

It is preferred that toxicity testing for additive reviews is conducted according to **USEPA (aquatic) or ASTM (sediment) methods**, or that toxicity testing is conducted at a **Wisconsin-certified laboratory**.

However, toxicity testing is sometimes conducted using other methods. In order to streamline the additive review process, a list of preferred and previously-evaluated acceptable alternative methods can be found in the table below. This list will periodically be updated if new methods are evaluated.

If the toxicity testing method you are looking for does not appear in the table below, please contact Meghan Williams, Water Evaluation Toxicologist, at [meghanc3.williams@wisconsin.gov](mailto:meghanc3.williams@wisconsin.gov) or 608-267-7654.

Test type	Species	Preferred methods	Acceptable alternative methods
<b>Water column tests</b>			
<b>Acute toxicity</b>			
	Ceriodaphnia dubia (water flea)	EPA 2002.0 EPA-821-R-02-012	40 CFR Part 797.1300
	Ceriodaphnia reticulata (water flea)		
	Ceriodaphnia serrulatus (water flea)		
	Daphnia pulex and Daphnia magna (water flea)	EPA 2021.0 EPA-821-R-02-012	OECD 202 40 CFR Part 797.1300
	Pimephales promelas (Fathead minnow)	EPA 2000.0 EPA-821-R-02-012	OECD 203 40 CFR Part 797.1400
	Oncorhynchus mykiss (Rainbow trout)	EPA 2019.0 EPA-821-R-02-012	OECD 203 40 CFR Part 797.1400
	Salvelinus fontinalis (Brook trout)	EPA 2019.0 EPA-821-R-02-012	
	Lepomis macrochirus (Bluegill)		OECD 203 40 CFR Part 797.1400
<b>Chronic toxicity</b>			
	Pimephales promelas (Fathead minnow), larval survival and growth	EPA 1000.0 EPA-821-R-02-013	Environment Canada EPS 1-RM-22
	Pimephales promelas (Fathead minnow), embryo-larval survival and teratogenicity	EPA 1001.0	
	Ceriodaphnia dubia (water flea), survival and reproduction	EPA 1002.0 EPA-821-R-02-013	Environment Canada EPS 1-RM-21
<b>Whole-sediment tests</b>			
<b>Acute toxicity</b>			
	Ceriodaphnia dubia (water flea)	ASTM E1706	
	Daphnia magna (water flea)	ASTM E1706	
<b>Chronic toxicity</b>			
	Hyalella azteca (amphipod)	ASTM E1706	

List is current as of May 2021

