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Your Order : CES/HQ 682

Our Ref : TEJ/Consul.1706/93

Report on the sample of **Tip Leachate** received for analysis on the 17th. June, 1993.

Source : Leachate from Little Newcastle Landfill Site.

Appearance:- Turbid water with a brown sediment



INCOMING

pH value : 6.50
Suspended matter : 0.396 %w/v

Analysis of filtrate

Iron, as Fe (micrograms/litre) : 15,275 (15.28 ppm)
Lead, as Pb (micrograms/litre) : 7
Manganese, as Mn (micrograms/litre) : 7325 (7.33ppm)
Copper, as Cu (micrograms/litre) : 3
Zinc, as Zn (micrograms/litre) : 50
Nickel, as Ni (micrograms/litre) : Nil
Chromium, as Cr (micrograms/litre) : 2
Cadmium, as Cd (micrograms/litre) : < 1



OTHER

Analysis of sediment

Iron, as Fe : 19.9 % of the sediment
Manganese, as Mn : 0.38 % of the sediment

Conclusions:

The concentrations of metallic impurities present in this sample of leachate water, other than iron and manganese, were at low levels and unlikely to cause problems if discharged to a receiving stream. However, the levels of iron and manganese in solution may have the effect of denuding a stream of its available oxygen, the resulting oxidised forms likely to form brown sediments on the stream beds.

The sediment present in the sample consisted basically of iron oxides and soil.

Signed
T.E. Johnson
Public Analyst
5th. July, 1993