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 mg/kg in rocks or ores, 0.005 μ g/L in waters, 0.2 mg/kg in soils, and 0.05 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 μ 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