

University of Utah  
College of Law  
**EXAMINATION HONOR CODE  
STATEMENT**

ENVIRONMENTAL LAW 7240

Professor Robert Adler

December 16, 2005

I, \_\_\_\_\_, exam # \_\_\_\_\_, certify  
that I have not used any unauthorized assistance or materials in the taking of this examination.

Unless specifically authorized below, I have not used any communication device and have not accessed any electronic files or materials by computer, including but not limited to, any materials on the hard drive, in directories, on floppy disks, or via the Internet or email. If this examination is answered on computer, I further understand that I assume the risk of any technical difficulties and that I will not be given additional time or consideration in the event of technical difficulties.

Taking of this examination is governed by the Codes of Student Rights and Responsibilities (PPM8-10) regarding academic honesty. I understand that failure to comply with that Code will result in my being subjected to academic sanctions, including but not limited to possible grade reduction, failing grade, suspension or dismissal from the law school.

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

Authorized Materials – Unrestricted

**University of Utah  
College of Law  
Examination Cover Sheet**

Student Examination Number: \_\_\_\_\_

**Environmental Law – 7240**

**Professor Robert Adler**

**Friday, Dec. 16, 2005  
1:00 p.m.**

**Fall Semester 2005**

**Time Allowed: 3 hours**

**Special Examination Instructions:**

**PLEASE READ CAREFULLY BEFORE PROCEEDING:**

1. **This exam consists of 3 essay questions of varying length, all of which have multiple parts. Grading points are directly proportional to the time assigned to each question, for a total of 180 points. Points/estimated time are indicated in bolded brackets. **DO NOT EXCEED THE TIME ALLOCATED FOR EACH QUESTION. MOVE ON!****
2. **Answer all questions in your blue books (or computer disks). No credit will be given for answers that are not included in the submitted blue book or computer disk answer.**
3. **Read the entire fact pattern and all questions carefully before proceeding. Make sure you understand what is being asked before you write.**
4. **The exam consists of 3 pages NOT including the instruction pages. Make sure you have all pages before proceeding.**
5. This exam is open book. You are allowed to bring any materials into the exam (including your case book, notes, outlines, and statute book). However, I recommend strongly that you not try to rely too heavily on these materials (especially your case book), because you will run the risk of running out of time to write the exam.
6. NOTE: Some exam facts are real. Others are hypothetical.

### General Examination Instructions:

1. Print your Examination Number, the title of the course and the instructor's name on the front of every bluebook used.
2. Number each bluebook (1 of 3, 2 of 3, 3 of 3, etc.) and place all bluebooks and examination questions inside the first-numbered bluebook.
3. Students **must submit the examination questions with the answers.**
4. Students who are typing must use the yellow paper provided.
5. Students may not take any bluebooks or scratch paper from the examination room, whether blank or used.
6. If the examination utilizes a computer answer sheet, print your Examination Number at the top of the front side of the computer answer sheet in the space provided. Complete the space marked "Identification Number" (on the back of the computer answer sheet) by filling in four zeros followed by your Examination Number. For example, if your Examination Number is 99999 fill in 000099999.

Question 1 – The Sad Tale of the Yucky, Hazy Valley [1 hour – 60 points]

If you looked up from your studying over the past week, you saw an unattractive haze over the Salt Lake Valley. If you took a break to exercise, your burning lungs might have told you that this “air” is not necessarily so healthy to breathe. Much of the winter air pollution problem in Salt Lake City is due to fine particulate matter. During inversions, in which a cold air mass is trapped below another air layer until a storm system comes through and clears the air, particulate matter builds up in the air, and can sometimes reach levels that exceed the applicable ambient air quality standards.

Salt Lake County is a “maintenance” area for PM-10 (particulate matter of 10 microns in diameter or smaller). The region once exceeded but now barely attains PM-10 air quality standards. A new implementation plan must demonstrate that air quality violations will not recur. Salt Lake County also faces significant growth. Major development proposals currently are being written for the west side of the valley. These large new developments will include residential, commercial, and light industrial areas, as well as all of the services required by communities (schools, fire stations, etc.). Other parts of Salt Lake County are expected to grow as well over the next several decades. In anticipation of higher demand for electrical power, assume there are also proposals for two new coal-fired power plants (which can emit significant amounts of PM-10) to be sited in Salt Lake County. However, the huge copper mine that has dominated the economy in the west side of the valley is nearing the end of its production during the same period, meaning that Kennecott will begin to reduce operations at its smelter during the same period (the large smokestack you see looking west from Salt Lake City, and which also emits PM-10 pollutants).

