



Sharon Green
Tri-TAC Chair
Sanitation Districts of Los Angeles County
P.O. Box 4998
Whittier, CA 90607
(562) 699-7411, ext. 2503
sgreen@lacsdsd.org

February 6, 2004

Via Electronic and US Mail
OW-Docket@epa.gov

Water Docket
Environmental Protection Agency
Mailcode 4101 T
1200 Pennsylvania Ave., NW
Washington, DC 20460

Attention: Docket ID No. OW-2003-0025

Subject: US EPA Draft Policy on the Practice of Blending

I am writing on behalf of Tri-TAC, a California organization of local public agencies responsible for wastewater collection, treatment, disposal and reclamation. Tri-TAC is an advisory group jointly sponsored by the California Association of Sanitation Agencies, the California Water Environment Association, and the League of California Cities. The constituents of Tri-TAC serve most of the sewered population of California.

Tri-TAC members operate under individual NPDES permits and/or a variety of general NPDES permits. Most of our members are single purpose sanitation and sanitary districts; however, some of our members are municipalities responsible for wastewater, stormwater, and other activities subject to an NPDES permitting authority. EPA's Draft Policy on Blending is of interest to Tri-TAC members because blending has been practiced by many treatment facilities in California for nearly three decades and changes to this long standing wet weather management practice could have far reaching impacts on public health and the financial well being of communities throughout California.

Tri-TAC strongly supports the policy due primarily to the fact that the policy recognizes and allows the continued practice of blending when all NPDES permit limits are met. We do have several comments which we feel will help clarify the policy and have presented these as an attachment to this letter.

Vice Chair
Chuck Weir
East Bay Dischargers
Authority
2651 Grant Avenue
San Lorenzo, CA 94580
cweir@ebda.org

Water Committee
Co-Chairs
Monica Oakley
Larry Walker Associates
250 Lafayette Circle
Suite 200
Lafayette, CA 94549
(925) 962-9700
monicao@lwa.com

Traci Minarnide
City of Los Angeles
433 S. Spring St., Suite 5
Los Angeles, CA 90013
(213) 473-8541
tminarni@san.lacity.org

Air Committee Chair
Jackie Kepke
CH2M Hill
155 Grand Ave., Suite 10
Oakland, CA 94612
(510) 251-2426
jkepke@ch2m.com

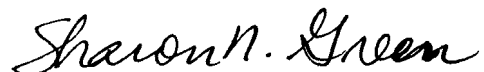
Land Committee
Co-Chairs
Layne Baroldi
Orange County
Sanitation District
P.O. Box 9127
Fountain Valley, CA 927
(714) 593-7456
lbaroldi@ocsd.com

Maura Bonnarens
East Bay Municipal
Utility District
375 11th St., MS702
Oakland, CA 94623
(510) 287-1141
mbonnare@ebmud.com

Water Docket
Environmental Protection Agency
February 6, 2004
Page 2

We urge EPA to adopt this policy which will hopefully end the inconsistent approaches to permitting this valuable wet weather management technique and help the nation refocus on other more pressing regulatory issues.

Sincerely,

A handwritten signature in black ink that reads "Sharon N. Green". The signature is written in a cursive, flowing style.

SHARON GREEN
Chair, Tri-TAC

SG:DRW:akg

Attachment

P:\tritac epa blending2.doc

ATTACHMENT

POTWs have always sought a clear identification of what is expected in terms of wastewater treatment. Those expectations are embodied in the NPDES permits, which are, by design, protective of the receiving waters. With respect to blending, our fundamental belief is that as long as permit limits are met, further controls on the POTW are not warranted.'

Our specific comments on the Draft Policy are summarized below.

Blending Authorized In Permits

The policy states that blending could be authorized in an NPDES permit if six principles are followed. This statement by itself appears to leave total discretion in the individual permit writer's hands. A permittee could comply with all six provisions yet not have blending specifically recognized in their NPDES permit. This should be restated to clarify that blending will be recognized in the permit if the permittee can demonstrate compliance with all six principles or it should be made clear that blending is allowed when the six principles are adhered to even if blending is not specifically authorized in the NPDES permit.

Excessive Infiltration/Inflow

In several places the policy attempts to link infiltration/inflow (VI) levels to the ability to blend. One example of this is the citing of 275 gals/capita/day (gpcd) as the threshold above which flows would be construed as signifying excessive I/I. Aside from the fact that 275 gpcd is an unrealistically low figure that is impractical for most POTW's to meet, we feel that the focus should be on capacity at the POTW and not I/I. Our rationale is that the Blending Policy is a POTW capacity issue and other regulations (i.e., prohibition on unpermitted overflows, SSO regulations, CMOM, etc.) are the proper mechanism to address issues related to the collection system. Concerns have been expressed in the debate on the SSO/CMOM Regulations about excessive I/I leading to sanitary sewer overflows and the need for secondary treatment for all such overflows. When blending is practiced all permit limits must be met, including secondary treatment performance-based limits. This fact should serve to de-link the practice of blending with concerns about excessive VI.

