	< 2	< 2	2620	± 150		
1748M0004		catfish		< 5	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NR			
L12763-04		catfish		< 5.2	< 12.51	< 14.57	< 14.03	< 23.02	< 23.02	< 23.02	< 23.02	5490	± 266.8		
200720875257	7 - Roseton	American eel	"	< 4	< 3	< 2	< 2	< 3	< 3	< 3	< 3	2490	± 160		
1748M0012		American eel		< 5	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NR			
L12763-01		American eel		< 7.2	< 17.2	< 18.23	< 16.24	< 21.73	< 21.73	< 21.73	< 21.73	3849	± 276.6		
200720875267	7 - Roseton	carp	"	< 4	< 1.9	< 1.8	< 1.7	< 3	< 3	< 3	< 3	2480	± 150		
1748M0007		carp		< 4	< 10	< 10	< 10	< 10	< 10	< 10	< 10	NR			
L12763-03		carp		< 9.5	< 17.98	< 21.29	< 19.98	< 25.07	< 25.07	< 25.07	< 25.07	4407	± 342.6		

2007 Data Comparison
Hudson River Fish Flesh
Sr-90 Concentrations

200720875261	11 - Castkill	sunfish	"	< 4	< 3	< 2	< 2	< 3	2620	±	170
1748M0011		sunfish		< 5	< 10	< 10	< 10	< 10	NR		
L12763-13		sunfish		< 6.6	< 14.89	< 16.49	< 18.72	< 22.27	3946	±	258.2
200720875259	11 - Castkill	white perch	"	< 4	6 ± 3	< 2	< 2	< 3	2390	±	160
1748M0005		white perch		< 6	< 10	< 10	< 10	< 10	NR		
L12763-15		white perch		< 7.9	< 13.11	< 16.06	< 14.27	< 19.56	5681	±	273.5
200720875262	11 - Castkill	catfish	"	< 3	9 ± 3	< 1.9	< 1.9	< 3	2640	±	160
1748M0006		catfish		< 4	< 10	< 10	< 10	< 10	NR		
L12763-16		catfish		< 7.8	< 14.98	< 13.66	< 9.44	< 19.25	4671	±	234.7
200720875263	11 - Castkill	American eel	"	< 4	< 3	< 2	< 2	< 3	2000	±	140
1748M0017		American eel		< 5	< 10	< 10	< 10	< 10	NR		
L12763-14		American eel		< 6.8	< 18.09	< 16.28	< 13.82	< 26.07	3331	±	320.6
200720875265	11 - Castkill	carp	"	< 4	< 2	< 2	< 2	< 3	2450	±	150
1748M0001		carp		< 5	< 10	< 10	< 10	< 10	NR		
L12763-17		carp		< 6.1	< 14.96	< 16.72	< 16.38	< 24.46	4487	±	293.7

Cs-137

Co-60

Cs-134

Co-58

NA = Not Analyzed
NR = Not reported
ELDARS # = NYS Result
ORISE # = NRC Result
AREVA # = Entergy Results

Region 4 = Area of Hudson River around IPEC
Region 7 = Area of Hudson River near Roseton, IPEC Control Area
Region 11 = Area of Hudson River near Village of Catskill, ~ 70 miles upstream of IPEC
* Entergy had AREVA analyze only Sunfish from near IPEC for gamma emitters.
All other Gamma analyses performed by their Env Lab at FitzPatrick.
** Sample volume too small for 3-way split. Only analyzed by NRC lab @ ORISE.