United States Environmental Protection Agency Office of Water, Office of Wastewater Management, Water Permits Division May 2012

National Pollutant Discharge Elimination System (NPDES) Whole Effluent Toxicity (WET) Spreadsheet

Spreadsheet Description

The NPDES Whole Effluent Toxicity (WET) Spreadsheet is a statistical spreadsheet (using Microsoft Excel^{®)}, which the Water Permits Division/Office of Wastewater Management is making available to EPA Regions, their States, and others for analyzing valid WET test data. The spreadsheet calculates acute and chronic WET effects (e.g., survival, reproduction, biomass, fertilization) identified in EPA's WET test methods under the NPDES program, including EPA WET test methods at 40 CFR Part 136 (USEPA 2002a, 2002b, 2002c) and the West Coast marine species methods (USEPA 1995). The spreadsheet calculates various WET endpoints recommended in EPA's Technical Support Document (TSD) (e.g., LC50, NOAEC, NOEC, LOEC, IC25; see Chapter 1, Section 1.3 of the TSD) based on the statistical flowcharts provided in EPA's test methods, as well as results using EPA's NPDES WET Test of Significant Toxicity document (TST; EPA 833-R-10-003, June 2010).

Why is U.S. EPA making this spreadsheet available to States and Regions?

After receiving numerous requests from EPA Regions and States, EPA developed the NPDES WET Spreadsheet to provide an easy to use, inexpensive way for States and Regions to independently analyze and evaluate valid WET data submitted by NPDES permittees (i.e., monitoring data used for determining WET reasonable potential or compliance monitoring for WET NPDES limits).

What can the NPDES WET spreadsheet be used for?

Features of the NPDES WET Spreadsheet

- ✓ Uses Microsoft Excel[®], which is readily available on most computers
- ✓ Easy data entry
- ✓ Drop down menus for entering type of WET test and endpoint
- ✓ Runs all WET endpoint analyses using EPA WET test method flow charts (TSD analyses) as well as EPA's TST
- ✓ One-click output of data
- ✓ Graphical and tabular display of results
- ✓ Ability to easily print or save analysis results
- ✓ Runs Reasonable Potential (RP) analyses using either TSD or TST approaches and calculates permit limits using TSD procedures.
- **Determining reasonable potential.** Point estimates using EPA's Technical Support Document approaches, as well as TST can be used for determining Reasonable Potential (RP).
- ➤ Compliance determinations. NOEC/LOEC and point estimates, as well as TST results can be used to determine permit compliance.

For more information, contact:

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