



**TNI PT for Accreditation**  
**Fields of Proficiency Testing**  
**Whole Effluent Toxicity Testing - Non-Potable Water**  
**Effective Date- May 19, 2026**

Blue = New Analyte      Magenta = Changes

| Matrix | EPA <sup>1</sup><br>Test<br>Code | EPA<br>Method<br>Reference | EPA <sup>1</sup><br>Analyte<br>Code | Technology <sup>2,6,7</sup><br>(Organism, Test Type [duration, type, condition, temperature and dilution water]) | Analyte <sup>3</sup><br>(Endpoint) | Reference Toxicants and Concentration <sup>4,5</sup> |  |  |
|--------|----------------------------------|----------------------------|-------------------------------------|--|------------------------------------|--|--|--|
|        |                                  |                            |                                     |  |                                    | Potassium<br>chloride<br><br>(mg/L)                  | Zinc sulfate<br>heptahydrate<br><br>(mg/L) | Ammonium<br>phosphate<br>dibasic<br><br>(mg/L) |
| NPW    | 0013                             | 2000.0                     | 754                                 | Fathead minnow ( <i>Pimephales promelas</i> ), 48-hr Acute, nonrenewal, 25°C, MHSF                               | LC50                               | 2000   | -  | 400  |
| NPW    | 0014                             | 2000.0                     | 755                                 | Fathead minnow ( <i>Pimephales promelas</i> ), 48-hr Acute, nonrenewal, 25°C, 20% DMW                            | LC50                               | 2000   | 8.8  | 300  |
| NPW    | 0015                             | 1000.0                     | 756                                 | Fathead minnow ( <i>Pimephales promelas</i> ), 7-day Chronic, daily renewal, MHSF                                | NOEC Survival                      | 2000   | 2.2  | 150  |
| NPW    | 0015                             | 1000.0                     | 808                                 | Fathead minnow ( <i>Pimephales promelas</i> ), 7-day Chronic, daily renewal, MHSF                                | IC25 (ON) Growth                   | 2000   | 2.2  | 150  |
| NPW    | 0015                             | 1000.0                     | 810                                 | Fathead minnow ( <i>Pimephales promelas</i> ), 7-day Chronic, daily renewal, MHSF                                | NOEC (ON) Growth                   | 2000   | 2.2  | 150  |
| NPW    | 0016                             | 1000.0                     | 759                                 | Fathead minnow ( <i>Pimephales promelas</i> ), 7-day Chronic, daily renewal, 20% DMW                             | NOEC Survival                      | 2000   | 4.4  | 150  |
| NPW    | 0016                             | 1000.0                     | 812                                 | Fathead minnow ( <i>Pimephales promelas</i> ), 7-day Chronic, daily renewal, 20% DMW                             | IC25 (ON) Growth                   | 2000   | 4.4  | 150  |
| NPW    | 0016                             | 1000.0                     | 814                                 | Fathead minnow ( <i>Pimephales promelas</i> ), 7-day Chronic, daily renewal, 20% DMW                             | NOEC (ON) Growth                   | 2000   | 4.4  | 150  |
| NPW    | 0019                             | 2002.0                     | 764                                 | Ceriodaphnia dubia, 48-hr Acute, nonrenewal, 25°C, MHSF  | LC50                               | 1000   | 2.2  | 200  |
| NPW    | 0020                             | 2002.0                     | 765                                 | Ceriodaphnia dubia, 48-hr Acute, nonrenewal, 25°C, 20% DMW   | LC50                               | 1000   | 2.2  | 200  |
| NPW    | 0021                             | 1002.0                     | 766                                 | Ceriodaphnia dubia, 3-Brood Chronic, daily renewal, MHSF   | NOEC Survival                      | 1000   | 1.5  | 200  |
| NPW    | 0021                             | 1002.0                     | 767                                 | Ceriodaphnia dubia, 3-Brood Chronic, daily renewal, MHSF   | IC25 Reproduction                  | 1000   | 1.5  | 200  |
| NPW    | 0021                             | 1002.0                     | 768                                 | Ceriodaphnia dubia, 3-Brood Chronic, daily renewal, MHSF   | NOEC Reproduction                  | 1000   | 1.5  | 200  |
| NPW    | 0022                             | 1002.0                     | 769                                 | Ceriodaphnia dubia, 3-Brood Chronic, daily renewal, 20% DMW  | NOEC Survival                      | 1000   | 1.5  | 200  |
| NPW    | 0022                             | 1002.0                     | 770                                 | Ceriodaphnia dubia, 3-Brood Chronic, daily renewal, 20% DMW  | IC25 Reproduction                  | 1000   | 1.5  | 200  |
| NPW    | 0022                             | 1002.0                     | 771                                 | Ceriodaphnia dubia, 3-Brood Chronic, daily renewal, 20% DMW  | NOEC Reproduction                  | 1000   | 1.5  | 200  |
| NPW    | 0032                             | 2021.0                     | 788                                 | Daphnia magna, 48-hr Acute, nonrenewal, 25°C, MHSF   | LC50                               | 1000   | 8.8  | 400  |
| NPW    | 0038                             | 2021.0                     | 794                                 | Daphnia pulex, 48-hr Acute, nonrenewal, 25°C, MHSF   | LC50                               | 1000   | 8.8  | 400  |
| NPW    | 0042                             | 2007.0                     | 798                                 | Mysid ( <i>Mysidopsis bahia</i> , <i>Americamysis bahia</i> ), 48-hr Acute, nonrenewal, 25°C, SSW                | LC50                               | 1200   | 17.6                                       | -  |
| NPW    | 0043                             | 1007.0                     | 799                                 | Mysid ( <i>Mysidopsis bahia</i> , <i>Americamysis bahia</i> ), 7-day Chronic, daily renewal, SSW                 | NOEC Survival                      | 1200   | 2.6  | -  |
| NPW    | 0043                             | 1007.0                     | 816                                 | Mysid ( <i>Mysidopsis bahia</i> , <i>Americamysis bahia</i> ), 7-day Chronic, daily renewal, SSW                 | IC25 (ON) Growth                   | 1200   | 2.6  | -  |
| NPW    | 0043                             | 1007.0                     | 818                                 | Mysid ( <i>Mysidopsis bahia</i> , <i>Americamysis bahia</i> ), 7-day Chronic, daily renewal, SSW                 | NOEC (ON) Growth                   | 1200   | 2.6  | -  |
| NPW    | 0044                             | 2006.0                     | 803                                 | Inland silverside ( <i>Menidia beryllina</i> ), 48-hr Acute, nonrenewal, 25°C, SSW                               | LC50                               | 1000   | 35.3                                       | -  |
| NPW    | 0045                             | 1006.0                     | 824                                 | Inland silverside ( <i>Menidia beryllina</i> ), 7-day Chronic, daily renewal, SSW                                | NOEC Survival                      | 1000   | -  | -  |
| NPW    | 0045                             | 1006.0                     | 825                                 | Inland silverside ( <i>Menidia beryllina</i> ), 7-day Chronic, daily renewal, SSW                                | IC25 (ON) Growth                   | 1000   | -  | -  |
| NPW    | 0045                             | 1006.0                     | 826                                 | Inland silverside ( <i>Menidia beryllina</i> ), 7-day Chronic, daily renewal, SSW                                | NOEC (ON) Growth                   | 1000   | -  | -  |
| NPW    | 0046                             | 2004.0                     | 804                                 | Sheepshead minnow ( <i>Cyprinodon variegatus</i> ), 48-hr Acute, nonrenewal, 25°C, SSW                           | LC50                               | 6000   | -  | -  |



