

used as the indicator organism to protect bathers from gastrointestinal illness in recreational waters.

The data supporting the 1986 bacteria water quality criteria were obtained from a series of epidemiological studies that examined the relationship between swimming-associated illness (namely, acute gastrointestinal illness) and the microbiological quality of the waters used by recreational bathers. The epidemiological studies demonstrated that fecal coliforms, the indicator originally recommended in 1968 by the Federal Water Pollution Control Administration of the Department of Interior, are correlated less strongly with swimming-associated gastroenteritis than other possible indicator organisms. Two indicator organisms, *E. coli* and enterococci, exhibited a strong correlation to swimming-associated gastroenteritis, the former in fresh water only and the latter in both fresh and marine waters. The strong correlation is due to the indicator organisms being more similar to many of the pathogens of concern in their ability to survive treatment and in the environment. Enterococci are also resistant to saline environments, enhancing their utility as an indicator in marine waters. In addition, *E. coli* and enterococci are less frequently found than fecal coliforms in environmental settings where fecal contamination is known to be absent.

The Beaches Environmental Assessment and Coastal Health (BEACH) Act was enacted on October 10, 2000. Public Law 106-284, 114 Stat. 870 (2000). The BEACH Act addresses pathogens and pathogen indicators in coastal recreation waters. Among other things, the BEACH Act added section 303(i) to the Clean Water Act to require States and Tribes with coastal (and Great Lake) recreation waters to adopt new or revised water quality standards by April 10, 2004, for pathogens and pathogen indicators for which EPA has published criteria under section 304(a). The BEACH Act also directs EPA to promulgate standards for States and Tribes that fail to adopt standards for pathogens and pathogen indicators for coastal recreation waters that are as protective of human health as those published by EPA.

III. Proposed Policy

EPA has received requests from many stakeholders to clarify the NPDES requirements for discharges from POTWs where peak wet weather flow is routed around biological treatment units and then blended with the effluent from the biological units prior to discharge where the final discharge meets permit effluent limitations based on the

secondary treatment regulation (40 CFR part 133) or any more stringent limitations necessary to attain water quality standards. Today's proposed policy has two components, (1) a proposed interpretation of the bypass provision (40 CFR 122.41(m)) as it applies to alternative wet weather treatment scenarios at POTW treatment plants that involve blending; and (2) draft guidance on how such an interpretation should be implemented. EPA requests comments on both the proposed interpretation and the draft guidance.

Peak wet weather discharges from POTWs that consist of effluent routed around biological or other advanced treatment units blended together with the effluent from the biological units (or from other advanced treatment units) prior to discharge would not be a prohibited bypass and could be authorized in an NPDES permit if all of the following principles were followed:

1. The final discharge meets effluent limitations based on the secondary treatment regulation (40 CFR part 133), including applicable 30-day average percent removal requirements, or any more stringent limitations necessary to attain water quality standards. For treatment works served by sanitary sewers, the Director of the NPDES permit program may substitute lower 30-day average percent removal requirements or a mass loading limit for the percent removal requirement only if the permittee demonstrates the criteria in § 133.103(d) are met, including that the less concentrated influent is not the result of excessive I/I. For treatment works served by combined sewers, § 133.103(a) provides that the decision must be made on a case-by-case basis as to whether any attainable percentage removal level can be defined during wet weather flows, and, if so, what the level should be.

2. The NPDES permit application for the POTW provides notice of, and specifically recognizes, the treatment scenario that would be used for peak flow management. The treatment scenario, including designed capacity of various units, should be consistent with generally accepted practices and long-term design criteria, and designed to ensure that discharges meet effluent limitations based on the secondary treatment regulation and any more stringent limitations necessary to meet water quality standards (including limitations necessary to meet applicable total maximum daily loadings). The application of the generally accepted practices and long-term design criterion typically would include an evaluation of changes to the base and peak design

flows at the treatment plant from the time the peak flow treatment scenario was last recognized by the NPDES authority, and, if circumstances have materially and substantially changed, an evaluation of the cost-effectiveness of a reasonable range of alternatives, which may entail construction of facilities to provide additional wet weather capabilities, such as equalization and/or storage facilities, or high-efficiency physical/chemical treatment for diverted flows. The application of the generally accepted practices and long-term design criterion should be reevaluated as circumstances change materially and substantially, and at permit reissuance. Any permit issued after EPA evaluates public comments received and takes further action on today's proposed policy should specifically recognize or incorporate by reference the treatment scenario that would be used for peak flow management. EPA notes that requiring documentation of the treatment scenario in the permit would ensure that EPA would have an opportunity to review the documentation during its review of permits issued by an authorized NPDES State. In addition, the public would have an opportunity to review and comment on the specific conditions under which blending would be authorized prior to final approval and issuance of the permit.

3. The treatment scenario that would be used for peak flow management should provide, prior to blending, at least the equivalent of primary clarification for the portion of flow routed around biological or other advanced treatment units.

4. The peak flow treatment scenario chosen by the permittee for use when flows exceed the capacity of storage/equalization units, biological treatment units or advanced treatment units should be operated as it is designed to be operated and in accordance with the treatment scenario reflected in the permit record and conditions set forth in the permit. A portion of the flow should only be routed around a biological or advanced treatment unit when the capacity of the treatment unit is being fully utilized. Additionally, for permits issued after EPA evaluates public comments received and takes further action on today's proposed policy, such a peak flow treatment scenario should only be used when flows exceed the capacity of storage/equalization units based on generally accepted good engineering practices and long-term design criteria aimed at protecting the structural integrity and function of the treatment units and