¹ We note that the preparation of a new EPA blending policy arguably is unnecessary to allow municipal wastewater treatment facilities to bypass (as that term is defined in 40 C.F.R. section 122.41(m)(1)) during wet weather conditions. Pursuant to 40 C.F.R. Section 122.41(m)(2), a municipal wastewater treatment facility may allow a bypass to occur if effluent limitations are not exceeded and if the bypass is for essential maintenance to assure efficient facility operations. As expressly stated in section 122.41(m)(2), these bypasses are not subject to the general bypass prohibition and notice requirements set forth in sections 122.41(m)(3) and (4). See 40 C.F.R. §122.41(m)(2). Since publicly-owned treatment works (POTWs) are required to operate continuously and must ensure that their biological and other treatment facilities are not impaired or destroyed as a result of excessive wet weather flows, essential maintenance must include the necessary diversion of particular flows during periods of wet weather.

Nonetheless, it should be recognized that a one-size-fits-all approach to defining excessive I/I is not the best way of addressing the issue and would by definition needlessly strain the resources of many communities by diverting limited funds towards efforts that have small cost/benefit ratios. A better risk-based approach is to relate excessive I/I to protection of beneficial uses. Cost-effectiveness methodologies for I/I control have been developed and utilized in several locations across the nation. These methodologies involve studies and modeling efforts that demonstrate that limited overflows during severe wet weather events can be tolerated without impacting a particular beneficial use. Through modeling efforts the frequency of tolerable overflows can be translated into a design storm which becomes the basis for developing I/I reduction and capacity improvement programs. When fully implemented, these programs will reduce sanitary sewer overflows to the level needed to protect beneficial uses.

Use of Storage

Storage can be an important component of a wet weather management program but it must be utilized in the most effective manner in order to achieve the full benefit of the storage. The draft policy states that blending should be allowed only when storage capacity is exceeded. This approach may result in adverse impacts to public health because it may result in avoidable overflows in the community.

It should be recognized that, not unlike many aspects of POTW operations, availability and use of storage is different for every POTW, but as an example, assume a POTW is located in an urban area and has a fairly large storage basin at the plant. When a significant storm hits, the flows to the secondary treatment process begin to increase and depending on the size of the storm, the secondary capacity may be exceeded. Primary capacity is often greater than secondary capacity so all flows would still be receiving primary treatment at that time. If the secondary capacity is exceeded the operator then needs to decide how to handle the excess flows. If diverting to storage is mandatory before blending is allowed, the flows would be diverted and begin to fill the available storage basin. Depending on the magnitude of the storm, even a large storage basin could be filled in less than an hour. With the storage capacity filled, the operator would then initiate blending. However, with a storm of increasing intensity, the capacity of the primary tanks may also be exceeded, which could result in unnecessary SSOs.

Another way to look at this is to consider the shape of the hydrograph, which represents the volume of flow coming into the wastewater treatment plant. Using a vertical slice of the hydrograph (storage) early on in the storm could potentially reduce the overall volume of treatment if the peak had not yet occurred. The reason for this is that the POTW would not be taking advantage of the volume associated with flow to the primaries -- a horizontal slice of the hydrograph -- which, when coupled with the vertical slice (storage) being taken during the peak of the storm, would result in a greater volume being treated than a too-early vertical slice. Hence, POTW operators need flexibility to optimize the treatment and storage during any particular storm event, and storage should certainly not be mandated to occur as soon as the secondary treatment capacity is exceeded.

We feel a better approach on utilization of storage is to allow the operator the flexibility to utilize available data (i.e., storm forecasts, Doppler radar, level monitoring data within the interceptor

system, etc.) to make informed decisions with respect to initiation of blending and use of storage capacity. In the example cited, if the storm was tailing off at the time the secondary capacity was exceeded the operator would choose to forego blending and capture the excess flow in storage for subsequent drain back into the plant for treatment. If however the storm was intensifying, the operator would choose to begin blending prior to filling and utilizing storage capacity in an effort to capture **the** peak of the storm and eliminate the possibility of SSOs or CSOs.

We feel allowing the flexibility described above in the policy would promote better operations and protection of public health and is especially important given that it is not always possible to predict the magnitude and timing of storm events with certainty. Regulations could require reporting on blending events to ensure that POTWs were practicing sound judgment in implementing blending as a wet weather management tool.

Use of Advanced and Secondary Treatment Processes

The draft policy states that blending would be allowed only after the capacity of all biological and advanced treatment units were exceeded. We agree that the requirement for not blending until secondary capacity is exceeded is consistent with Clean Water Act requirements. However, advanced treatment is not a legislative mandate but rather is required to meet particular receiving water quality limitations (and in some cases, it is used for other purposes, such as to meet requirements for water recycling that are not derived from the Clean Water Act). Thus, if the permit limits for an advanced wastewater treatment facility could be met without all flows being routed through the advanced treatment unit process, then the receiving waters would be protected. For this reason it does not seem appropriate to mandate full utilization of advanced treatment units in the blending policy.