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|     |      |        |     |   |                  |      |     |   |
|-----|------|--------|-----|---|------------------|------|-----|---|
| NPW | 0047 | 1004.0 | 805 | Sheepshead minnow ( <i>Cyprinodon variegatus</i> ), 7-day Chronic, daily renewal, SSW | NOEC Survival    | 3000 | 6.6 | - |
| NPW | 0047 | 1004.0 | 820 | Sheepshead minnow ( <i>Cyprinodon variegatus</i> ), 7-day Chronic, daily renewal, SSW | IC25 (ON) Growth | 3000 | 6.6 | - |
| NPW | 0047 | 1004.0 | 822 | Sheepshead minnow ( <i>Cyprinodon variegatus</i> ), 7-day Chronic, daily renewal, SSW | NOEC (ON) Growth | 3000 | 6.6 | - |

1) EPA Test Code and Analyte Code are Technology and Analyte specific.

2) Dilution Water definition:

MHSF = Moderately Hard Synthetic Freshwater

20% DMW - 20% Diluted Mineral Water

SSW - Synthetic seawater

3) Analyte definitions:

LC50 = Concentration where 50% of the organisms do not survive.

NOEC = No Observable Effects Concentration

IC25 = Concentration where there is 25% reduction in growth or reproduction.

ON = Calculation based on Original Number of organisms used to start the test.

4) Reference Toxicant Concentrations are shown as guidance.

5) Reference Toxicant Concentrations shown above are as the toxicant salt or compound.

6) Proficiency Study Assigned Values (AV):

NOEC Analytes: AV should be set to the Study Median of the data reported by laboratories; reported values are <6.25%, 6.25%, 12.5%, 25%, 50%, 100%, or >100%. If the Median falls between two of these values, then the AV is set at the higher value.

Non-NOEC Analytes: AV should be set to the Study Mean, calculated using reported values from 6.25% and 100%, inclusive.

Robust Study Mean and Standard Deviation are generated using appropriate statistical analysis of study data set. (ie Bi-weight, Grubbs, Dixon, ISO 13528, etc.)

7) Proficiency Testing Acceptance Limits:

NOEC Analytes: Lower Acceptance Limit is the test dilution below the Median (or <6.25%, whichever is higher); Upper Acceptance Limit is the test dilution above the Median (or >100%, whichever is lower).

If the Median is between two test dilutions, then the Lower Acceptance Limit is the second test dilution below the Median, and the Upper Acceptance Limit is the second test dilution above the Median.

Non-NOEC Analytes: Mean +/- 2 Standard Deviations. If the upper limit is greater than 100%, then set the Upper Acceptance Limit at ">100%." If the lower limit is less than 6.25%, then set the Lower Acceptance Limit to "<6.25%."

**For Non-NOEC Analytes:**

If the lower acceptance limit generated using the criteria contained in this table is greater than 90% of the study mean, the lower acceptance limits are set at 90% of the study mean.

If the upper acceptance limit generated using the criteria contained in this table is less than 110% of the study mean, the upper acceptance limits are set at 110% of the study mean.