



Mecklenburg County Health Department

October 2, 2000

To: Sheila Nichols
Children's Environmental Health Branch

From: Dennis Salmen

Re: Request For Alternate Sanitizer and Cleaner Use in a Day Care

Sheila:

A chemical distributor in Mecklenburg County has proposed to use two separate Lysol® brand cleaners and sanitizers at a day care, particularly at a diaper-changing area. The sanitizer appears to be a quaternary ammonium product which is designed to provide a concentration of 200 ppm. Section .2819(c), **Diapering and Diaper Changing Facilities** requires "A solution of 100 ppm chlorine or equivalent methods approved by the Department...". Since this is double the chlorine sanitizer strength referenced in Section .2812(e)(4)(D), should a comparable doubling of the quaternary ammonium strength to 400 ppm be applied for diaper-changing areas ? I have enclosed a copy of the Material Safety Data Sheet (MSDS) for the product for your review.

As an additional note, we have reviewed the MSDS for the proposed cleaner (i.e. Lysol® Antibacterial All Purpose Cleaner) and found the Exposure Effects to list skin irritation and eye damage effects. Since, Section .2819(c), **Diapering and Diaper Changing Facilities** requires "...a mild solution of water and detergent...", we have denied their request to use this product at diaper-changing areas. I have enclosed a copy of that Material Safety Data Sheet (MSDS) for your review.

Thank you for your attention to this matter.

**North Carolina Department of
Environment And Natural Resources**

Division of Environmental Health

James B. Hunt Jr., Governor
Bill Holman, Secretary
Linda C. Sewall, Director
Michael U. Rhodes, Section Chief



December 15, 2000

MEMORANDUM

TO: Dennis Salmen, Environmental Health Supervisor
Mecklenburg County Health Department

FROM: Sheila Nichols, Regional Environmental Health Specialist
Children's Environmental Health Branch

THROUGH: Ed Norman, Program Supervisor
Children's Environmental Health Branch

SUBJECT: Request for alternative sanitizer for diaper changing facilities

This memo is in response to your letter dated October 2, 2000, in which you asked whether or not a solution of 400 ppm quaternary ammonia was equivalent to a solution of 100 ppm chlorine for sanitizing diaper changing facilities.

A manufacturer of quaternary ammonia products ("quats") was contacted and indicated that a solution of 200 ppm quaternary ammonia with a contact time of ten minutes was recommended for sanitizing. Some quaternary ammonia products require a longer contact time to sanitize. A 100 ppm chlorine solution requires a two minute contact time to sanitize a surface. The manufacturer also recommended a 400 ppm quaternary ammonia solution for disinfecting diapering surfaces. However, 15A NCAC 18A .2819 (c) of the Child Care Sanitation rules only requires sanitizing.

The lengthy contact time needed for a quaternary ammonia solution to sanitize a diaper changing surface makes it's use impractical because of the numerous diapering events that may occur in a room full of infants. Therefore, a quaternary ammonia solution is not considered an "equivalent method" to a chlorine solution for sanitizing. Finally, chlorine is widely available and is an economical product.

I hope this response has adequately addressed your concerns. Please feel free to call me at (336) 973-8622 or Ed Norman at (919) 715-3293 if you have any further questions.