

Appalachian State University  
Economics 4621/5621 – Advanced Environmental Economics  
Final Test  
Due May 4, 2015 by 5PM

Attempt SIX questions. Neatness counts.

1. Kolstad (page 386, 2<sup>nd</sup> edition) discusses disadvantages of relying on the use of liability lawsuits to address environmental policy targets. He notes that the liability mechanism faces problems with hazards that are common and have significant (large impact) risks. Reliance on liability would burden the courts. Using the Hand Rule (as we discussed in class) discuss Kolstad's argument. Hint: is it a requirement that the case go to trial?
2. Table 18.1 in the text reports on a number of mortality equivalent risks. Given this information how would you explain the persistence of desires to regulate risk arising from the production of PVC but the lack of political pressure to regulate bicycle riding?
3. One of the most common techniques for measuring the value of environmental resources (views, cleaner air or water, etc) is the Contingent Valuation Method (CVM). Critics contend that the question regarding the individual's value is hypothetical (no money is actually collected) so the responses suffer from "hypothetical bias". Explain hypothetical bias. Would it lead to over or under-stated values? Why? Do you think hypothetical bias is a real problem? Explain.
4. For many years the often repeated slogan was "dilution is the solution to pollution". What have we learned regarding this view of the world? In the *Weyerhaeuser v. Castle* (1978, D.C.) case the court ruled that Weyerhaeuser's defense, that the discharge into the Pacific Ocean was a small fraction of the total volume of the receiving water (the ocean) so no damages occurred, was invalid and ruled against Weyerhaeuser. Was the court correct? Explain.
5. We have implemented many environmental policies that rely on market forces to introduce efficiency into the regulatory process. One such program is the SO<sub>2</sub> permit program to reduce the overall level of acid rain depositions into lakes and streams in the northeast part of the country. Explain how this program works. What is the effect of heterogeneity of firms' abatement costs on the performance of the permit market? Explain carefully.
6. Many environmental regulations result in a "taking" or loss of property rights for an individual or a group. Explain the concept of a taking as it applies in this context. Typically, such takings do not result in compensation to the original owner of the property right. Look up the *Lucas v South Carolina Coastal Council* case and argue for or against payment of compensation for Lucas. Is compensation justified in such regulatory takings?

7. CERCLA mandates that all past and present land owners are potentially liable for damages from contaminated lands. Such joint and severable liability enhances recovery for losses imposed by environmental contamination. However, the law results in some unintended consequences. Identify two of these consequences and explain the effects.