



PROJECTS

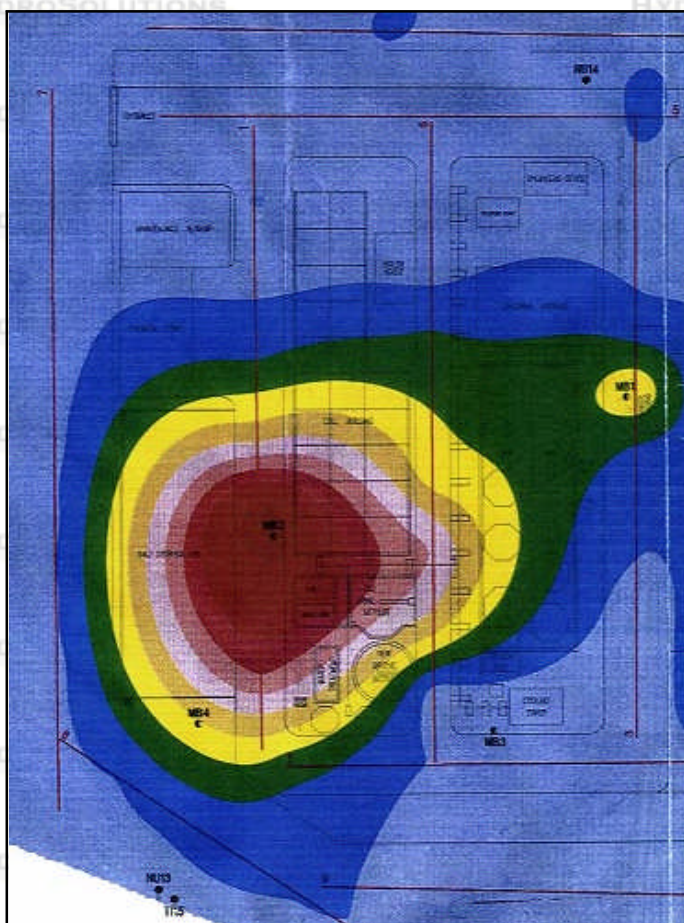
HYDROGEOLOGY

Hydro13

CHLOR-ALKALI MANUFACTURER, KWINANA, WA Groundwater investigation

An investigation of groundwater quality was undertaken at a chlor-alkali plant, producing chlorine gas, sodium hydroxide and hydrogen from brine by electrolysis. The manufacturing process involves solid salt dissolved in hot water to produce brine as the raw material.

A geophysical survey using the Em34 was undertaken to produce electromagnetic profiles of the operational site. These data were used to infer potential points of leakage to groundwater.



A groundwater monitoring network was established to determine hydrogeological conditions and groundwater quality in 3-dimensions.

The rate of movement and salt flux was estimated.

It was concluded that the low migration rates would promote natural attenuation of the salt by advective dispersion in the absence of any downgradient users. Recommendations were made for an ongoing monitoring program.

Hydrosolutions Pty Ltd
U14, 14 Whyalla Street
Willetton
Western Australia 6155
Tel: (+61 8) 9457 5448
Fax: (+61 8) 9457 4293
Mob: 0403 021533

E-mail: stuart.jeffries@hydrosolutions.com.au
Website: www.hydrosolutions.com.au