

To: Distribution Below

From: Ron Sloan *RS*

Subject: Error in Table submitted with the January 25, 2000 letter

Date: January 27, 2000

The Table referred to in the 1/25/00 letter to Ms. Allison Hess was in error. It was a draft document that contained factual errors and in particular it was also incomplete in that it did not cover the 1998 data. Therefore, the entire package with the proper table is being resent. Please discard the previous submission. I apologize for this oversight and if you have comments or questions please contact me (518-457-0756 or rjsloan@gw.dec.state.ny.us).

cc: A. Hess ✓  
G. Barnhart  
L. Skinner  
K. Kogut  
T. Wahl  
R. Mulvey  
W. Ports  
M. Kane  
D. Keane  
D. Tuohy

*Allison,  
I'm sorry about the mix-up  
on the table. Hope this will  
straighten out any misunderstanding.  
Ran*

**New York State Department of Environmental Conservation  
Division of Fish, Wildlife & Marine Resources**

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Allison Hess  
USEPA Region 2  
290 Broadway - 19<sup>th</sup> Floor  
New York, NY 10007-1866

January 25, 2000

Dear Ms. Hess:

This letter is a follow-up to the data William Ports provided to you on PCBs in fish in the Hudson River upstream of the Sherman Island Dam in the Town of Queensbury. I am enclosing a summary table intended to provide additional perspective on fish PCB levels in the upper Hudson River. The results were compiled from the Hudson Basin contaminant database which EPA and TAMS currently possess.

The simplest approach to interpret the table is to take the document in order by year and location starting with 'Blue Ledge' near approximate rivermile 273. This area just upstream of the Village of North Creek is in as pristine an area as any in New York State. The PCB concentrations in the fish reflect that condition from the PCB perspective. They approach what may be considered baseline for the river. Note one of the fish did have some discernible concentrations of PCB (Yes, there are some known spots of contamination in the vicinity allegedly from nearby railroad operations and mining activity.). Note also that the lipid based concentrations hover around 1 ppm or less with the exception of the one smallmouth bass. These results, although higher than what I would consider true 'background,' do provide a baseline for the Hudson River as a whole. Although not shown in this table, there are other places in New York State which do produce fish where all the samples are less than the detection limits. Right now we are striving to meet detection limits between 0.02 and 0.01 ppm depending upon the laboratory doing the analyses and a number of other factors related to the media being analyzed. The bottom line is, if all of our monitored waters met the PCB conditions depicted by the fish from 'Blue Ledge,' I would need to find additional work.

The rest of the table deals with what I regard as a real remediation success story. It features the site that Mr. Jean-Pierre Moreau of the Niagara Mohawk Power Corporation presented at the National Academy of Science meeting in Albany on November 8, 1999. In 1992 (data not included) and 1993, fish exhibited abnormally high levels - refer to the 'Queensbury at site' segment - comparable to values observed in fish from the Thompson Island and Stillwater Pools of the Hudson River. The PCB fish concentrations in other parts of the Sherman Island Pool drop by an order of magnitude as soon as you move away from the 'Queensbury' site (see the attached figure for fish sample locations).

Between 1993 and 1995, some interim steps were taken to remove obvious source conditions. However, active remediation did not occur until 1996. The fish collected during the remediation in 1996 exhibited an order of magnitude decline near the site compared to the 1993



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concentrations. Fish from the other locations, although mixed in their results, tended toward detection limit levels. By way of reference, the water intake location is about 2000 feet downstream of the site. The boat launch area is approximately the same distance upstream.

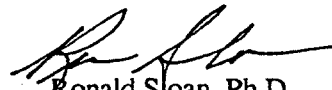
The 1996 active remediation included removal of upland soils and partial sediment removal in the dry by lowering the water level up to four feet to remove areas at or above 1 ppm PCB. These actions resulted in an exponential improvement, but the 1998 data still indicate that a source is still evident at the site. The 1997 and 1999 results, not shown here, are similar to those observed in 1998.

One of the most striking aspects of this site is the localized nature of the contamination. In particular, note the 1998 concentrations in the fish taken directly across the river from the site, a distance of just a few dozen yards. Concentrations in these fish are two to five times lower than fish taken at the site.

Currently, the remaining sediment contamination is a very small 'hot spot' in relatively deep water. This area, referred to as Operable Unit 2, is under consideration for future remedial action. It is our opinion, from the fish data, that this area of contaminated sediments is still a PCB source and is subject to further discussion by the state, the company and the citizens advisory group.

Thank you for your interest in this project and hope you will find this description of use.

Sincerely,

  
Ronald Sloan, Ph.D.  
Research Scientist

cc: G. Barnhart  
L. Skinner  
K. Kogut  
T. Wahl  
R. Mulvey  
W. Ports  
M. Kane  
D. Keane  
D. Tuohy

