

Department of Chemistry

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Mr. Lewis A. Rosen
Commercial Director
Hydropath (UK) Ltd
Linpac House
Otterspool Way
WATFORD
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1 November 1993

Dear Mr. Rosen,

You have asked me to comment on the effects of applied fields on water.

Our research suggests that applied fields act on the nuclei of growing crystals and on prenuclear clusters. In the case of hard water the action would be on calcium carbonate nuclei or on prenuclear clusters containing hydrated calcium ions. These interactions alter the growth pattern of calcium carbonate crystals leading to larger particle size and to scale prevention.

There is no evidence that the applied fields have any effect on the chemical composition of the water itself and I do not believe that it would be reasonable to expect changes in the water.

Applied field devices such as Hydropath are not water softeners, because the calcium is not removed from the system and the potability of the water should not be affected.

Yours sincerely,

A handwritten signature in black ink, appearing to read "J.D. Donaldson", with a horizontal line underneath.

Professor J.D. Donaldson