Presentation K–5

Lead Removal by Ion Exchange

Peter Meyers, ResinTech, Inc., Cherry Hill, NJ

Dissolved lead is a significant environmental concern. Lead removal by ion exchange is somewhat problematic. Lead is not very soluble, and in many instances is present as a colloidal solid, and is essentially non-ionized. When lead is present as an ion, its removal by ion exchange is quite complete, but lead doesn't come off the resin easily, leading to problems during the regeneration cycle. This paper describes a pilot study performed for a large electronics manufacturer to determine which resin (weak or strong cation) is most effective to remove lead from water, and to determine the most effective means of regeneration. The pilot plant demonstrated that a combination of filtration and ion exchange was successful to reduce lead concentrations from several hundred ppb down to single-digit ppb effluent on a routine basis.

Paper not available.

For more information, contact:
Peter Meyers
ResinTech, Inc.
615 Deer Road
Cherry Hill, NJ 08034
Phone: 856/354-1152 Ext. 123
FAX: 856/354-6165
pmeyers@resintech.com