UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 14 1992

OFFICE OF WATER

MEMORANDUM

SUBJECT: Clarifications Regarding Certain Aspects of EPA's Surface Water Toxics Control Regulations

FROM: for Michael B. Cook, Director
Office of Wastewater Enforcement And Compliance

Robert H. Wayland, III, Director
Office of Wetlands, Oceans and Watersheds

TO: Water Management Division Directors, Regions I-X

Attached is a set of clarifications relating to five issues associated with EPA's Surface Water Toxics Control Regulations. Each clarification concerns aspects of EPA's regulations relating to section 304(l) and water quality-based effluent limitations.

These clarifications are being issued by EPA in connection with negotiations between EPA and petitioners in the case of American Paper Institute v. EPA (No. 89-1499), which is pending in the U.S. Court of Appeals for the D.C. Circuit. In return, petitioners have agreed not to brief the issues that are subject to these clarifications in the aforementioned case.

Your offices should refer to these clarifications when applying the regulations to which they correspond. We also ask that you distribute these clarifications to the States within your respective regions.

cc: Regional Counsel Water Branch Chiefs, Regions I-X

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CLARIFICATIONS

1. ISSUE: The definition of whole effluent toxicity in 40 C.F.R. § 122.2.

CLARIFICATION:

EPA defined whole effluent toxicity in 40 C.F.R. § 122.2 as the "aggregate toxic effect of an effluent measured directly by a toxicity test." The petitioners were concerned that this definition, in conjunction with the requirement in 40 C.F.R. § 122.44(d)(1)(iv) and (v) that states implement narrative criteria by imposing limits on whole effluent toxicity, could be read expansively to require states to impose whole effluent toxicity limits prohibiting discharges which evoke any response in test organisms, no matter how slight, as measured by toxicity tests. The petitioners stated that such an interpretation could deprive a state of the authority to define what it considers to be acceptable levels of toxicity in a discharger's effluent consistent with applicable water quality standards. EPA does not interpret the definition of whole effluent toxicity in section 122.2, or the requirements of section 122.44(d)(1)(iv) and (v), as imposing any substantive water quality standard for what constitutes an acceptable level of whole effluent toxicity. Rather, these sections indicate when the permitting authority must establish permit limits on whole effluent toxicity for purposes of achieving water quality standards (either numeric or narrative water quality criteria).

2. ISSUE: The enforceability of limitations based upon single toxicity test results, as discussed at 54 Fed. Reg. 23,871.

CLARIFICATION:

In the preamble to the final rule, at 54 Fed. Reg. 23,871, EPA stated that:

> A limit on whole effluent toxicity refers to a numeric effluent limitation expressed in terms such as toxic units, no observed effect level (NOEL), LC 50, or percent mortality. Effluent limitations may be expressed as chronic toxicity or acute toxicity (or both). Regardless of how the numeric limitations for whole effluent toxicity are expressed, any single violation of an effluent limit is a violation of the NPDES permit and is subject to the full range of state and Federal enforcement actions.

EPA interprets this paragraph and existing regulations to provide that violation of an effluent limit for whole effluent toxicity is enforceable, whether that limit is expressed in terms of a numeric effluent limit or, where setting a numeric effluent

limit is infeasible, best management practices. (For example, some storm water discharges have volumes and pollutant concentrations that fluctuate wildly with storm events, making it difficult to document resulting water quality impacts.) The preamble statement does not address the issue of how permit limits may be derived. For example, when used appropriately, permit limits may include averages (e.g., monthly averages) which may be exceeded by an individual measurement so long as the average of the individual measurements is not above the limit and any applicable daily maximum is complied with. Permit limits, however expressed, must be designed to protect water quality standards.

3. ISSUE: The requirement for limitations on all pollutants and the use of indicators, as set forth at 40 C.F.R. § 122.44(d)(1)(i).

CLARIFICATION:

40 C.F.R. § 122.44(d)(1)(i) requires that permits contain effluent limitations to control pollutants that "are or may be" discharged at levels having the "reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

EPA did not intend to require water quality-based permit limitations on all pollutants contained in a discharge through the promulgation of the June 2, 1989 regulation; nor do we believe that the regulation has that effect. The proper interpretation of the regulations is that developing water quality-based limitations is a step-by-step process. First, the permitting authority must evaluate all available information to determine at what level pollutants are expected to exist in the current discharge. This determination is governed by 40 C.F.R. § 122.44(d)(1)(ii). The goal of this step is to estimate the levels of pollutants in the effluent as discharged at the time of permit application, or with any projected increases in the discharge.

