

CE 326 Principles of Environmental Engineering – Spring 2006
HAZARDOUS WASTES

Scope of the Hazardous Waste Problem: _____

Hazardous Wastes Generators: _____

Treatment Storage and Disposal Facilities (TSDF): _____

93% of hazardous wastes managed by: _____

Chemical Products Industry (\$125b annually) contributes: _____

Number of Chemicals: _____

New Chemicals Manufactured every year: _____

Abandoned Hazardous Wastes Sites: _____

- In 1980 Congress passed the C_____ E_____ R_____ C_____ and L_____ Act (CERCLA) better known as Superfund
- \$1.6b from taxes on c_____ o_____ & commercial chemicals
- every state had to compile a list of hazardous waste sites and submit it to EPA
 - N_____ P_____ L_____
- EPA prioritized these sites based on the potential hazard from g_____ (S_{GW}), s_____ water (S_{SW}), and a_____ exposure (S_A):

$$S_M = \frac{1}{1.73} \sqrt{S_{GW}^2 + S_{SW}^2 + S_A^2}$$

where S_M is the composite score

- There are _____ sites on the list
- Only _____ sites have been cleaned up
- Three things about Superfund
 - _____
 - party can be liable for actions that were previously l_____
 - p_____ r_____ p_____
 - _____
 - anyone who buys p_____ contaminated with hazardous wastes can be liable
 - only way to avoid liability is to make “a_____ a_____ I_____” prior to purchase
 - _____
 - liability can be shared between parties or any one party may be liable for entire cleanup
 - “deep pockets”
 - EPA only needs to s_____ one party - that party must sue other parties to recoup c_____ c_____