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Office of Pesticide Programs
Regulatory Public Docket (7502P)
Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0001

RE: Triclosan Re-Registration Docket No. EPA-HQ-OPP-2007-0513

Thank you for the opportunity to comment on the risk assessments for triclosan as part of the Re-Registration Eligibility Decision (RED) process.

Tri-TAC is a technical advisory committee for Publicly Owned Treatment Works (POTWs) in California. Tri-TAC is jointly sponsored by the California Association of Sanitation Agencies, the California Water Environment Association, and the League of California Cities. The constituency base for Tri-TAC collects, treats, and reclaims more than two billion gallons of wastewater each day and serves most of the sewered population of California.

Tri-TAC's member agencies are very concerned about triclosan's impacts to water quality, aquatic organisms and biosolids. Triclosan in paints, textiles, countertops, cutting boards and institutional equipment may be washed into the sanitary sewer system where it may pass through POTWs into receiving waters or partition to biosolids. These two distinct fates of triclosan pose problems for POTWs in terms of their ability to comply with National Pollutant Discharge Elimination System (NPDES) permits and to beneficially reuse biosolids. Of equal concern to us are other uses of triclosan that are not covered in this docket, such as antimicrobial hand soap and toothpaste, products that are specifically sewered after use without attention to their ultimate impacts to the environment. Many of these products claim antimicrobial effects, and therefore should be regulated as pesticides. We believe that all sources of triclosan should be assessed for their cumulative potential to enter the

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sanitary sewer system, pass through POTWs into receiving waters and partition to biosolids.

We have specific comments on this docket, as follows.

The Ecological Hazard and Environmental Risk Assessment Chapter

1. As noted in the Ecological Hazard and Environmental Risk Assessment chapter, the EPA requires the registrant to provide modeling information to indicate the proportion of triclosan in the environment attributed to registered uses of triclosan. We believe that all quantities of triclosan in the environment should be attributed to antimicrobial uses. Uses of triclosan that are regulated by the Food and Drug Administration, such as toothpaste and antimicrobial hand soap, are antimicrobial in nature and contribute to the concentrations found in the environment that cause water quality impacts and impacts to biota. If FDA-regulated uses are found to contribute a significant proportion of environmental concentrations, EPA should work with the FDA to incorporate mitigation measures for impacts irrespective of source.
2. This chapter identifies several data gaps and indicates additional studies may be required. The chapter neglects the issue of endocrine disruption in aquatic organisms, which have been documented by others and show that triclosan may have thyroidal, oestrogenic and androgenic effects.¹² Because triclosan is typically found in receiving waters at trace (ppb and ppt) concentrations, endocrine disruption and chronic effects to aquatic biota may be more probable than acute effects and should therefore be incorporated in this risk assessment. Furthermore, because some species may be harmed at early stages in their development, early life development studies should be required for freshwater, marine and estuarine organisms.
3. The subchapter, "Estuarine and Marine Organisms, Acute," states that no acute toxicity for estuarine and marine organisms is required because "effluent containing the active ingredient" is not expected to reach this environment. However, the Environmental Fate chapter shows that triclosan is indeed expected in effluent. In light of this, acute toxicity for estuarine and marine organisms should be required.
4. This chapter notes that hazard labels will be required on products with registered uses of triclosan. We are concerned that other uses of triclosan not covered by this re-registration, such as antimicrobial hand soap and toothpaste, will continue

¹ Veldhoen et al. (2006) show that triclosan is a thyroidal endocrine disruptor.

² Gee et al. (2007) indicate triclosan may exhibit oestrogenic and androgenic activity.

to go unlabeled. All uses of triclosan that have a direct route to the sanitary sewer should require these hazard labels.

Cumulative Risk

1. Because POTWs treat wastewater from multiple sources with a variety of chemicals, it is important to understand the cumulative risk of triclosan in combination with other chemicals that may behave similarly. The EPA should require the registrant to provide information about the common mechanism of toxicity with other chemicals and set forth a schedule for completing an aggregate exposure assessment and cumulative risk assessment. POTWs' biological processes, their ability to comply with permits and whole effluent toxicity tests, and the aquatic environments into which they discharge may be impacted by cumulative toxicity from triclosan in combination with other agents.

Environmental Fate Science Chapter

1. This chapter provides many citations regarding pass-through of triclosan to receiving waters, as well as partitioning to biosolids. However, it does not include information regarding triclosan's impacts to biological processes at wastewater treatment plants or the impact on the beneficial reuse of biosolids. This section should include this information as well as an assessment of triclosan's ability to compromise POTW compliance with water quality permit requirements.
2. In this chapter, aqueous photolysis studies indicate that triclosan degrades quickly when exposed to light. However, continual discharge of triclosan into the environment presents a problem of "pseudo-persistence." For example, while degradation may occur, triclosan remains "pseudo-persistent" because it is constantly being introduced into receiving waters via POTW effluent. This section should address this continual presence of triclosan in the environment and point to the Ecological Hazard and Environmental Risk Assessment chapter for studies on population and generational impacts related to this continual exposure. If these studies are not available, they should be required of the registrant.
3. Degradation and transformation products are noted in this chapter, including methyl triclosan and 2,4-dichlorophenol. However, environmental and ecological hazards and risk assessments are not presented for these transformation products in this chapter or elsewhere. An assessment of these compounds in terms of impacts to wastewater treatment plants' biological processes, the potential for these transformation products to pass through to the aquatic environment, and their impacts to aquatic life should be incorporated. In addition, an assessment of how these transformation products impact the beneficial reuse of biosolids is necessary.

4. This chapter notes that an endangered species assessment has not been conducted and a determination will not be made at this time. California has numerous listed species, including invertebrates, amphibians, fish and water fowl that may be impacted by the constant introduction of triclosan into receiving waters. We therefore support an additional endangered species assessment; if this assessment indicates threatened and endangered species may be harmed, we ask that the EPA require mitigation measures of the registrant.

POTWs are generally very effective in reducing discharges of toxic pollutants to the environment; however, there is growing concern that the increasing prevalence of products that use pesticides and other toxic compounds for general antimicrobial purposes may impair our ability to meet strict discharge permits. Although responsible for ensuring high quality effluent, POTWs do not have the authority to regulate domestic uses of many of these products that may enter the sanitary sewer system via indoor drains.

Many chemicals in commerce, including triclosan, have not been adequately screened for their ability to impact or pass through POTWs, to impact the quality of biosolids produced by POTWs, and to harm aquatic life. We need the Environmental Protection Agency to exercise its authority to control all uses of triclosan that may pose problems for POTWs and ultimately the environment. Thank you for consideration of these comments.



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Chair, Tri-TAC

JC:wh

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