Prof. Ben Trachtenberg Brooklyn Law School, Environmental Law, Spring 2010 Three-Hour In-Class Final Examination

RULES

Students May Consult the Following Materials During the Examination:

- The Robert Percival casebook, *Environmental Regulation* (6th ed.),
- any other assigned or recommended readings from the syllabus,
- a statutory supplement, and
- an outline or notes prepared by the exam taker or by any other student (or group of students) enrolled in Ben Trachtenberg's Environmental Law class <u>this semester</u> at Brooklyn Law School (*i.e.*, no commercial outlines, hornbooks, or work product of students not currently in Trachtenberg's class are permitted).

Reminder: No electronic materials are permitted. If you want notes or other documents that exist on a computer, you must print them out and bring hard copies to the examination.

Grading:

Each of the three sections is of equal weight. You may use your time as you wish, but I suggest you spend about one hour on each section.

I will not see (and accordingly will not consider when grading) anything written on the exam questions themselves. Please put all answers into the appropriate place.

Commentary Concerning Multiple Choice Questions:

If you believe a multiple choice question has no correct answer (or has more than one), you may explain your reasoning. You may do so for no more than two questions; if you write narratives for more than two, I will read only the first two. Note that a correct answer with no explanation gets full credit, and a correct answer with an erroneous explanation is marked wrong. Accordingly, please provide explanations for your answers only if you think such commentary is truly necessary. As noted above, any commentary must be included with your examination answers; I will not see any comments written on the examination questions.

Academic Honesty:

Please obey Brooklyn Law School's rules concerning academic honestly and ethical examination taking. It is far better to perform poorly on an examination than to violate these rules. I take these rules seriously, as does the Law School, as do admissions committees of state bar organizations.

ADVICE

Look carefully at questions before you answer them. Especially in the multiple choice section, you may see a question seeking the answer "most likely" to be true (or false) or the one that "best summarizes" a concept. Make sure you understand what the question asks before choosing an answer.

Please think about your narrative answers before you write them. A clear, brief answer is nearly always superior to a slightly longer, less clear answer.

In particular, for the short answer questions, it is more important to demonstrate familiarity and mastery of a question's topic than to recite everything in the course materials that potentially relates to the question.

Budget your time carefully. If you spend ninety minutes on the multiple choice questions, it will be very difficult to answer the remainder of the examination questions.

Good luck. I have enjoyed working with you all this semester.

QUESTIONS BEGIN ON NEXT PAGE

QUESTIONS

Multiple Choice Questions: 1/3 of exam grade in total

Choose one answer for each question.

1. Which substance is <u>not</u> a "criteria pollutant" for which EPA has set National Ambient Air Quality Standards?

- a. Carbon Dioxide
- b. Carbon Monoxide
- c. Lead
- d. Ozone
- e. Particulate Matter

2. Which fact, if true about a proposed project, would most strongly support an argument that an Environmental Impact Statement <u>is required</u> under the NEPA before the project may proceed?

- a. The private parties conducting the project receive funding from a state agency
- b. The project is prohibited unless the builder receives a municipal zoning variance
- c. The project involves draining ten acres of wetlands
- d. Congress has appropriated money to fund the project
- e. The Vice President of the United States is conducting the project personally
- 3. Which statute does <u>not</u> explicitly provide a private right of action?
 - a. CERCLA
 - b. Clean Air Act
 - c. Clean Water Act
 - d. NEPA
 - e. RCRA

4. With respect to a beekeeper, which of the following is an externality?

- a. In addition to providing honey that the beekeeper can sell, the bees pollinate plants on nearby farms
- b. Local regulation requires that the beekeeper pay for an annual inspection of her hives
- c. When her bees thrive, the beekeeper makes more money than usual, even though she must hire additional employees to help bottle the unusually high amount of honey
- d. Occasionally, the beekeeper is stung by bees while harvesting honey, causing her to miss a day of work
- e. In addition to providing honey that the beekeeper can sell, the bees produce wax that the beekeeper harvests to make cosmetic products for her own use

5. Fill in the blanks so that the following sentence is true: Under the Clean Water Act, it is generally illegal to discharge a pollutant into ______ without _____.

