

EXAM # _____

FINAL EXAM
ENVIRONMENTAL LAW, FALL 1999
CAPITAL UNIVERSITY LAW SCHOOL
Professor Hirsch

Professor's Instructions: Read Carefully

1. At the beginning of this exam you should have the following: (a) this nine-page exam packet; (b) a scantron form sheet for the multiple choice questions; (c) a scantron instruction sheet; (d) a #2 pencil to mark the scantron sheet and a pen for writing the narrative portions of the exam; (e) answer books.
2. *Please write your exam number on the front of your envelope, the upper right hand corner of your exam packet and on each of your answer books.*
3. *Please fill in the identifying information on your scantron sheet, as indicated in the instructions.*
4. This is a three-hour examination. It consists of a multiple choice section and two essays. I recommend that you spend 60 minutes on the multiple choice section, 75 minutes on Essay I, and 45 minutes on Essay II. Points will be allocated roughly in proportion to these recommended time allocations. Manage your time wisely. Be sure to reserve sufficient time to answer all parts of the exam fully.
5. Write all your narrative answers on the colored answer books. Begin each essay with a new answer book. If you write more than one answer book for a given essay, number the books sequentially (e.g. Essay I, book 2). Answers written on the exam packet itself will not be considered.
6. *At the conclusion of the exam, please insert your exam packet, answer books, and scantron sheet into the envelope. Then place the envelope in the box at the front of the examination room. **You may not make a copy of or otherwise reproduce the exam packet.***

MULTIPLE CHOICE QUESTIONS

(60 minutes)

1. Under RCRA, a “characteristic waste” is deemed “hazardous” if it exhibits one of four characteristics. These four characteristics are:
 - A. Toxicity, corrosivity, ignitability and carcinogenicity.
 - B. Carcinogenicity, ignitability, reactivity and corrosivity.
 - C. Toxicity, reactivity, ignitability and corrosivity.
 - D. Corrosivity, toxicity, ignitability and explosivity.
 - E. Reactivity, corrosivity, toxicity and flammability.

2. Under NEPA, which of the following would *not* have to be considered in determining whether a major federal action will "significantly affect" the quality of the human environment.
 - A. The degree to which the action may adversely affect a threatened species.
 - B. The degree to which the project may increase noise, crime or traffic problems in a neighborhood.
 - C. The fact that the action's effects are likely to be highly controversial.
 - D. The fact that the action will take place near a civil war battlefield.
 - E. All of the above must be considered.

3. In establishing primary National Ambient Air Quality Standards for criteria pollutants, the EPA is *not authorized* to do which of the following:
 - A. Take into consideration the adverse health effects on particularly sensitive populations such as the elderly, where the majority of citizens would experience no health effects at all.
 - B. Take into consideration the economic cost to regulated entities of achieving the standard that EPA sets.
 - C. Take into consideration debatable health effects that have not yet been scientifically proven to be harmful.

- D. Set a more stringent standard than the one that, according to existing studies, would constitute the minimum necessary to protect the public health.
4. Which of the following would not constitute a "discharge of a pollutant" under section 301 of the Clean Water Act:
- A. Using a pipe to carry water pollutants from a factory to a riverbed, where the riverbed is dry except for a one-month rainy season.
- B. Employing a ditch to collect the pollutant-containing run-off from an industrial facility and channel it into a lake.
- C. Using a conveyor belt to carry pollutants in the form of solid waste from a facility and deposit it into a river.
- D. Employing a lab technician to carry buckets of liquid toxic chemicals out of a facility and dump them into a stream.
- E. All of the above would constitute the "discharge of a pollutant" under section 301 of the Clean Water Act.
5. Hazco discards Waste A and Waste B, both of which are solid wastes. Waste A is listed as a RCRA hazardous waste. Waste B exhibits the toxicity characteristic as defined under RCRA. Before discarding these wastes, Hazco mixes each of them separately with another solid waste, Waste C. Based only on the above facts, which of the following is not positively identifiable as a RCRA "hazardous waste"?
- A. Waste B.
- B. The mixture of Waste A and Waste C.
- C. The mixture of Waste B and Waste C.
- D. All of the above can positively be identified as RCRA hazardous wastes
6. The "God Squad" is:
- A. A hit television show popular in the 1970s.
- B. A body of federal, state and local officials that determines which endangered species are entitled to protection.
- C. A group of Fish and Wildlife Service officials that reviews actions of federal agencies to determine their biological consequences.

