## Environmental Geotechniques – Engi 7718 In Class Assignment – 22 July 2009

a.	They are plants that accumulate very high concentrations of a particular element such as a metal and the concentrations accumulated by the plant may be many times the concentration in the soil or water to which the plant is exposed. green cabbage is an example
b.	In southwestern Guizhou Provinmce, China mercury and arsenic were present with the thallium; in the Allchar deposit of former Yugoslavia antimony and arsenic were present with the thallium; in Lengenbach, Switzerland lead, zinc, arsenic and barium were present with the thallium.
c.	$0.02~\text{mg/kg}$ in rocks or ores, $0.005~\mu\text{g/L}$ in waters, $0.2~\text{mg/kg}$ in soils, and $0.05~\text{mg/kg}$ crops
d.	Crops grown in the area containing high levels of thallium are a source of thallium to the residents, their urine contained concentrations of from 153 – 2668 $\mu$ g/L and the normal level in people from unpolluted areas is < 1 $\mu$ g/L, such crops should not be continued to be grown
e.	Excavating foundations, irrigation with waters containing thallium, lining irrigation channels with soil materials or rocks containing thallium, coal mining where the tailings could contribute to contaminated surface water run-off, using mine tailings for terraces