



July 22, 2011

Dr. Al Armendariz, Regional Administrator
USEPA Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

Dear Dr. Armendariz:

Thank you for your letter of June 22, 2011, responding to our letter of May 6, 2011, regarding sublethal whole effluent toxicity (WET) permit limits. We appreciate your consideration of our issues with implementation of this requirement in Texas. The Texas WET Coalition believes that WET testing can have a significant positive role in helping to ensure that wastewater treatment is effective and protective of the environment. However, there are several points in your letter that we view differently, and we would like to take this opportunity to respond.

CWA Act and Texas WQS require sublethal WET limits

In your letter you stated that the Clean Water Act and the Texas Water Quality Standards require permits limits to protect against sublethal toxicity when reasonable potential exists. While we do not disagree with this point, our major objection all along has been how reasonable potential is determined, and how the limit is subsequently incorporated into discharge permits. We believe that determining and managing sublethal toxicity is different from *lethal* toxicity, and requires a different approach to permitting.

Cost

In response to a request from several of Texas' elected officials, our WET coalition has developed the enclosed document titled "Potential Cost Impacts on Texas Publicly Owned Treatment Works Due to Proposed Whole Effluent Toxicity Sublethal Permit Limits." This report estimates the number of Texas permittees that may require sublethal permit limits based on information received from EPA and the Texas Commission on Environmental Quality. Potential costs were broken down into three categories:

- Cost of toxicity reduction evaluation (TRE)

- Cost of enforcement actions associated with test failures while the TRE is underway and corrective actions are being implemented, or as a result of the inability of the permittee to identify a cause of test failures.
- Cost of implementing a control strategy (assuming that a cause of the sublethal failures can be identified)

The resulting costs are summarized in the table on page 13 of the report.

Correlation of Sublethal WET Testing to Instream Impacts

Your letter cites the District of Columbia Court of Appeals decision in *Edison Electric Institute v. Environmental Protection Agency*, 391 F.3d 1267 (D.C. Cir. 2004) as rejecting any arguments that there is a lack of demonstrated correlation between sublethal WET testing in the laboratory and actual instream impacts that might justify a different treatment for sublethal testing. This is a misstatement of the Court of Appeals Decision. While the Court of Appeals did uphold the WET test method, in general, its opinion anticipates the very debate we are having about the proper *implementation* of sublethal WET testing in permitting. The Court of Appeals clearly points to the role of state permitting authorities in setting permit limits to “allay” the concerns raised by the regulated community that the “correlation between laboratory toxicity and instream impacts grows weaker at lower levels of toxicity.” *Id.* at 1274. Because such limits are imposed by local permitting authorities, the Court of Appeals explains that such permitting decisions are not a part of its review in *Edison Electric* and confirms that “individual dischargers remain free to challenge their permits on a case-by-case basis if they believe that local authorities are regulating at a level that poses only a minimal risk to aquatic life.” *Id.*

This is precisely what we, as representatives of the regulated community are doing — challenging a permitting implementation policy because we believe that EPA Region 6 is attempting to regulate to levels posing only minimal risks, if any. The EPA study cited by the Court of Appeals in *Edison Electric* as supporting the “representativeness of the WET test methods in general”¹ actually calls into question the link between sublethal test results and instream impacts. The study observes:

[w]e appear to be approaching consensus that when significant lethality (and in the case of effluents, assuming accurate dilution has been considered) is seen in toxicity tests there is a very high potential of aquatic ecosystem impairment. As this connection is accepted, we continue to struggle with the idea that sublethal

¹ *Edison Elec. Institute, et al. v. EPA*, (No. 96-1062, 96-1124) (C.C.D.C. 1996), *aff'd*. 391 F.3d 1267, 1273 (D.C. Cir. 2004).

effects on indicator species can result in detectable adverse ecosystem responses.²

The Coalition is unaware of studies since 1999 that have reached a different conclusion (i.e. "that sublethal effects on indicator species can result in detectable adverse ecosystem responses"). A study by the Water Environment Research Foundation³ found that, "WET test results [of effluent] exhibited few relationships with [instream] bioassessment results, and could not usually predict instream effects even when incorporating actual effluent dilution."

