WESTCAS POLICY STATEMENT TEMPLATE EXAMPLE MARCH 2009

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POLICY STATEMENT EXAMPLE:

I. Title

Policy Statement on Whole Effluent Toxicity Testing

II. Brief Summary of the Issue

The Whole Effluent Toxicity (WET) test was developed to assess the potential of an effluent discharge to induce toxic effects in aquatic life. This test provides a valuable tool for protecting the nation's waters since it is not possible to assess the potential for toxic effects using solely chemical testing.

III. Description of Impacts on Arid West

When WET requirements are incorporated into permits for the discharge of treated effluent, the requirements should be consistent with the documented variability of the test. Because the test relies on the response of living organisms, there is inherent variability in test results. The variability of the organism's response limits the ability of a permittee to determine the cause of sublethal test failures. Scientific studies relating the frequency and magnitude of sublethal test failures to a potential for instream impacts are lacking. Moreover, the salts present in waters in the arid West frequently cause ionic interference in WET testing. Additionally, most arid West receiving waters are ephemeral streams and effluent-dependent waters. Because of the absence of dilution, test pass or failure is typically determined based on samples that are 100% effluent, or nearly 100% effluent.

IV. Overall Recommendation or WESTCAS Position

WESTCAS believes that the proper role for WET testing in permits is to identify instances wherein an effluent may be producing toxic effects to instream organisms, and to facilitate the identification of appropriate measures to control the toxic effects. To this end, WET permit requirements should be based on the following principles:

 The Reasonable Potential (RP) determination should be based on a more scientifically valid approach than that set forth in the <u>Technical Support</u> <u>Document for Water-Quality-Based Toxics Control (TSD)</u>. The TSD approach

- concludes there is a reasonable potential that instream toxic effects exist if there is a single test failure (lethal or sublethal) over the period of record being evaluated. There are no scientific studies that suggest that a single sublethal test failure can be correlated to instream impacts.
- A numeric WET permit limit is generally inappropriate. However, if a limit is imposed, it should be consistent with the variability of the test and account for challenges associated with conducting a successful Toxicity Identification Evaluation/Toxicity Reduction Evaluation (TIE/TRE).
- Repeated failures of a WET test at an appropriate magnitude of toxicity should trigger a TIE/TRE. The magnitude and frequency of test failures that trigger a TIE/TRE should be different for acute, chronic lethal, and chronic sublethal effects.
- Permit limits should not be established for sublethal effects because of the high variability of these test results, and the lack of evidence of instream effects.
- Permit limits based on lethality should be based on a median result over an appropriate period of time in order to account for test variability. A minimum period of time should be three months.
- Endpoints based on Percent Effect should be acceptable, as well as the No Observed Effect Concentration (NOEC) and 25% Inhibition Concentration endpoints.
- Permit limits should not be established and/or penalties incurred for test failures resulting from the ionic composition of the domestic water supply for the area served by the wastewater treatment facility.
- As long as a permittee is pursuing a TIE/TRE with due diligence, the permittee should not be held in violation of their permit
- V. (Optional) List of Annualized Action Items for 1-2 Years