- D. A group of Cabinet-level federal officials and at least one state official who can allow federal actions to proceed even where they will jeopardize an endangered species.
 - E. A group of environmentalists, government officials and industry representatives, appointed by the President, that determines whether endangered species shall live or die.
7. The main reason(s) that the Clean Water Act regulates point sources and not non-point sources is that:
- A. Non-point sources do not contribute significantly to water pollution in the United States.
 - B. Land use control has typically been handled on the local level and there is political resistance to the federal government's getting involved in this area.
 - C. It is easier to establish effluent limitations and to design control technology for point sources than for non-point sources.
 - D. Both A and C.
 - E. Both B and C.
8. Which of the following constitutes a major difference between the Endangered Species Act (ESA) requirements for determining whether a federal action will "jeopardize" an endangered species, and the NEPA requirements for determining whether a federal action will "significantly affect" the quality of the human environment:
- A. Under NEPA, a federal agency makes the determination itself, whereas under the ESA it must consult with another federal agency.
 - B. Under NEPA, the agency need not consider how the action may impact on endangered species since it need only concern itself with impacts on the "human environment."
 - C. Under the ESA the agency is limited to considering direct harm to individual members of the species whereas under NEPA it is not.
 - D. Under the ESA a "jeopardy" determination is based on a biological assessment whereas under NEPA the "significantly affect" determination is based on an environmental impact statement.

9. Trashco has four different waste streams that it discards from its facility. The first of these is a gas that Trashco seals in air-tight containers before discarding. The second is a liquid waste that Trashco hauls off to a landfill in sealed barrels. The third is a toxic gas that Trashco emits through its smokestack. The fourth is a liquid waste that an individual worker occasionally carries out of the facility in buckets and pours onto the ground behind the facility. Which of these waste streams would not qualify as a RCRA "solid waste"? (For the purposes of this question, assume that none of these waste streams are regulated under a Clean Water Act NPDES permit.)
- A. The gas in the air-tight containers.
 - B. The liquid waste discarded in sealed barrels.
 - C. The toxic gas emitted through the smokestack.
 - D. The liquid waste carried out in buckets and poured onto the ground behind the facility.
 - E. None of the above would qualify as a "solid waste" under RCRA.
10. Development, Inc. is preparing to build residential housing in a 1000-acre tract of old growth forest in New Jersey. Friends of Wildlife (FOW), a public interest conservation group, has discovered that the red-throated warbler, an endangered species, lives only in old growth forest in the Northeastern United States and that there is little of this type of forest land remaining. FOW has brought suit in federal district court under Section 9 of the Endangered Species Act to stop Development, Inc. from cutting down the 1000-acre tract of old growth forest. Which of the following pieces of evidence--standing alone and without any other supporting evidence--would be *least helpful* to FOW's efforts?
- A. Evidence that the cutting down of the 1000 acres of old growth forest would degrade the habitat of the red-throated warbler.
 - B. Evidence that the cutting down of the 1000 acres of old growth forest would directly result in the deaths of only three red-throated warblers.
 - C. Evidence that the cutting down of the 1000 acres of old growth forest would have a detrimental effect on the breeding capability of the red-throated warbler.
 - D. Evidence that the cutting down of the 1000 acres of old growth forest would have a detrimental effect on the warbler's ability to build its nests.
11. Under the Natural Resource Damage provisions of CERCLA, a Trustee that has assessed damages in compliance with the current Department of Interior regulations:

- A. Will be awarded damages in that amount.
- B. Will be presumed in court to have assessed the damages correctly.
- C. Will be able to seek reimbursement from the federal government of the costs of damage assessment.
- D. Will have assessed damages as the “lesser of” restoration cost or lost use value.

ESSAY I
(75 minutes)

In the early 1940's, Chemco, a manufacturer of industrial chemicals, generated a great deal of Chemical A as a by-product of its chemical manufacturing operations. Knowing of no market for this chemical by-product, and having no use for it, Chemco stored its growing inventory of Chemical A in vast storage tanks and even thought about discarding it. In 1948, Renewco purchased a "greenfield" plot of land near Chemco's plant. Renewco had discovered that by running a high voltage of electricity through Chemical A it could create a new chemical, Chemical B, which could be used in many industrial processes. Renewco arranged to purchase large amounts of Chemical A from Chemco for \$.02/gallon. It then purchased electrical equipment, including electrical transformers containing PCBs, from Electrico, which it installed at its facility. It used this equipment to "recycle" Chemical A into Chemical B, which it sold on a national market at a substantial profit.

Renewco exceeded the prevailing industry standards for care in handling chemicals. Nonetheless, during the course of handling Chemicals A and B, Renewco inevitably spilled some of these chemicals onto the ground. Representatives of Chemco, who were often at the Renewco plant, witnessed some of these spills and knew that they were an unavoidable part of the production process. Chemical A and Chemical B were added to the list of CERCLA hazardous substances in 1983.