# Blue Ledge and Sherman Island Pool Temporal PCB (ppm) Table

\* - 1993 congeneric analyses

	Location (River mile)	Species (age)	Number Analyzed	Total PCB	Lipid PCB
1992	Blue ledge (273)	Fatfish	8	<0.02 (<0.02 - <0.02)	0.94 (0.72 - 1.67)
		Smallmouth bass	19	<0.02 (<0.02 - 0.04)	2.24 (0.76 - 80)
		White sucker	19	<0.02 (<0.02 - <0.02)	1.22 (0.55 - 1.70)
1993*	Sherman island pool (207)	Cyprinid	77	0.10 (0.09 - 0.12)	2.95 (2.89 - 3.06)
		Smallmouth bass	22	0.13 (0.09 - 0.16)	8.01 (4.45 - 10.86)
		Yellow perch	5	0.15 (0.11 - 0.20)	3.42 (3.10 - 3.56)
	Queensbury at site - location #1 (208)	Cyprinid	50	6.54 (4.72 - 7.48)	406.12 (196.47 - 501.65)
		Pumpkinseed	1	23.76	766.38
Smallmouth bass		22	9.21 (2.04 - 11.31)	697.98 (102.06 - 870.36)	
Yellow perch		12	9.94 (2.39 - 19.30)	267.40 (79.56 - 469.54)	
1995	At Queensbury Site - loc #1	Rock bass	19	0.65 (<0.05 - 5.60)	71.15 (2.27 - 560)
		Smallmouth bass	17	0.27 (<0.05 - 0.91)	19.42 (3.33 - 65.39)
		Yellow perch	15	0.12 (<0.05 - 0.32)	7.28 (20 - 16.84)
	Sherman Isl Pool Near Water Intake - loc #3	Bluegill sunfish	1	0.04	3.59
		Rock bass	2	<0.01 (<0.01 - <0.01)	2.56 (1.89 - 3.23)
Walleye		1	<0.01	10	
Below Boat Launch - loc #4	Smallmouth bass	3	0.04 (<0.01 - 0.06)	3.95 (0.72 - 8.55)	
1996	At Queensbury Site - loc #1	Northern pike	1	<0.02	4.65
		Rock bass	3	0.21 (0.12 - 0.30)	30.68 (20.83 - 39.47)
		Smallmouth bass	3	1.04 (0.95 - 1.21)	121.51 (75.19 - 159.21)
		Walleye	4	0.32 (0.11 - 0.72)	36.96 (12.31 - 88.89)
		Yellow perch	10	0.22 (<0.02 - 0.84)	48.79 (4.65 - 205.12)
	Across River fr. Qnsbry Site - loc #2	Rock bass	5	0.10 (<0.05 - 0.26)	11.70 (7.14 - 21.43)
		Yellow perch	5	<0.05 (<0.05 - <0.05)	6.52 (5.38 - 8.06)
	Sherman Isl Pool Near Water Intake - loc #3	Smallmouth bass	4	0.15 (0.08 - 0.34)	21.67 (8.95 - 55.64)
		Yellow perch	11	0.34 (<0.05 - 0.84)	77 (5.81 - 220)
	Below Boat Launch - loc #4	Smallmouth bass	2	0.66 (0.49 - 0.82)	138.44 (124.70 - 152.19)
		Walleye	5	0.09 (<0.05 - 0.14)	10.26 (5.88 - 14.36)
		Yellow perch	5	<0.05 (<0.05 - <0.05)	6.25 (4.46 - 7.94)
	Above Boat Launch - loc #5	Northern pike	3	<0.02 (<0.02 - 0.03)	4.80 (3.08 - 5.76)
		Rock bass	9	<0.04 (<0.02 - <0.05)	7.65 (5.40 - 10.87)
		Smallmouth bass	4	<0.05 (<0.05 - <0.05)	4.27 (3.29 - 5.62)
Walleye		3	0.90 (0.65 - 1.31)	124.39 (92.84 - 152.09)	
1998	At Queensbury Site - loc #1	Northern pike	2	0.08 (<0.05 - 0.12)	14.27 (0.92 - 27.62)
		Rock bass	3	0.33 (0.20 - 0.53)	35.10 (17.67 - 52.77)
		Smallmouth bass	5	0.23 (<0.05 - 0.46)	21.60 (3.12 - 42.99)
		Walleye	5	0.26 (0.08 - 0.46)	22.56 (13.33 - 31.48)
		Yellow perch	12	0.18 (<0.02 - 0.95)	15.45 (3.47 - 52.20)
	Across River fr. Qnsbry Site - loc #2	Northern pike	1	<0.02	9.09
		Rock bass	4	0.06 (<0.05 - 0.08)	5.82 (3.76 - 7.81)
		Smallmouth bass	1	<0.05	4.63
		Walleye	5	0.07 (<0.02 - 0.17)	10.89 (5.13 - 25.44)
		Yellow perch	7	<0.04 (<0.02 - <0.05)	6.29 (3.42 - 9.26)
	Sherman Isl Pool Near Water Intake - loc #3	Northern pike	1	<0.02	20
		Rock bass	3	<0.05 (<0.02 - 0.06)	4.51 (2.63 - 6.15)
		Smallmouth bass	3	0.06 (<0.05 - 0.08)	4.57 (4.13 - 5.20)
		Walleye	1	0.06	13.40
		Yellow perch	8	<0.04 (<0.02 - <0.05)	5.60 (4.63 - 7.94)
Below Boat Launch - loc #4	Rock bass	1	<0.02	10	
	Smallmouth bass	1	<0.02	3.03	
	Walleye	1	0.04	8.86	
Above Boat Launch - loc #5	Rock bass	4	<0.05 (<0.05 - <0.05)	6.59 (5.56 - 7.81)	
	Yellow perch	6	0.06 (<0.05 - 0.09)	6.77 (4.17 - 15)	

USE THIS AND (141) FOR APPROX. OF JUNE 4