A analogous situation exists with respect to CSO facilities. Since secondary treatment is not mandated for CSO treatment plants, as long as any effluent limits and/or management practice requirements are being met, the use of full secondary treatment capacity should not be mandated in the blending policy. Hence, secondary treatment is to CSO facilities as advanced treatment is to facilities treating wastewater from separate sanitary sewers only.

Monitoring for Pathogens

The issue of increased pathogens in blended effluents has been a major concern in the debate on blending over the last several years. POTWs share the concern about pathogens and recognize that there is not a wealth of data on this issue. It should be noted, however, that in the formulation of the concepts that were the basis of the Clean Water Act the secondary treatment process was not the process identified for protection of public health. Lawmakers and regulators recognized there may be some incidental pathogen destruction that occurs during secondary treatment, but that a separate stand-alone disinfection process was needed to ensure public health. Such a process (i.e., disinfection) was specifically identified in the regulations governing wastewater treatment. In addition, over the last 30 years during which blending has been recognized in permits and practiced across the country, few if any incidents of public health impacts have been documented to be caused by blending. Even so, POTWs support the collection of data to increase our knowledge and understanding of blending and any potential

impacts on public health. Given the desire to obtain additional data yet the lack of any clearly identified problem based on 30 years of practice, it seems reasonable to initiate efforts to expand the database on pathogens in blended effluents concurrent with promulgating the blending policy.

One practical issue associated with expanding the pathogen database is the high cost and time associated with pathogen monitoring. There are currently efforts underway by national research organizations and POTW associations which will further our knowledge on the pathogen issue. Therefore, the policy should not require pathogen monitoring by POTWs that blend, in recognition of the national efforts underway and the strain on resources by including such a requirement in permits. The policy should also recognize that in the near future the knowledge base on the issue of pathogens associated with blending will be much greater, thereby negating the need for an on-going national monitoring program. Therefore, when specific monitoring is required, it should be limited to a defined scope and schedule that would terminate unless there is a demonstrated need for ongoing monitoring.

Disinfection By-products

Another issue associated with pathogens is the need to increase chlorination in blended effluent in order to meet the indicator organism reduction requirement of the permit. The concern is that higher chlorine levels are needed in blended effluents which can result in the formation of dangerous disinfection byproducts. Tri-TAC recognizes this as an issue, but feels there are factors which tend to mitigate the concerns over this issue. The first factor is that during the disinfection process the applied chlorine is consumed and the formulation of byproducts is thus limited to the time in the chlorine contact basin. It should also be recognized that wastewater effluents often have high concentrations of ammonia, which form chloramines that out-compete the organics for combining with chlorine in the secondary effluent and thus in a chlorinated wastewater, formation of high levels of trihalomethanes does not generally occur. Trihalomethanes that do form are very volatile, not bioaccumulative, and do not last long in the receiving waters. Finally, in California the EPA- promulgated California Toxics Rule and the State Implementation Policy adopted by the State Water Resources Control Board require “reasonable potential” analysis of POTW effluents and the placement of limits in permits for constituents that have the potential for exceeding water quality objectives. Disinfection byproducts such as trihalomethanes are part of this analysis. Therefore, if disinfection byproducts were produced during blending and had the potential for exceeding water quality objectives, there would be permit limits in place to protect the receiving water.

Requirement to Provide Primary Treatment

As stated earlier, meeting permit limits should be the determining factor for whether blending is permissible. The Clean Water Act recognizes there are different treatment processes and therefore did stipulate a specific process but rather a performance/technology-based standard of secondary treatment. For this reason and the fact that some plants do not have a primary clarification unit process, we believe that stipulating the requirement for “at least the equivalent of primary clarification” is inappropriate and not warranted.

Blending in Wet Weather

Although it is implied, it is not clearly stated in the policy that blending should be limited to wet weather events. Blending during dry weather could be viewed as a bypass and would have to be done in compliance with the bypass provisions of 40 CFR 122.41(m).

85% Removal

The definition of secondary treatment which includes BOD, TSS and percent removal was based on the ability of technology to achieve specified levels in “normal” wastewaters. With dilute influent, BOD and TSS levels can be so low that the POTW has difficulty in meeting the 85% removal criteria. In order to meet the 85% removal criteria, effluent BOD and TSS would have to be far lower than standard secondary treatment plants are capable of meeting. While 40 CFR 133.103(d)(3) allows for the demonstration that excessive I/I does not exist in order to obtain relief from the 85% removal requirement, the threshold for “cost-effective,” as mentioned in the regulations, can be interpreted so broadly (because the guidance [*Sewer System Analysis and Rehabilitation, EPA, 1991*] is quite vague) that this regulation has become meaningless and unavailable to POTWs in California. We are concerned that if this same threshold were used for blending, that blending would become unavailable as well. As stated above, excessive I/I should be completely de-linked from blending because these issues are separate and being addressed in different regulations. Thus, we feel that alternatives with respect to the 85% removal criteria are to grant an exception to the criteria in the policy during wet weather events or to clearly define in this policy what constitutes “cost-effective” for the purposes of meeting 40 CFR 133.103(d)(3).

P:\tritac blending Attachment.doc