

WASTE MANAGEMENT AND GEOLOGY

NEPA: National Environmental Policy Act of 1969

RCRA: Resource Conservation and Recovery Act of 1976

EPA: Environmental Protection Agency

Municipal Waste Disposal Methods

1) Sanitary Land Fills

2) Incineration

3) Ocean Dumping

Problems of Waste Isolation

1) Stabilization

2) Gas Generation

3) Leachate

The Completed Landfill

Recycling

Composting

Multiple Land Use Strategies

Hazardous Waste Disposal Methods

1) Secure Landfills

2) Deep Well Injection

Superfunding

Nuclear Waste Disposal

Types of Nuclear Waste:

- 1) High Level
- 2) Low Level
- 3) Mill Tailings

Isolation of Nuclear Waste

⇒ Yucca Mountain

Health and Safety Standards for Nuclear Waste

Emissions:

- 1) Alpha Particles
- 2) Beta Particles
- 3) Gamma Rays

Is There a Future for Nuclear Energy?

Private Sewage Disposal

Case Studies

15.1: The Sociology of Waste Disposal

15.2: The Highest Point between Maine and Florida

15.3: Deep Well Injection and Human Caused Earthquakes

15.4: Love Canal – A Precedent in Human Caused Environmental Pollution

15.5: Radon and Indoor Air Pollution