Renewco continued its operations until early 1962, at which time the market for Chemical B dried up. In that year, Renewco tore down its buildings and equipment, most of which it sold for scrap. However, the scrap dealer would not take the electrical transformers and so Renewco disposed of them in a garbage pit on the property. Over time, some of the transformers cracked and leaked PCBs (a CERCLA hazardous substance) into the pit.

In 1963, Renewco sold the cleared property to Toolco, a manufacturer of farming implements that operated a large plant several miles away. Toolco used the former Renewco plant site as a dumping ground for its own waste products, including bits of scrap metal and hundreds of barrels of used solvent (both of which are CERCLA hazardous substances). It employed Moveco, a waste hauler, to transport the waste materials from the Toolco plant to the former Renewco Site, which it renamed the Toolco Landfill. Moveco deposited all such trash at the Toolco Landfill, as instructed by Toolco, and spread it evenly over the Landfill Site. To raise some extra cash, Toolco allowed Smallco and Littleco to dump small amounts of waste at the Landfill for a fee. Toolco's records indicate that, over the course of three years, Smallco sent thirty-two barrels of unspecified waste to the site. Littleco sent only twelve barrels that, according to Toolco's records, "contained arsenic, as marked on container."

In 1969, Toolco closed its plant and no longer needed the Landfill. It covered all visible trash and barrels with soil, planted grass as a ground cover, and divided the property into two parcels. It sold the largest parcel in 1970 to a company set up by Joe Mechanic, a former forman at the Toolco plant who had been to the Toolco Landfill many times. Through some creative landscaping, Mechanic's company, the Hole in One Golf Co., turned its portion of the

site into a private golf course. In 1989, the Hole in One Golf Co. became short on cash and was unable to pay its taxes. The City of Columbo gained title to the golf course property due to this tax delinquency.

In 1972, Toolco sold the other part of the former landfill to Tree Nursery, Inc., which opened an outdoor nursery on the parcel selling trees, shrubs and other plants. Prior to the purchase, the owners of Tree Nursery, Inc. walked over the grounds but were unable to see any of the trash or barrels buried there since Toolco had covered them over. They asked Toolco what it had used the site for. Toolco told them that the land had never been used for industrial purposes. In 1986, Tree Nursery, Inc. sold its parcel of land to Buckeye Hardware, which opened a store and warehouse on the property. Buckeye asked Tree Nursery about prior uses of the site and was told all that Tree Nursery knew, *i.e.* that the site had had no prior industrial use. Buckeye made no further inquiry.

In January, 1993, EPA was informed that numerous people living near the former Toolco Landfill Site were complaining of nausea and other symptoms. It tested the wells in the area and found them to be heavily contaminated. Upon further investigation, EPA found that CERCLA hazardous substances were leaching from the Site into the groundwater. Much, but by no means all, of the contamination was found to come from the barrels of solvent that Toolco had deposited at the site and that had been corroding and leaking since the time that they were placed there. The investigation revealed traces of PCB's and arsenic at the Site, but no traces of these chemicals in the release into the groundwater that was contaminating the wells. EPA placed the Site on the National Priorities List, cleaned it up using monies from the Superfund, and then brought suit under CERCLA section 107 against Toolco for reimbursement of EPA's response costs. Toolco has recently settled the suit, agreeing to pay EPA \$10 million to cover the cost of the cleaning up the Site.

Toolco has just hired you as its outside environmental counsel. It wants you to help it recover as much as possible of the \$10 million from other parties that are liable under CERCLA. Write a memo to the general counsel of Toolco in which you discuss Toolco's chances of recovering against each of the following parties: Chemco, Renewco, Electrico, Moveco, Smallco, Littleco, the Hole in One Golf Co., the City of Columbo, Tree Nursery, Inc. and Buckeye Hardware. Where applicable, cite to specific statutory provisions and/or cases to support your conclusions. Assume that all the CERCLA cases that you were assigned in the Percival, Miller casebook are binding authority in this jurisdiction.

ESSAY II
(45 minutes)

In the course, we read two cases that dealt with the power of the EPA to grant exemptions from the Clean Water Act's NPDES permitting program. In *NRDC v. Costle*, the court rejected the EPA's claim that it could exempt some entities from the permitting scheme. In *Chemical Manufacturer's Association v. NRDC*, on the other hand, the court upheld the agency's authority to exempt certain entities from NPDES emission limitations. Are these cases in conflict with one another, or can they be reconciled? Explain. In your answer, make reference to: (1) the nature of the exemptions at issue and the reasons why the EPA wanted to grant them; (2) the courts' reasons for denying (in *NRDC v. Costle*) or upholding (in *CMA v. NRDC*) agency authority to grant these exemptions; and (3) the problems often faced by agencies such as the EPA in implementing nationally-uniform, command-and-control systems of environmental regulation.