

## Chapter 22 study questions

### The “Big Questions”

- A) What are the various kinds of water pollution and their sources and effects?
- B) What are strategies for decreasing water pollution?
- C) What are some important Laws concerning water pollution?

As always, be sure you know all the bold and italic words.

1. What is “water pollution” and what factors affect its definition.
2. What is the primary water pollution problem in the world today?
3. Why can it be expected that sources of drinking water in some locations will be degraded in the near future?
4. Explain what reduces the O<sub>2</sub> content in streams.
5. Relate BOD to dissolved oxygen.
6. Describe the three zones resulting from the introduction of raw sewage to streams.
7. What were the causes of the Outbreak in Milwaukee Wisconsin?
8. Why is fecal coliform bacteria used as a measure of disease causing potential in polluted water?
9. Describe the causes and effects of *e. coli* as a pollutant. Include the example of the Walkerton outbreak in your answer.
10. What are the two primary nutrients that are considered pollutants and what are their sources.
11. How is Medical lake a good example of nutrient pollution?
12. Describe the process of Eutrophication.
13. What are the effects of oil spills? How does the Exxon Valdez accident demonstrate these effects?
14. Why is sediment pollution a “twofold problem?”
15. What human activities affect the creation of sediment pollution?
16. What types of mines create acid mine drainage and what type of acid do these mines create?
17. What are the effects of acid mine drainage?
18. Contrast point and non-point sources of pollution and give examples of each.
19. What factors effect the potential hazard presented by groundwater pollution?

20. How does groundwater pollution differ from surface water pollution?
21. Explain the functions of the basic parts of a septic tank system.
22. Summarize what happens at each stage of a waste treatment plant (bullet lists, arrows, outline OK).
23. Explain how wastewater can be applied to land applications.
24. How are wetlands being utilized in the context of wastewater?
25. What are the three types of water reuse, and what are the possible benefits or problems with each?
26. What are some of the most important laws regarding water pollution and what did they require?