



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
NATIONAL RISK MANAGEMENT RESEARCH LABORATORY  
CINCINNATI, OH 45268

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Roger D. Masters, Ph.D.  
Research Professor of Government  
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Hanover, New Hampshire 03755-3547

OFFICE OF  
RESEARCH AND DEVELOPMENT

Dear Dr. Masters:

Thank you for your letter dated December 19, 2000. I apologize for the delay in my response. To formulate a reply to you, it was necessary to coordinate with our program office in Washington.

A recent communication to you (November 29, 2000) from Jeanette Wiltse, Director, Health and Ecological Division indicated that the U.S. Environmental Protection Agency (EPA) endorsed the use of fluosilicate compounds for fluoridation of public drinking water supplies. Supporting the endorsement is the ANSI/NSF Standard 60, Drinking Water Chemicals - Health Effects. This is the official agency position on this matter.

In January, representatives from the Office of Research and Development (ORD) and the Offices of Science and Technology and Ground Water and Drinking Water met to discuss a number of water related issues including Fluoridation. Several fluoride chemistry related research needs were identified including: (1) accurate and precise values for the stability constants of mixed fluorohydroxo complexes with aluminum (III), iron (III) and other metal cations likely to be found under drinking water conditions and (2) a kinetic model for the dissociation and hydrolysis of fluosilicates and stepwise equilibrium constants for the partial hydrolysis products.

As a result of these discussions, ORD is exploring options to initiate research in the identified research areas.

If we have additional information on this issue, we will forward it to you.

Sincerely,

*Sally C. Gutierrez*  
Sally C. Gutierrez  
Director  
Water Supply and Water Resources  
Division