- a. "navigable waters" / an Act of Congress
- b. "navigable waters" /a permit
- c. "international waters" / a permit
- d. "international waters" / an Act of Congress
- e. "a municipal sewer" / a permit

6. Which of the following entities is <u>most</u> likely to be held liable as an "arranger" under the CERCLA?

- a. A gasoline distributor that supplied fuel to service stations that have become contaminated because of drivers spilling gasoline at the pump, if the spilling was known to the distributor
- b. A manufacturer of light bulbs containing hazardous material that sells the bulbs to a factory that uses the light bulbs and then buries them in a makeshift landfill on the factory site
- c. A professor whose students use their knowledge of environmental law for evil
- d. A textbook company who sells its waste paper scraps to a company that recycles the scraps and resells the material as toilet paper
- e. A paint manufacturer that hires a company to dispose of a hazardous byproduct of the paint manufacturing process, after which shoddy disposal methods lead to contamination, if the shoddy methods were unknown to the manufacturer

7. If the OSHA promulgates a permanent permissible exposure limit (sometimes known as a "PEL") with respect to the presence of a toxic substance in workplaces, which of the following standards would <u>most likely</u> be used by a court considering a challenge to the PEL?

- a. Whether the PEL is "reasonably necessary and appropriate to remedy a significant risk of material health impairment"
- b. Whether the PEL is the "lowest level feasible"
- c. Whether the PEL is "sufficient to guarantee workplaces that are free from any risk of material health impairment"
- d. Whether the PEL is "nearly certain to impose no significant costs on regulated entities"
- e. Whether the PEL is "nearly certain to impose no unreasonable costs on regulated entities"
- 8. Which of the following statements is <u>true</u>?
 - a. Brazil has violated its emission-reduction obligations under the Kyoto Protocol
 - b. China has violated its emission-reduction obligations under the Kyoto Protocol
 - c. India has violated its emission-reduction obligations under the Kyoto Protocol
 - d. The United States has violated its emission-reduction obligations under the Kyoto Protocol
 - e. None of the above

9. Which of the following state actions with respect to a parcel of land would <u>most likely</u> require that the state compensate the owner?

- a. A prohibition on the filling of wetlands on a parcel of land
- b. A requirement that the owner allow a path for beach access in exchange for a permit to construct a residence on the land
- c. A prohibition on the razing of a historic building on the land
- d. A prohibition on operating a slaughterhouse on the land
- e. A requirement that the owner allow destruction of a tree on the land to prevent the disease affecting the tree from spreading to trees on nearby parcels
- 10. Which of these is a point source of pollution for purposes of the Clean Water Act?
 - a. A factory smokestack whose discharges contribute to downwind NAAQS nonattainment
 - b. Fertilizer runoff from a farm
 - c. A urinating swimmer
 - d. A pipe discharging waste incidental to the normal operation of a U.S. Navy vessel
 - e. None of the above

11. Under the federal laws regulating the sale of foods containing carcinogens, which is the following is <u>currently</u> unlawful?

- a. The use of any carcinogenic pesticides on United States farms
- b. The sale in the United States of raw produce grown on farms using any carcinogenic pesticide (or processed foods including such produce as an ingredient), unless the pesticides meet the "reasonable certainty of no harm standard"
- c. The sale in the United States of raw produce grown on farms using any carcinogenic pesticide
- d. The sale in the United States of processed foods including as an ingredient produce grown on farms using any carcinogenic pesticide
- e. The use of any carcinogenic pesticides on United States farms, unless the pesticides meet the "reasonable certainty of no harm standard"

12. Which of the following was <u>not</u> a problem associated with Rule 1610 ("Old-Vehicle Scrapping") enacted by the SCAQMD?

- a. Creation or maintenance of hot spots
- b. Inability to accurately measure costs and benefits
- c. Underreporting of emissions by polluters
- d. Too few emission credits issued, leading to undue scarcity
- e. Too many emission credits issued, leading to limited efforts to install pollution controls

13. Imagine that California enacts a statute prohibiting anyone from driving on a state-maintained freeway in a vehicle that runs on gasoline. The state does not request a federal permit or waiver. Before the statute goes into effect, an American car manufacturer sues the state to prevent enforcement of the statute. Which provision of law is most likely to help the plaintiff's case?