Under 40 C.F.R. § 122.44(d)(1)(ii), the permitting authority must take into account the likely variability of the pollutant in the effluent, other current discharges (from both point and non-point sources as well as natural background), and (where appropriate) dilution. At the end of this step the permitting authority will have estimated an in-stream level of the pollutant (or pollutant parameter) of concern that has the reasonable potential to occur as a result of the discharge. (Most of this

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[1] The technological or economic feasibility of a discharger meeting numeric limitations is not relevant to this determination.

step may have already been completed as a part of the total maximum daily load and wasteload allocation calculation.) If the estimated in-stream levels (which may occur, but will not necessarily occur) would exceed any applicable water quality criterion, including the narrative criteria, then the permitting authority must go to the next step and establish a water quality-based limit in accordance with paragraphs 122.44(d)(1)(iii)-(vi).

EPA does not interpret section 122.44(d)(1)(i) as requiring that permits contain water quality-based limitations on every pollutant that may be present in a given effluent. Rather, water quality-based limits are established where the permitting authority reasonably anticipates the discharge of pollutants by the permittee at levels that have the reasonable potential to cause or contribute to an excursion above any state water quality criterion, including state narrative criteria for water quality. 40 C.F.R. § 122.44(d)(1)(i). The permitting authority should evaluate the reasonable potential for an excursion above a water quality criterion in light of the character of the effluent as discharged.

4. <u>ISSUE</u>: The use of a state policy or regulation interpreting state narrative water quality criteria, as set forth at 40 C.F.R. § 122.44(d)(1)(vi)(A).

<u>CLARIFICATION</u>:

The final rule provides that a permitting authority must establish permit limits using one or more of several options whenever a specific chemical for which the state has not established a water quality criterion is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a state narrative criterion. 40 C.F.R. § 122.44(d)(1)(vi). The rule then prescribes several options for establishing permit limitations, including "explicit State policy or regulation interpreting [the State's] narrative water quality criterion . . . ." 54 Fed. Reg. at 23,896, codified at 40 C.F.R. § 122.44(d)(1)(vi)(A).

EPA interprets section 122.44(d)(1)(vi) as requiring permit writers to use a formally adopted state regulation or policy (including any state waste load allocation approved by EPA or established by EPA using formally-adopted state regulations or polices, where available) for deriving a chemical-specific numeric water quality-based effluent limitation from an applicable narrative standard in lieu of the other options for interpreting a narrative standard set forth in that section, if such a formally-adopted state regulation or policy exists. Such a regulation or policy would typically be part of either a state's water quality standards or total maximum daily load for the water body in question, and would be subject to EPA approval or disapproval in accordance with 40 C.F.R. Parts 130 or 131. If

the state had not formally adopted a state regulation or policy pursuant to 40 C.F.R. Parts 130 or 131, or if it has not been approved as part of the state NPDES program, the permit writer must develop limits, using any one of the options set forth in section 122.44(d)(1)(vi). Some of the industry petitioners in American Paper Institute v. U.S. EPA (D.C. Cir. No. 89-1499) and consolidated cases do not agree that a formally adopted state regulation or policy must be subject to EPA approval or disapproval before permit writers would be required to use the policy in developing limits. EPA expects this issue to be litigated in the permit context.

When a permit writer interprets a narrative standard, the method of interpretation used will be available for public comment as a part of the permit and typically may be appealed through administrative and judicial procedures available for review of NPDES permit conditions.

5. ISSUE: The standards for listing waters on the list of Clean Water Act ("CWA") section 304(l)(1)(B), 33 U.S.C. § 1314(l)(1)(B), as set out at 40 C.F.R. § 130.10(d)(5.

CLARIFICATION:

Section 304(l)(1)(B) of the CWA, 33 U.S.C. § 1314(l)(1)(B), provides that the state should list waters where an applicable water quality standard is exceeded "due entirely or substantially" to point sources. EPA's final rule requires listing of a water under section 304(l)(1)(B) where (1) water quality-based limits on one or more point sources would result in the water quality standard for a toxic pollutant being achieved, or (2) discharges from one or more point sources would be sufficient to cause or are expected to cause an exceedence of the water quality standard for a toxic pollutant, regardless of any contribution of the same pollutant from nonpoint sources. 54 Fed. Reg. at 23,897, codified at 40 C.F.R. § 130.10(d)(5).

The conditions in 40 C.F.R. § 130.10(d)(5) govern only the determination of whether or not a given water should be listed under section 304(l)(1)(B). Section 130.10 (d)(5) does not dictate the limitations to be included in an individual control strategy ("ICS"). ICSs may be developed in light of permit limits and nonpoint source requirements established through the total maximum daily load ("TMDL") process. The TMDL is a quantification of the capacity of a waterbody to assimilate pollutants based on the applicable water quality standard. The TMDL consists of the sum of wasteload allocations for point sources, load allocations for nonpoint sources, and natural background, with a margin of safety to account for uncertainty. Subject to EPA approval, if a state determines that reductions in the discharge of pollutants from a point source would be inequitable or prohibitively expensive, the state may adopt a

TMDL for achieving the water quality standards which relies in whole or in part upon control requirements on nonpoint sources. See 40 C.F.R. Section 130.7