

SELECTIVE CONTAMINANT REMOVAL FROM NATURAL WATER

J Irving and F Boodoo

Purolite International Ltd. Cowbridge Road, Pontyclun, Wales, CF72 8YL, UK

ABSTRACT

The use of ion exchange resins to treat potable water has been practised for decades. Recently the subject of trace residuals to be found in potable water that may be undesirable or even toxic has merited considerable interest. Rightly or wrongly, the quality of water from Municipal Water Supplies has been questioned. Production of bottled water from various natural sources has grown concurrently with these developments. Many such sources are very satisfactory in terms of excellent taste and commendable quality. However recent studies have shown that traces of just one or two analytes makes such sources less desirable or not of a quality that passes the tight regulations for potable water supplies. Ion exchange resins have been developed for selective purification. Of particular interest is that the processes of conditioning resins while targeting the selective removal of a particular contamination may be refined so that that composition of the water from a given natural source remains essentially unchanged. This is often a regulatory requirement for natural bottled water supplies.