

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: March 14, 2007

MEMO TO: Paul Ghere, Manager of Purchasing

FROM: Chris Dembiczak, Environmental Health and Safety Specialist II

THROUGH: Bruce Lepore, Manager of Workplace Health and Safety

SUBJECT: Antibacterial Soap Phase-out

RECOMMENDATIONS

In response to emerging *triclosan* or *triclocarban* environmental concerns, and recent health studies of the efficacy of antibacterial soaps, Workplace Health and Safety (WHS) recommends a District-wide phase-out of products containing these ingredients by implementing the following changes.

- 1) Phase out over a period of 12 months the purchase of antibacterial soaps at the District.
- 2) Use existing supplies of antibacterial soap until supplies are depleted to avoid restocking costs and inventory complications.
- 3) Supply all work units where employees are or may be exposed to sewage, blood, or other potentially infectious materials with alcohol-based hand sanitizers for employee use.
- 4) Ensure that future purchases of alcohol-based hand sanitizers used for infection control contain 60-70% isopropanol and/or ethanol. Specifications for Purchasing to set up a new specific warehouse item are outlined below.

BACKGROUND

Nearly all commercially available antibacterial soaps contain triclosan or triclocarban as active ingredients. These chemicals have very similar properties, but triclosan is the most prevalent. Both chemicals have recently been identified as environmental pollutants of concern. Triclosan has been found in 60% of the surface waters of the United States, in biosolids leaving wastewater treatment facilities, and in over 90% of human breast milk sampled in one study. Triclosan has also been found to bioaccumulate in fish in impacted surface waters. Additionally, chloroxylenol (PCMX), another active ingredient in antibacterial soaps has also been identified as a potential aquatic pollutant. Another concern that has been raised is the possibility of creating antibiotic-resistant bacteria due to the interaction of these chemicals with bacteria in the environment.

Regarding human health concerns, recent studies conclude that the use of regular soap is just as effective for infection control purposes in standard household settings as are antibacterial soaps containing triclosan and triclocarban. For example, one Pakistani study where hygiene conditions are poor demonstrated that regular soap was just as effective as antibacterial soap at

removing bacteria from hands. Moreover, current guidance documents for hospital workers with direct exposure to blood or potentially infectious fluids recommend the use of either antibacterial soap *or* alcohol-based hand sanitizers when contact with infectious materials occurs. Since both are effective, many hospitals have replaced antibacterial soap with alcohol-based hand sanitizers.

DISCUSSION

The primary infection risks to EBMUD employees results from exposure to wastewater, sewage, and exposure to blood or bodily fluids when cleaning bathrooms or other areas that may contain these fluids. Employees who voluntarily perform First Aid may also be exposed to infectious fluids. To support the research noted above:

- WHS will assist Purchasing to replace products containing triclosan, triclocarban, and chloroxylenol (PCMX) and phase out existing supplies.
- WHS will update RSP 1900 - Infection Control (reference page 19-11), and inform District staff of these changes through the use of a safety alert, training, and Local Safety Committee discussions.
- Work units with routine exposure to infectious materials who need hand sanitizers will be required to supply a gel, foam, or other product containing 60%-70% isopropanol and/or ethanol. For work units without exposure to infectious materials, use of hand sanitizers is optional.
- Work units may purchase any hand sanitizer containing 60-70% isopropanol and/or ethanol that meets their needs for infection control. However, a couple of items will be stocked at District warehouses (e.g. Adeline, Wastewater) for convenience. Item 034368, a 16oz squeeze bottle hand sanitizer (60% ethanol), is already available and is convenient for outdoor work crews.
- WHS also recommends that Purchasing stock another hand sanitizer item in District warehouses that meets the specifications below. This pump bottle will be useful for placing beside handwashing stations where running water is available.

Hand Sanitizer Specifications (source: *Center for Disease Control and Prevention - Guideline for Hand Hygiene in Health-Care Settings; Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force October 25, 2002 / 51(RR16);1-44*)

- Active Ingredients must contain 60-70% isopropanol, ethanol, or a combination of both.
- Must contain an emollient or moisturizer such as aloe, vitamin E, or equivalent to prevent drying of hands.
- Must be dispensed through hand-activated pump.
- Volume of container must be 8-16oz.
- Must dry on hands without the use of hand towels or other towels.

SUMMARY

Phasing out *triclosan and triclocarban* will remove two identified environmental contaminants from the District's inventory thereby assisting the District to maintain its status as a "Green Business." And this will be accomplished without compromising the existing high level of protection afforded staff that are or can be exposed to infectious materials on a routine or emergency basis.

If questions arise or more information is needed, I can be contacted at 287-1536, or Bruce Lepore can be contacted at 287-0704.

BL/CD:cd

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