

ERP Toxicity Review Checklist – Chronic test

01/21/2020

Project Name & Permit # _____

Bioassay Lab: _____ Test Start Date: _____

Check that each of the following factors are present and acceptable for each species tested. I = invertebrate, F= fish	I	F
1. The bioassay is for the correct test (chronic) and species		
2. The bioassay lab is on the DOH list of certified labs for the test performed.		
3. The Chain of Custody forms (3) are filled out. Arrival Temperature is $\leq 6^{\circ}\text{C}$.		
4. Was the elapsed time from the sample collection to first use in bioassay < 36 hours?		
5. Does the effluent preparation match the permit/RFI requirements?		
6. Test Duration: C. dubia – until 60% of surviving control organisms have 3 broods, max 8 days. P. promelas, A. bahia, M. beryllina – 7 days		
7. Were the test solutions renewed daily?		
8. Were the test organisms fed daily?		
9. Was there a minimum of five concentrations of effluent? Check permit/procedure for required dilutions.		
10. Was the correct dilution water used? Freshwater tests – Moderately hard dilution water. Saltwater tests – Artificial seawater - check permit for required salinity.		
11. Was the correct volume of test solution used in each test chamber? C. dubia - 15 mL recommended minimum P. promelas – 250 mL recommended minimum M. beryllina – 500 - 750 mL recommended A. bahia – 150 mL recommended minimum		
12. Were the correct number of test organisms placed in each test chamber? C. dubia - 1 required P. promelas – 10 recommended minimum A. bahia – 5 required minimum M. beryllina – 10 required minimum		
13. Were the correct number of replicate test chambers used for each concentration? C. dubia – 10 required minimum P. promelas, M. beryllina – 4 required minimum A. bahia – 8 required minimum		
14. Were the test organisms the correct age? C. dubia - < 24 hours, 8 hour range in age P. promelas - < 24 hours M. beryllina – 7-11 days, ≤ 24 -hour age range A. bahia – 7 days required		
15. Was the control survival greater than 80%?		
16. For C. dubia , did 60% of surviving control females have 3 broods before test end?		
17. For C. dubia was the average number of young per surviving female ≥ 15 ?		

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	I	F
18. Was the average dry weight per surviving control organism acceptable? P. promelas ≥ 0.25 mg, M. beryllina ≥ 0.50 mg, A. bahia ≥ 0.20 mg		
19. Was the test run at the recommended temperature? C. dubia , P. Promelas , M. beryllina - 25 ± 1°C A. bahia – 26 ± 1°C		
20. Was temperature checked daily? Was temperature range ≤ 3°C?		
21. Was DO checked each day?		
22. Were the test solutions aerated? Only if DO falls below 4.0 mg/L. Aerate all sample chambers, not for C. dubia .		
23. Was the sample dechlorinated? Not usually allowed.		
24. Did the lab calculate the IC25?		
25. Did the results meet the permit limit? (IC25 > 100%)		
26. Did the lab include their monthly standard reference toxicant data in the report?		
27. Was the monthly SRT test a valid test?		
28. Did the lab submit their QA chart?		
29. Was the monthly result within the 2 s.d.?		
30. Did the lab submit their CV chart?		
31. Was the CV (standard deviation/mean) within control limits?		
32. Was this a valid toxicity test?		

Record Invertebrate SRT test species and test start date: _____

Record Fish SRT test species and test start date: _____

Reviewer's Name: _____ Review Date: _____

Comments: _____