A. Assume that valid local research indicates that the kinds of particulate matter typically present in Salt Lake County air are not as damaging to human health as in other parts of the country. Based on this information, can the county or the state weaken the applicable ambient air quality standards for PM-10 as a way to prevent future nonattainment status? Why or why not? [10]

B. Can any level of government amend the air quality standards for PM-10 for Salt Lake County on the basis that attainment of the standards will not be possible given expected growth in the region? Why or why not? [10]

C. Describe the process by which the maintenance implementation plan should be developed to ensure that the PM-10 standard will be attained over time. Who must take what steps, and who can or should be involved in the process, and in what ways? (Read Part D before answering.) [10]

D. What substantive issues will the plan have to address to assure continued attainment of the PM-10 standard in the region? What information is needed; how will it be analyzed and used; and what decisions must be made? What problems do you foresee in developing this plan, and how might you propose to solve them? (Read Part E before answering.) [20]

E. Can the two new major stationary sources (the power plants) be allowed when the region is so close to violating the standards? If so, how, and under what conditions? [10]

Question 2 – Avalanches and Not So Natural Disasters [1 hour – 60 points]

This year's early snow, followed by prolonged sub-freezing weather, created a layer of hoar frost on the snow in the Wasatch Mountains. Large subsequent snowfalls on top of this frost layer create perfect conditions for slides. Next spring, a massive slide occurs at the Beta Ski Resort in Middle Cottonwood Canyon. Runoff erodes away the surface soil that has covered an old tailings pile from an early 20<sup>th</sup> century mining operation. Lead and other toxic metals begin to run off the site and into Middle Cottonwood Creek, which then runs into the Jordan River and Great Salt Lake.

Salt Lake County uses Middle Cottonwood Creek as part of its public drinking water supply, and operates a treatment plant at the bottom of the canyon. Because of the new mine runoff, drinking water from the plant exceeds the applicable drinking water standards (maximum contaminant levels or MCLs) under the federal Safe Drinking Water Act (SDWA). To avoid SDWA penalties and other possible sanctions, the County installs new treatment equipment and incurs ongoing operation costs.

The company that operated the mine is now long-defunct. The land on which the mine tailings sit is now owned by the federal government as part of the National Forest system. Beta operates a four-season resort on the site under a Special Use Permit issued by the Forest Service. Because the slide zone now interferes with operation and maintenance of one of Beta's most popular lifts, it must re-grade the area and rebuild the small road it uses for maintenance equipment. This work further increases the amounts of metals in runoff from the site.

The Forest Service and Beta propose a plan to remedy this problem. They propose to divert the runoff away from the ditch that runs into Middle Cottonwood Creek. Instead, the runoff will be filtered through soils up-gradient from some wet meadow wetlands adjacent to the creek. Consultants to Beta, using various groundwater models, predict that after the combination of filtering by the soils and wetlands, the remaining water seeping into the creek will no longer cause problems at the County's drinking water treatment plant. At the same time, however, Beta proposes that the Forest Service allow it to build a new mid-mountain restaurant on the old tailings pile as long as it must spend so much money to change the site contours. The additional excavation and other work related to that construction, however, could expose even more waste material to runoff.

You are an attorney for the County.

A. What remedies might you have, and against whom, to recoup the County's unexpected treatment costs? Explain fully. [30]

B. You are scheduled to meet with attorneys for the Forest Service, Beta, EPA and the state Department of Environmental Quality in an effort to ensure that the County's interests are protected by the various pending proposals. What substantive and procedural issues would you raise to meet that goal, and why would they help protect your client's interests? [30]

Question 3 – The Even Sadder Tale of the Poisonous Ducks [1 hour – 60 points]

Through recent sampling efforts, high levels of mercury have been detected in ducks taken from Great Salt Lake wetlands. The state Department of Wildlife Resources (DWR) issued a limited advisory to hunters identifying species of ducks that should not be consumed due to excess mercury levels. The advisories were based on samples from ten ducks of each species typically sought by local hunters. DWR issued advisories for those species for which the average (mean) concentration of mercury in duck tissue exceeded thresholds set by EPA. DWR then indicated that it would take no additional action, asserting that the ducks are “owned” and regulated by the federal government through the U.S. Fish and Wildlife Service. (Local environmental groups accused DWR of “passing the duck.”) FWS issues an advance notice of proposed rule making (ANPRM) in the Federal Register, indicating that it proposes to issue more comprehensive guidelines on taking and consuming potentially contaminated waterfowl from Great Salt Lake.

The sources of mercury contamination in the Great Salt Lake Duck population are not well known. Mercury may be transported atmospherically from mining operations in Nevada. Nationally, coal-fired power plants are a major source of mercury emissions and air deposition into water bodies, and several plants in Utah and in neighboring states could contribute to the problem. There may be mercury in runoff from abandoned mining sites in the mountains around the lake, and elsewhere in the Great Salt Lake watershed. In addition, while some Great Salt Lake ducks are year-round residents, others are migratory and could be contaminated elsewhere.

You are retained by the Utah Chapter of Ducks Unlimited to represent the interests of Utah duck hunters.

A. What issues would you raise in response to the ANPRM regarding how FWS should proceed with its process? Include any comments about DWR’s current method for issuing advisories. [15]

B. Because you represent a “legitimate sportsmen’s group” rather than “environmental terrorists,” a member of Utah’s congressional delegation invites you to help his staff draft proposed federal legislation to address this problem. Assume for purposes of this question that none of the existing environmental statutes apply to this situation. Choosing from all of the various tools you learned this semester, design a comprehensive program to address as many aspects of this problem as possible, and explain why you chose those methods. [45]