- a. Clean Air Act § 110
- b. Clean Air Act § 126
- c. Clean Air Act § 209
- d. Clean Air Act § 211
- e. Clean Air Act § 242

14. Who selects the Administrator of the EPA?

- a. The Administrator is appointed by the Secretary of the Interior
- b. The Administrator is appointed by the Secretary of Health and Human Services
- c. The Administrator is appointed by the President of the United States
- d. The Administrator is appointed by the Chief of the Forest Service
- e. The Administrator is elected
- 15. What are "halons"?
 - a. Chemicals that help arsonists accelerate the spread of fires
 - b. Chemicals that deplete the ozone layer and contribute to the "greenhouse effect"
 - c. Chemicals that deplete the ozone layer but do not contribute to the "greenhouse effect"
 - d. Chemicals that do not deplete the ozone layer but do contribute to the "greenhouse effect"
 - e. Chemicals that neither deplete the ozone layer nor contribute to the "greenhouse effect"
- 16. Which of the following does not enjoy an exemption from CERCLA liability?
 - a. A lessee of residential property, sued with respect to her household waste
 - b. A party holding "indicia of ownership" primarily to protect a security interest as described in CERCLA § 101(20)(A)
 - c. A party indemnified as described in CERCLA § 107(e)
 - d. An "innocent owner" as defined by CERCLA $\int 107(q)$
 - e. A "bona fide prospective purchaser" as defined by CERCLA § 107(r)

17. Imagine that a factory produces 10,000 gallons of hazardous waste (as defined by the RCRA) in one month, and the waste is subsequently taken away from the factory in complete compliance with state and federal law. Which of the following is most likely <u>false</u>?

- a. A copy of the uniform "manifest" describing this waste was sent to a state or federal environmental agency
- b. The transporter of this waste was regulated by regulations issued pursuant to RCRA § 3002
- c. The factory has received an identification number from EPA
- d. The waste was treated, stored, or disposed of only at facilities issued permits by EPA
- e. The factory received a copy of the uniform "manifest" describing this waste from a TSD facility

- 18. For residents of Brooklyn, which of the following best approximates a "public good"?
 - a. Access to Prospect Park
 - b. Quality public schools
 - c. Public hospitals
 - d. A clean East River
 - e. Municipal garbage collection

19. Which of the following is a form of "health-based" regulation?

- a. The list of PRPs set forth at CERCLA § 107
- b. The setting of an NAAQS for a criteria pollutant pursuant to Clean Air Act § 109
- c. The NPDES permit program standards described in Clean Water Act § 306
- d. The mandatory "e-waste" take-back benchmarks in New York City's Intro 729 (*a.k.a.* Local Law 21 of 2008)
- e. The labeling requirements of California's Proposition 65
- 20. Which of the following is true concerning the CERCLA?
 - a. A PRP may be liable for costs incurred following a "release" but not a "threatened release"
 - b. If a "release" occurs at a facility, the quantity of the substance released is not relevant to whether the federal government has authority to initiate remedial action
 - c. If a "release" occurs at a facility, the quantity of the substance released is not relevant to the facility operator's duty to notify the National Response Center about the release
 - d. Because the CERCLA operates under a theory of strict liability, a PRP may be liable for a "release" caused by an act of war
 - e. Unless a facility is listed on the National Priorities List, its operator cannot be liable for costs incurred in response to a "release" at the facility

21. Imagine a company is selling a chemical in the United States. Which of the following is <u>true</u> of the EPA's authority pursuant to the TSCA?

- a. If the chemical is not a "carcinogen," EPA cannot prohibit its sale in the United States
- b. If EPA is "certain" that the chemical presents an "unreasonable risk" to health or the environment, EPA must prohibit its sale in the United States
- c. If EPA has a "reasonable basis" to conclude that the chemical presents an "unreasonable risk" to health or the environment, EPA may regulate the disposal of the chemical
- d. If EPA has a "reasonable basis" to conclude that the chemical presents an "unreasonable risk" to health or the environment, EPA must prohibit its sale in the United States
- e. If the chemical is a "carcinogen," EPA must prohibit its sale in the United States

- 22. Which of the following is true of the Safe Drinking Water Act?
 - a. For most substances, the MCLG is identical to the MCL
 - b. The establishment of a MCLG for a substance is a form of "technology-based" regulation
 - c. For most carcinogens for which a MCLG is established, the MCLG will be zero
 - d. If a water supply meets the MCLG and MCL for a particular substance, then according to EPA data, there is "zero risk" to drinkers of that water supply resulting from that substance
 - e. EPA is prohibited from considering costs of implementation when setting an MCL

23. Imagine that a term appears in a statute administered by the EPA (*e.g.*, the term "source" of pollution in the Clean Air Act). After EPA announces its construction of the term, which of the following is true of a court reviewing EPA's action?

