

2009 Boron Guidelines Development Work

Anthony Knafla, Equilibrium Environmental Inc.

Boron is a common co-contaminant typically found with salts in produced water. The resulting soil boron impacts due to produced water releases can in many cases be more persistent than the salt component due to the significant binding of boron to soil surfaces. Elevated boron levels can pose direct risks to plants, as well as risks to receptors such as livestock and groundwater. The current CCME and Alberta Environment guidelines for soil boron are based on the HWS methodology, but a preliminary literature review has indicated that the SPB methodology may be a more relevant indicator for plant toxicity in a variety of soil types.

2009 Equilibrium_Boron presentation (guideline development)