October 13, 2011

Dear County Executive Leggett and County Council Members,

The Water Quality Advisory Group (WQAG) wishes to draw your attention to the chemical substance triclosan, a widely used antimicrobial agent contained in many commercial and household products. Triclosan has come under increased scrutiny because it is now recognized as a persistent environmental contaminant in natural waters and soils, as well as in human body tissue. The WQAG recommends that the County Council take a proactive, precautionary approach to the proliferation of this contaminant by encouraging County departments to minimize or eliminate, where possible, the purchase of products containing triclosan. We also recommend that the County supports, to the extent practicable, continued investigation of triclosan by the Environmental Protection Agency (EPA) and the Food and Drug Administration (FDA).

Triclosan was created more than 40 years ago to be used as a surgical scrub in hospitals, where it is very effective. However, it is now used in low concentrations in a wide range of consumer products, including soaps, deodorants and some toothpaste. In addition, triclosan has commercial, institutional, and industrial applications including use in commercial HVAC coils, and is used as a material preservative in many products including, fabrics (footwear, clothing), vinyl, and plastics (toys, toothbrushes, cutting boards). In the late 1990s, the annual U.S. production volume of triclosan exceeded a million pounds, and has likely increased since that time. A survey by the Centers for Disease Control (CDC) estimates that the chemical is present in the urine of 75 percent of Americans over the age of five.

There is growing concern about the potential effects of triclosan on human health and its fate in, and effect on the environment. Several studies have shown that triclosan may act as an endocrine disrupter, and contribute to antibiotic resistance in bacteria. EPA and the FDA are conducting studies to better understand the effects of triclosan, including expediting its review as part of EPA’s Endocrine Disruptor Screening Program. Studies conducted by the FDA and the CDC confirm that hand washing with antibacterial soap is no more effective in killing germs than washing with plain soap and water. However, the promotion of antimicrobial products in the market place has played on consumers’ fears regarding germs, and has significantly increased the amount of triclosan being used, again raising concerns about human health issues.

Once triclosan is introduced into wastewater (e.g., from household cleaning and personal care products), it is considered to be moderate to difficult for conventional wastewater
treatment plants to remove. Advanced treatment processes are more successful at removal from wastewater, but plant upgrades would add further to the cost of plant operations. Traces of triclosan inevitably pass through wastewater treatment plants with the treated effluent and are discharged to receiving waters. Much of the triclosan removed from wastewater is sequestered in the biosolids that, in our region, are largely land-applied as fertilizer for agriculture. It is unknown whether residues in soil are persistent in the food chain (i.e., crops or pasture grass) or are carried with sediment loads in storm water runoff leading to successive contamination in surface waters. Environmental effects of triclosan on wildlife, especially aquatic organisms, are also unknown although the suspected endocrine disrupting capacity may contribute to enhanced adverse “mixture” effects where other endocrine disrupting contaminants (e.g., pesticides) are present.

The WQAG supports continued use of triclosan for its intended purpose as an antimicrobial agent in clinical settings. However, additional studies to determine the human health and environmental impacts need to be completed, and so the WQAG recommends the reduction or elimination of its use in products procured by the County until or unless studies indicate that the health and environmental impacts are negligible. By adopting this proactive, precautionary position, the County will continue its legacy of public health and environmental leadership.

Please let us know if we may be of additional assistance in this matter.

Sincerely,

Carol J. Henry
Co-Chair

Daphne Pee
Co-Chair