- a. The court must uphold EPA's action unless it violates the nondelegation doctrine
- b. If the statutory language is ambiguous, the court should uphold EPA's construction upon a finding that the construction "more likely than not" advances the public interest
- c. If EPA's construction contradicts the statutory language, the court should uphold EPA's decision if EPA's construction advances the public interest
- d. If the statutory language is ambiguous, the court should uphold EPA's construction upon a finding that the construction is reasonable
- e. If the statutory language is ambiguous, the court should uphold EPA's construction absent a finding "beyond a reasonable doubt" that the construction imperils the environment
- 24. Which of the following statements concerning "SIPs" under the Clean Air Act is false?
 - a. After EPA sets an NAAQS, it is up to each state to decide how to achieve the standard
 - b. If a state uses "tall stacks" to attain an NAAQS, it does not receive credit for the gains achieved by that method
 - c. If a state uses "command and control" to attain an NAAQS, it does not receive credit for the gains achieved by that method
 - d. Regardless of pollution levels within a state, its SIP may be inadequate if the state contributes significantly to nonattainment in another state
 - e. In certain circumstances, EPA may reject a state's proposed SIP as deficient, after which EPA may promulgate a federal implementation plan

25. It is the national goal that the discharge of pollutants into the navigable waters be eliminated by what year?

- a. 1975
- b. 1985
- c. 1995
- d. 2005
- e. 2015

26. Imagine that a corporation wishes to discharge a toxic pollutant into a large river adjacent to the corporation's factory. If the corporation applies for a permit from EPA (or a state agency) authorizing the discharge, the effluent limit is <u>most likely</u> to be based on calculations related to what kind of technology?

- a. BAT
- b. BCT
- c. BPT
- d. LAER
- e. RACT

27. Which of the following best summarizes the "precautionary principle"?

- a. Where there are threats of irreversible or other serious damage to the environment, each nation must fund precautionary measures at levels proportionate to that nation's contribution to the harm
- b. Where there are threats of irreversible or other serious damage to the environment, a lack of full scientific certainty does not justify postponing cost-effective measures to prevent environmental harms
- c. Where there are threats of irreversible or other serious damage to the environment, the use of cost-benefit analysis is not appropriate when policymakers decide what environmental precautions to implement
- d. Where there are threats of irreversible or other serious damage to the environment, each nation must implement precautions according to its ability, so that each nation will be protected according to its need
- e. Where there are threats of irreversible or other serious damage to the environment, the money spent on precaution should equal or exceed the cost of the threatened environmental harms

28. Which of the following statements concerning the greenhouse gases that contribute to global warming is <u>false</u>?

- a. A ton of carbon dioxide contributes to global warming in the same way regardless of where on earth it is released
- b. On a ton-for-ton basis, methane contributes to global warming at a higher rate than does carbon dioxide
- c. The "greenhouse effect" did not exist before the industrial revolution
- d. In producing the same amount of energy, the combustion of oil releases less carbon dioxide than does the combustion of coal
- e. The United States has participated in international negotiations aimed at reducing the emission of greenhouse gases

29. Which of the following activities most likely is <u>unlawful</u> absent a permit issued pursuant to Section 404 of the Clean Water Act?

- a. Depositing fill material into an isolated pond located entirely in Illinois
- b. The dredging of mud from the Mississippi River
- c. The "incidental fallback" of soil dredged from a wetland directly adjacent to a navigable river
- d. Depositing fill material into the Mississippi River as part of normal farming activity
- e. Depositing fill material into wetlands not adjacent to, but with a "significant nexus to," a navigable river
- 30. Which of the following activities is not regulated by California's Proposition 65?
 - a. Intentional exposure by a business of a person, without a warning, to a carcinogen
 - b. Intentional exposure by a business of a person, without a warning, to a chemical known to cause reproductive toxicity
 - c. Unknowing negligent exposure by a business of a person to a chemical known to cause reproductive toxicity
 - d. Discharges of carcinogens into water
 - e. Discharges of carcinogens into land where such chemicals probably will pass into drinking water

END OF MULTIPLE CHOICE QUESTIONS

Short Answer Questions: 1/3 of exam grade in total

Answer four of the five questions (if you answer all five, I will read only the first four).