Even under EPA's own study results, EPA Region 6 is seeking to regulate at such a minimal level by requiring permit limits on the basis of a single sublethal WET test failure. Your letter also fails to mention the Court's discussion that, "[e]ven by EPA's calculations, WET tests will be wrong some of the time, which is why EPA warned against using a single test result to institute an action for a civil penalty." *Id.* at 1272. If a single WET test should not support a civil enforcement case, there are similar problems in using a single result to impose a permit limit.

History of Successful Sublethal Only TREs

You stated that there have been two successful sublethal TRE studies in Texas. However, you do not identify by whom these studies were done so we have no way of benefitting from any information regarding this general observation. It is perplexing that you state, "Many EPA WET methods are being used by industrial and municipal permittees nationally to successfully identify and eliminate the causes of chronic sublethal WET test failures." A response to the recent FOIA request by the Texas WET Coalition, no documents were provided by any EPA office or laboratory that contained information demonstrating that a sublethal TRE study had been successfully conducted in Texas or elsewhere.

Your letter references Dr. James D. Horne's poster "Sublethal Toxicity Identification – Texas Case Studies" as a study demonstrating the correlation between sublethal test effects and instream toxicity. Your conclusion is confusing and erroneous. We do not find any reference to instream toxicity or a correlation with instream toxicity, and the poster does not present any instream data. We have also been unable to obtain any study/information from the Society of Environmental Toxicology and Chemistry (SETAC)

² De Vlaming, Victor and Teresa J. Norberg-King, A Review of Single Species Toxicity Tests: Are the Tests Reliable Predictors of Aquatic Ecosystem Community Responses?, EPA/600/R-97/114 (1999) p. 24 available at <http://nepis.epa.gov>.

³ Jerry Diamond, James Stribling, Evaluation of WET Testing as an Indicator of Aquatic Health in Effluent-Dominated Streams: A Pilot Study, Water Environment Research Foundation Report (2007).

WET Coalition
July 22, 2011

that describes the correlation you refer to between sublethal toxicity and instream impacts. Dr. Horne's work demonstrates that sublethal TIEs require certain minimum criteria before a sublethal TRE may be successful. However, with regard to sublethal TIEs, Dr. Horne acknowledges several limitations, including the "potential for limited efficacy if toxic signal is weak." The limitations are evident in the only POTW case study presented in Dr. Horne's summary, where the strongest WET test failure is recorded after the presumed cause of WET test failures is controlled.

Enforcement

In your letter, you indicated that EPA guidance does not recommend that a single exceedance of a WET limit causing no known harm result in a formal enforcement response. We are aware of this guidance, but point out that the exceedance of a WET limit is still a violation, regardless of the enforcement response. Furthermore, the permittee can be diligently attempting to respond to the violation by conducting a TRE, and yet violations will continue to accrue until the source of the violation is identified. Unfortunately, in the case of sublethal only exceedances, identifying the source can be a lengthy and expensive process.

In conclusion, we believe that significant, persistent lethal effects require a response on the part of the wastewater plant operator. Furthermore, repeated sublethal effects can be a useful indicator that lethal effects may be present and, thus, could appropriately trigger a response of more frequent testing to confirm or refute this potential. However, sublethal WET permit limits, particularly in the form where every test exhibiting a sublethal effect is a permit noncompliance, are excessively burdensome to the community that must spend substantial funds in an attempt to solve what may be a non-existent problem.

Thank you for your consideration of these issues. Please feel free to contact me at 512-924-2102 or carol@weat.org if you have any questions, or need any additional information.

Sincerely,



Carol Batterton
On behalf of the Texas WET Coalition

Enclosure

WET Coalition
July 22, 2011

Cc: Texas Congressional Delegation (w/o enclosure)
Ms. L'Oreal Stepney, TCEQ (w/o enclosure)
Mr. Charles Maguire, TCEQ (w/o enclosure)
Mr. Dean Robbins, Deputy Executive Director, TWCA (w/o enclosure)
Mr. Randy Palachek, Chairman Water Quality Committee, TWCA (w/o enclosure)
Mr. David Briggs, President, WEAT (w/o enclosure)
Mr. Gordon Pederson, President, TACWA (w/o enclosure)
Mr. David Scholler, Chair, TAWWA (w/o enclosure)
Mr. Mike Howe, Executive Director, TAWWA (w/o enclosure)