Review for Chapters 21-22: Water Pollution, Solid & Hazardous Waste

1. Distinguish between a non-point source and point source of pollution.

2. What would be chemical and biological evidence of human waste contamination of a waterway?

3. Be able to explain what is occurring at various locations (zones) in a river when a point source contamination is introduced to the waterway (i.e. DO, BOD, organisms).

4. What are some diseases that are caused by pathogens in drinking water?

5. Know the specifics about the Clean Water Act and the Safe Drinking Water Act.

6. What occurs during each stage of sewage treatment (primary vs. secondary)?

7. Why are many rivers and lakes still contaminated with PCBs and mercury?

8. What legislation has a cradle-to-grave approach in dealing with hazardous waste?

9. What is the process called when plants are utilized to remove toxins from soils?

10. Where does most solid waste in the United States come from by source, composition, and industry?

11. What is the term for a contaminated location that receives financial assistance to return the land to some usable purpose?

12. Recognize the chemicals that are listed on the POP list. Why are POPs such a problem?

13. If the average US citizen produces 4 lbs of waste a day and there are 350 million Americans, how much waste do we produce in a given year? (No calculator, use DA)

14. By percentage, how much does the United States landfill, recycle, incinerate?

15. What legislation taxes companies in order to fund cleanup projects? What is another name for this legislation?

16. What is the difference between open-loop/primary & secondary recycling?

17. What is integrated waste management? Summarize the priorities.

18. What are the concerns regarding CAFOs?

19. What causes eutrophication? What are the consequences? What are HABs? Hypoxia?

20. Know the water tests (physical, chemical, biological) that are performed to evaluate water quality in a watershed.

21. What methods of waste disposal are legal in the U.S.? Illegal?