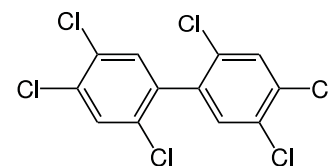




# TOTAL MAXIMUM DAILY LOADS (TMDL): 209 POLYCHLORINATED BIPHENYLS (PCBS) BY METHOD 1668A

**Total Maximum Daily Load** expresses the maximum amount of a pollutant that a water body can receive and still attain quality standards. TMDL is an important component of the Clean Water Act's (CWA) framework to restore and protect our Nation's waters

**Polychlorinated Biphenyls (PCBs)** are industrial chemicals that do not occur naturally in the environment and are considered as persistent organic pollutants. Banned from manufacturing for over 40 years, PCBs continue to enter the environment from poorly maintained hazardous waste sites, leaking transformers, illegal or improper dumping of PCB wastes, and burning of wastes in municipal or industrial incinerators. PCBs are considered as lipophilic ("fat loving") carcinogens and once released to the environment, will often bioaccumulate within aquatic species, including fish.



**Polychlorinated Biphenyl**

METHOD	CONGENERS	DESCRIPTION	MATRIX	RL/PQL <sup>1</sup>	TAT <sup>2</sup>	CONTAINER	PRESERVATION*	HOLD TIMES <sup>3</sup>	MIN VOLUME
1668- TMDL	PCB 209 Congeners	Total Maximum Daily Load   209 PCB congeners and Totals {e.g. TMDL / DRBC / VADEQ / Impaired Waters}	Water	<0.01-0.1 ng/L	15 Days	Two 2-Liter (AG)	Refrigerate <6° C Unpreserved	Up to 1 year	2 l
NOTES									
1. RLs/PQLs subject to change, please contact lab for current limits.					3. Some State or Federal agencies may have alternative hold times and those must be met.				
2. Standard TAT is measured by business days – rush/customized TAT may be available by prearrangement.					*All methods require samples to remain in darkness or out of direct contact with sunlight.				

## Detection/Reporting Limits and Sampling Guidelines

Method 1668A can be used for the determination of 209 polychlorinated biphenyls (PCBs) in a variety of matrices using isotope dilution by Gas Chromatography/High-resolution Mass Spectrometry (GC/HRMS). Utilizing a limit of 300 ng/L for total PCB content, this approach typically meets CWA regulatory program limits for TMDL or Impaired Water State Programs.

It is recommended that a single, two-liter (2L) container (clean amber glass) should be used for sample collection. Sampling containers and deionized water (optional) should originate from the analytical laboratory performing PCB testing. A targeted volume of four liters (4L) per sample is preferred.