

May 2, 2008

Name: _____ Pledge (sign): _____

Env Studies 201 Test #3

Point Total: 100 pts possible

6 pts 1. In a little detail, describe *one* of the following controversies: the Love Canal incident or the EPA particulate matter incident.

6 pts 2. What is the main *advantage* and *disadvantage* of the Precautionary Principle?

6 pts 3. (a) What is *radiative forcing*?

8 pts (b) What human activities have resulted in a positive radiative forcing? List as many as you can.

8 pts 4. It has been estimated that approximately 4000 people died in London's 'killer smog' episode in 1952. How was this estimate obtained? A figure—with properly labeled axes—would be a great help to clarify your answer.

6 pts 5. (a) Sketch an example of a dose-response curve, making sure to label the axes.

6 pts (b) What is the NOEL (or NOAEL)? Explain it and add it to your sketch.

6. The Kyoto Protocol has three *flexibility mechanisms* to help meet emissions targets.

6 pts (a) List these mechanisms and briefly describe each.

6 pts (b) Explain the economic justification in common for all these mechanisms.

8 pts (c) Ruth Greenspan Bell was critical of these mechanisms. What were her criticisms?

6 pts 7. What are *dead zones* and what pollutants and activities cause them to occur?

12 pts 8. How is air quality regulated under the Clean Air Act? Answer in a little detail.

16 pts 9. Why are effective environmental treaties difficult to craft? And what exactly constitutes an 'effective' environmental treaty? Answer in detail. In your answer, explain the concepts of 'free riding' and 'side payments.' Also use the Helsinki Protocol to illustrate your answer.