

Summary of Significant Potential Changes to the Implementation Procedures for Whole Effluent Toxicity

January 7, 2009

Testing Frequencies

- Currently, testing frequencies are quarterly for the first year, with some, but not all, permittees eligible for a testing frequency reduction. The permittees that had quarterly testing in the previous permit "for other reasons" are not eligible for the testing frequency reduction. The testing frequencies in the previous permit were based on a flow chart in the 1995 IPs, where the potential for greater toxicity increased the testing frequency. Thus, the process for determining testing frequencies is, for all practical purposes, derived from the 1995 IPs, which were superseded by the 2003 IPs.
- As proposed, an analytical Reasonable Potential (RP) determination will be performed on the testing data from the previous five years. (See below) Permittees that are determined to meet RP will get Whole Effluent Toxicity (WET) limits and will not be eligible for the testing frequency reduction. The RP determination eliminates the need for the "de facto" testing frequencies from the 1995 IPs; all permittees without WET limits will now be eligible for the testing frequency reduction.

Sublethal Whole Effluent Toxicity (WET) Limits

- Currently, only the lethal endpoint was addressed by WET limits; and WET limits were only established after a permittee had demonstrated persistent significant lethality and had performed a Toxicity Reduction Evaluation (TRE) but was unable to identify and confirm the toxicant.
- As proposed, WET limits will address both lethal and sublethal (growth and reproduction) endpoints. WET limits may still be added after a TRE, but also when a determination of RP is made during the permit renewal or amendment process.

Reasonable Potential (RP) Determination for Toxicity

- Currently, dischargers perform quarterly testing when there is insufficient data to determine RP to cause toxicity. Additional factors are weighed in determining whether there is reasonable potential to cause toxicity.
- EPA Region 6 prefers a modified use of the Technical Support Document (TSD) analytical approach, where one failure requires the addition of a WET limit unless there are mitigating circumstances.

- As proposed, an RP determination will be performed when a permit is renewed or amended, with the previous five years of data reviewed.
- If a determination of RP is made, then the permit will be issued with a WET limit going into effect after an investigative and compliance period.
- RP will be determined separately for lethal and sublethal effects. If RP is determined, a WET limit will be included in the permit. Thus, a permittee may have a sublethal Whole Effluent Toxicity (WET) limit but not a lethal one, or may have both.
- RP for lethality is initially determined when there has been more than two failures in the past three years or more than three failures in the past five years; RP for sublethality is initially determined when there has been more than three failures in the past three years or more than five failures in the past five years;
- After initial determination, a final determination is subject to Best Professional Judgment (BPJ) based on a number of factors outlined in the IPs.

WET Limit Removal

- Currently, WET limits are treated the same as other limits and subject to "anti-backsliding"
- As proposed, WET limits may be removed two ways:
 1. Automatically during the compliance period based on no additional demonstrations of significant toxicity; and
 2. By a major amendment after the limit has become effective and with no demonstrations of toxicity in the past three years.

Enforcement of WET Limits

- Currently, an initial lethal WET limit noncompliance generates a Notice of Violation (NOV). Testing then increases to monthly until the permittee passes three consecutive tests. If another noncompliance occurs during this period of increased testing, the permittee is referred for mandatory enforcement.
- As proposed, a first failure results in an increased testing frequency but without the issuance of an NOV.
- For a lethal WET limit, a Notice of Enforcement (NOE) will be made if another lethal failure occurs during the period of increased testing.
- For a sublethal WET limit, a Notice of Enforcement (NOE) will be made if two additional sublethal failures occur during the period of increased testing.