

## **HW Assignment – Sedimentary Rocks**

(from Goodman, 1993)

Due Dec. 02, 2016

1. You are a project engineer for the design and construction of an underground powerhouse in interbedded sandstones and shales. (a) Discuss the controls offered by the rock in connection with siting the project? What potential problems are likely to develop during construction? What design modifications would counteract the expectable problems?
2. A non-sanitary (toxic) landfill is to be placed in a canyon cut steeply into tightly folded sandstone and shale. What special considerations does this geological picture suggest as far as the design and operation of the landfill are concerned?
3. A public parking lot is to be constructed within a city over the site of a former sinkhole. What different schemes could be used to deal with the potential foundation hazard?
4. What exploratory strategies can be used to determine the water retentiveness of a reservoir in karstic terrain?
5. Rock salt has been proposed as a host rock for disposal of nuclear wastes. Which would be preferable: salt in salt dome or salt from a bedded deposit? Why?
6. Limestone is a common aggregate for Portland cement and asphaltic concrete. What factors could make one limestone source excellent for such use and cause another to be disallowed?