Table 6. Concentrations of Select Contaminants in Geddes Brook/Ninemile Creek Fish

Contaminants (only contaminants considered risk drivers are shown)	Units (wet weight)	Target Tissue Concentration Range (mg/kg) [2]		Fish Concentrations (mg/kg) Data from 1990, 1998, 2000, and 2002		
				Arithmetic Mean	95% UCL [4]	Max Detection
Human Health Exposure - Fish Fillets		**RME**				
Mercury (as methylmercury)[5]	mg/kg	0.6		0.55	0.73	2.5
Total PCBs [6]	mg/kg	0.011 to 1.1		0.17	0.45	1.9
PCDD/PCDFs - TEQ as 2,3,7,8-TCDD [7]	mg/kg	1.0E-07 to 1.0E-05		2.3E-06	5.9E-06	1.8E-05
Ecological Exposure - Small Fish (3 to 18 cm) Whole Fish [1, 3]		**NOAEL**	**LOAEL**			
Mercury (as methylmercury)	mg/kg	0.009	0.187	0.28	0.85	0.85
Ecological Exposure - Large Fish (18 to 60 cm) Whole Fish [1, 3]		**NOAEL**	**LOAEL**			
Mercury (as methylmercury)	mg/kg	0.014	0.345	0.56	1.9	1.9

Sources:
-- Human health exposure data (fish fillets) were taken from Table 3.1 of Appendix B of the Geddes Brook/Ninemile Creek Human Health Risk Assessment (HHRA) report.
-- Ecological exposure data (whole fish) were taken from Table I-2 of the Geddes Brook/Ninemile Creek FS report.
-- Target tissue concentrations were taken from Appendix I of the Geddes Brook/Ninemile Creek FS report and from Attachment A-2 of Appendix A of the Supplemental FS report. Fish tissue PRGs can be found in the text boxes on pages 54 and 55 of the Proposed Plan.

Notes:
1. Mercury concentrations were adjusted from fillet to whole body concentrations by multiplying by a factor of 0.7, as developed in the Onondaga Lake Baseline Ecological Risk Assessment.
2. RME = reasonable maximum exposure; NOAEL = no-observed-adverse-effect-level; LOAEL = lowest-observed-adverse-effect-level.
3. NOAELs and LOAELs for small (3 to 18 cm) fish are based on the belted kingfisher and mink. NOAELs and LOAELs for large (18 to 60 cm) fish are based on the great blue heron and river otter.
4. The maximum detected concentration was used as the 95% UCL if it was lower than the calculated UCL.
5. The human health target tissue concentration for mercury (0.6 mg/kg) is based on young child RME (non-cancer effects). The RME target concentration for adults is slightly higher (0.9 mg/kg). See the PRGs in fish tissue text box on page 54 of the Proposed Plan.

6. The human health target tissue concentrations for total PCBs based on RME carcinogenic risks at risk targets of 1E-05 and 1E-04 for adults are 0.11 mg/kg and 1.1 mg/kg, respectively. The RME targets based on non-cancer effects of 0.12 to 0.19 mg/kg fall within the range based on the carcinogenic risk target of 1E-05. A target concentration based on the 1E-06 risk level (0.011 mg/kg) is much lower than mean background concentrations in US waters and may not be achievable. See the PRGs in fish tissue text box on page 54 of the Proposed Plan.

7. The human health target tissue concentrations for PCDD/PCDFs based on RME carcinogenic risks at risk targets of 1E-05 and 1E-04 for adults are 1E-06 mg/kg and 1E-05 mg/kg, respectively. Non-carcinogenic targets could not be developed for PCDD/PCDFs. A target concentration based on the 1E-06 risk level (1E-07 mg/kg) is much lower than mean background concentrations in US waters and may not be achievable. See the PRGs in fish tissue text box on page 54 of the Proposed Plan.