Phytoremediation

1. Overview of conventional remediation and phytoremediation
2. Organic (degradable) pollutants

1

Outline

- 1. Pollution problem
- 2. Traditional treatments
- 3. Phytoremediation-advantages and disadvantages
- 4. How phytoremediation works
- 5. Examples: Solvents, explosives, PAHs
- 6. Matching the plant to the site
- 7. Gas Works Park and K.C. DOT discussion

2

Study Guide

- Compare conventional methods of remediation to phytoremediation in terms of advantages and disadvantages.
- What are some of the ways that phytoremediation works?
- What are some of the possibilities and challenges with phytoremediation at the local examples?

3

Overview of How Phytoremediation Works

- A. Phytoextraction (metals)
- B. Rhizofiltration (metals)
- C. Phytostabilization and containment (metals)
- D. Phytovolatilization (metals)
- E. Phytostimulation
- F. Phytodegradation

4

Examples of successful phytoremediation projects

- http://www.cluin.org/products/phyto/
- USDA EPA website on phytoremediation projects
  - Search “phytoremediation” and “complete”

5