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TO WHOM IT MAY CONCERN

I have been conducting research on the germicidal activity of chemicals for over 25 years. This has resulted in the development of several new and fully quantitative methods and also in the testing of all major classes of chemical germicides. The methods developed by me now form the basis for several national and international standards for testing germicides. I am an advisor to Government of Canada’s Therapeutic Products Bureau and also a member of the U.S. Environmental Protection Agency’s Scientific Advisory Panel on Germicide Test Methodology.

While germicides form the backbone of infection control, we use many chemicals for this purpose that may be toxic to humans and also harmful to the environment. Further, the label claims of many products on the market do not relate to their field application. For example, the contact time required is too long, the organisms used for testing are not relevant and the actual methods for testing them are seriously flawed. Bleach is readily available and inexpensive, but it can be toxic and corrosive. Quaternary ammoniums are generally considered to be mild and are good bactericides, but they are ineffective against most non-enveloped viruses and also have a low biodegradability profile. Phenolics are effective mycobactericides, but may be toxic and also contain volatile chemicals. Glutaraldehyde is non-corrosive and broad-spectrum with extended contact times, but its fumes can be harmful to mucous membranes.

In view of the above, I have been discouraging the use of such chemicals and encouraging manufacturers to develop safer, environmentally-benign and faster-acting formulations. Products based on stabilized and accelerated hydrogen peroxide (AHP) are among those that combine many of the attributes I desire in a chemical germicide. Among the important ones of these attributes are: (a) safety to humans, particularly those who work in healthcare and other institutional settings, (b) ready breakdown in the environment to harmless by-products, (c) spectrum of activity to include major classes of pathogens, (d) contact times shorter than required by other types of germicides, (e) freedom from volatile organics, (f) compatibility with as wide a variety of materials as possible and (g) ease of application.

I strongly believe that we cannot continue to expose ourselves to harmful chemicals or dispose of them in the environment. There must be an awareness of this issue on a global scale if we are to make a difference for the generations to come. Let us begin by starting with the use of safer chemical germicides in infection control.

Yours sincerely,

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