1. It has been argued that "there is no such thing as a 99-cent cheeseburger." Chances are, this saying is not meant to be taken literally. After all, many cheeseburgers can actually be purchased for 99 cents. What then does the saying mean? Is it correct? Sensible? Silly?

2. Why does the United States have such a hard time decreasing the amount of water pollution issuing from non-point sources?

3. Explain the concept of "discounting" the value of a future cost or benefit to its "present value." Why is this process important to considerations of proposed environmental regulations?

4. How can a landowner determine whether the water on her property is subject to regulation under the Clean Water Act?

5. Decades after its enactment, the National Environmental Policy Act remains a subject of intense controversy. Should it be repealed? If not, could it nonetheless be improved?

END OF SHORT ANSWER QUESTIONS

Issue Spotter (traditional law school exam question): 1/3 of exam grade

You are an attorney employed by the State of Kent in the state's Environmental Bureau ("EB"). Kent law authorizes the EB to perform all tasks related to the environment that the state must perform under federal law. Your boss, the EB Director, has asked you to prepare a memorandum discussing the key issues EB staff should consider when writing Kent's next SIP.

As a starting point, the Director provides you with notes compiled by a former EB staff member who unfortunately is neither a lawyer nor a scientist (and is not around to provide any additional explanation). In addition, the Director has asked that you flag any other important issues that may occur to you when reviewing the notes.

The notes follow:

Important Facts About Clean Air in Kent

Here is a map of Kent, which is a perfect rectangle and is divided into three counties:

Western County	Central County	Eastern County
National Park and Federal Wildlife Refuge	* Chancellorsville	B U S Y B E L T
	Smeltington	

Kent has a lot of work to do with respect to clean air. In and near our capital city, Chancellorsville, residents report unpleasant smoggy conditions when exercising outdoors, and children seem particularly affected. Some of the kids are seen wheezing while playing outside, and kids with asthma have it really bad. The problem is reportedly worse during the day than at night, and it gets terrible in the summertime. People attribute the poor air quality to the area's intense use of passenger cars, as well as some light industry. Half of Kent's population lives in the Chancellorsville metropolitan area.

South of the capital, the city of Smeltington contains the state's only lead smelter. I'm told that the level of lead in the air is within federal limits everywhere in the state, even near Smeltington. The air in our neighbor to the south, the State of Adams, also is within federal lead limits, but I have heard that the water in Lake Adams, a formerly popular site for fishing and swimming which is

immediately over the state line due south of Smeltington, has dangerous levels of lead that politicians in Adams blame on us.

In the eastern part of the state, near our border with the State of Jefferson, there are five mediumsized cities, all with multiple major manufacturing plants. The north-south highway connecting these cities is called the "Busy Belt" because the linked locations are so industrious. The plants consume a great deal of electricity from nearby coal-fired power plants. Along with valuable goods, the manufacturing plants produce pollution, including tiny particles that get deep into people's lungs. And the power plants produce some of the same bad stuff! People who live along the Busy Belt call in a lot of complaints to EB. Many of the complaints relate to some of the older factories and power plants that have been around for a long time; some of the employees have parents (and even grandparents) who worked at the same locations. The newer facilities don't seem as problematic. Everyone expected the older facilities to close long ago, but somehow they remain open year after year.

The western part of the state is mostly devoted to national parkland and federal wildlife refuges. The rest of Western County is also quite rural and bucolic. The main business in Western County is tourism. Just east of the national park (between the park and the Central County line), an industrialist has purchased land for the purpose of creating a new manufacturing region to compete with the Busy Belt and give jobs to some of many unemployed persons living in that part of the state. He said he'll build his own power plants too. He explained that because he cares about the environment, he will power his manufacturing plants entirely with hydroelectric power he could produce just inside the eastern edge of the park (or maybe nuclear power; he's open to both). Also, to protect the park from pollution issuing from his manufacturing plants, he intends to build immense chimneys to send the pollution far away.

I hope we can make our state's air clean for everyone!

Please provide the text of your memorandum to the Director.

END OF ISSUE SPOTTER QUESTION

END OF EXAMINATION QUESTIONS

REMINDER: I will not see (and accordingly will not consider when grading) anything written on the exam questions themselves. Please put all answers into the appropriate place.