SAMPLE PAPER TOPICS

I've listed below some sample topics that might serve as a basis for a final paper in this class. You are not required to choose your topic from this list. In fact, I am hoping that you will select different topics that will draw on your own experience, training and interests.

As we've discussed in class, your topic should allow you to provide some creative and original legal research. Research papers that compare the laws of different countries are an excellent source of ideas and information, but I will expect you to draw conclusions and legal observations on the importance of differences between legal systems and how they affect the application of environmental laws to emerging technologies.

I've listed some sample topics below. Each of these general topics would need further refinement and focus on a specific technology or law that could allow deeper legal analysis. All of these topics would also support some comparative analysis of how different national laws would handle these issues:

- *Made in Our Own Image – How Do the Endangered Species Act and Other Federal Natural Resource Statutes Apply to Genetically Modified Animals or Plants?* For example, if private industry creates a genetically modified version of an endangered species such as salmon, would the Endangered Species Act limit the release of that modified salmon into the wild? Would those "artificial" salmon count as species members when deciding whether that species is endangered? What should the law be?

- *The Perils of Safe Harbors – Should We Provide a Shield Against Environmental Liabilities for Desirable Emerging Technologies?* This paper could examine, for example, whether EPA does (or should) grant waivers against CERCLA liability for cleanups that use nanomaterials, or shield geoengineering research or demonstration projects from tort liability. Do other nations provide a limited immunity from environmental enforcement liabilities for research activities or demonstrations?

- *Knowledge and The Undiscovered Country – Can Reflexive Regulation Work With Emerging Technologies that Pose "Unknown Unknowns"?* If so, how can we design laws and regulations to encourage responsible corporate behavior without stifling discovery and innovation? What role should the precautionary principle play? This topic would need to provide a focused evaluation of how reflexive environmental strategies should apply to a specific technology or two, such as geoengineering or synthetic biology.

- *When Power Means Responsibility – Do Federal Laws Require the Use of Emerging Technologies for Certain Environmental Goals?* Some scientists have urged that we must actively seek out ways to genetically modify certain species which face a threat of imminent extinction from climate change. If a species' existence was immediately threatened, would the Endangered Species Act compel federal agencies to consider using emerging

technologies such as climate engineering, genetic modification or ecosystem migration techniques to save them?

- *Tipping the Scales, Changing the Setting – How Will Unconventional Gas Production Change Environmental Legal Requirements and Permitting Standards for Energy Production?* Emerging technologies to unlock gas from shale formations may create a large domestic gas supply that will change expectations for energy production and use. For example, will a ubiquitous supply of cheap natural gas make it more difficult to get federal Clean Air Act permits for coal-fired power plants, oil sand refineries or other energy sources (such as hydropower or wind) that require large swaths of land? Because of the possibly universal availability of cheap natural gas in the future, federal agencies may insist on greenhouse gas permitting limits that effectively discourage power from other sources. Would (or should) the Clean Air Act allow this?