

FINAL EXAMINATION
ENVIRONMENTAL LAW

P.N. Davis

Wednesday, May 4, 2011
8:30 - 11:30 AM

THIS IS A THREE (3) HOUR EXAMINATION.

THIS EXAMINATION CONTAINS THREE (3) PAGES.

THIS EXAMINATION CONTAINS TWO (2) QUESTIONS.

I = 150 min. II = 30 min.

FILL IN YOUR EXAMINATION NUMBER ON THE BLUEBOOK STICKER.

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YOU MAY BRING IN YOUR STATUTORY SUPPLEMENT, BUT NOTHING ELSE. You may write in the margins and on the blank pages of the supplement.

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Instructions:

1. These questions will be graded on the basis of the times indicated with each questions. The indicated time for the questions total 3 hours. You will be given 3 hours to write the examination. Budget your time carefully or you may not finish.
2. Be sure to state a result whenever a question asks for one. Merely stating the arguments on both sides of a legal issue will result in only partial credit because you will not have completed the analysis required by that type of question.
3. If you find it necessary to make factual assumptions in order to answer a question, be sure to state the assumption.
4. Do not assume additional facts for the purpose of avoiding a legal issue or making its resolution easier.
5. Comment briefly on each legal issue reasonably raised by the questions and on each reason for your answer, even when you decide that one legal issue or reason controls the result.
6. The difference between triumph and disaster may lie in a **careful** reading of the questions.

I.
(150 minutes)

At Rock Bridge Memorial State Park, near Columbia, Missouri, there is a cave, over seven miles long, known as Devil's Icebox Cave. There is a stream flowing through the entire cave, a tributary to Gans Creek. Leaving the cave, it passes through a open area (a collapsed portion of the cave), under Rock Bridge, and then on the surface again into Gans Creek (at the confluence with Little Bonne Femme Creek). Gans Creek is tributary to the Missouri River. The creek's watershed is several thousands of acres in size over the cave in the Pierpont area. The watershed contains several hundred sinkholes, as well as some losing streams and bogs, which collect rainwater and allow it to drain down fissures in the limestone karst rock and into the stream in the cave. The sinkholes and the cave itself are solution channels dissolved in the limestone rock. They were created over several millennia by acidic rain and drainage water dissolving its way through the rock, creating those solution channels.

In the cave live the "endangered" gray bat, which roost on the cave's ceiling and fly out of the cave at night to eat mosquitos and other insects, and the "threatened" pink planarian, a type of flatworm known to exist only in this cave. The natural quality of the water entering the cave is high, and provides the moisture and aquatic habitat needed by those species. The cave is closed to the public during the bats' nursing season, but can be and is traversed by guided cave tours at other times. About 1.5 miles into the cave, there is a low place, which can be traversed only by crawling through the water in the stream. Upstream from that point, the cave can be traversed for nearly another six miles in a canoe moored in the cave. Several guided tours occur in the cave each year. Some of the cave tour guides and some of those on the tours are members of *Save the Cave*.

In the sinkhole watershed above the cave, Samuel Stone proposes to construct an agricultural chemical distribution facility. It would handle pesticides, herbicides, and fertilizers for farmers whose farms are located south of Columbia. These chemicals are considered "hazardous" if not contained. Construction of this facility would require regrading 30 acres of land in the watershed and filling in many of the sinkholes. The facility would be equipped with liquid transfer equipment (for transferring the chemicals from bulk tank trucks to storage tanks, and from those tanks to small tanks mounted on farmers' trucks and trailers. Small leaks and

spills are inherent in this transfer process. The transfer area would be paved with concrete with contours designed to lead any leaks and spills to a concrete-lined drainage sump. The sump would be pumped out from time-to-time and its contents trucked to a hazardous waste disposal facility.

Save the Cave, a nonprofit interest group, was organized to resist construction of Stone's agricultural chemical distribution facility. Its members consist of some of landowners on and near the sinkhole watershed near Pierpont, some the cave tour guides, and many residents of Columbia nearby. Some persons taking the cave tours also are members of *Save the Cave*. Stone asserts that the design of his facility would prevent any soil or groundwater contamination on surrounding land, including that owned by members of *Save the Cave*. The concern of *Save the Cave* members is the environmental integrity of the cave and its fauna.

Save the Cave asserts that agricultural chemicals would leak and spill from Stone's facility by overflowing of the sump and, during heavy rains, washing off the concrete pad. Then those chemicals mixed with runoff water would descend through the sinkholes and fissures in the limestone into the underground stream in the cave below. There the toxins in the leaked chemicals would diffuse into the stream water, injuring or killing the bats and pink planarians. Contaminated water flowing from the cave would contaminate Gans Creek and adversely affect aquatic animals and plants there.

Fluorescent dye tracing tests conducted by hydrology faculty members of the University of Missouri Geology Department confirm that rainwater falling on the sinkhole watershed does descend through the sinkholes and fissures in the limestone strata into the underground stream in the cave. Toxic material licenses have been granted under the Federal Insecticide Fungicide and Rodenticide Act [FIFRA] for application of the pesticides and herbicides which would be distributed at Stone's facility. They are described as toxic to nontarget plants and animals if not totally contained at storage facilities. Stone does not dispute those findings.

Save the Cave sued Stone seeking an injunction against construction of the agricultural chemical distribution facility. It also sued Missouri DNR and EPA for a declaration that they must require Stone to apply for a permit and for a further declaration that issuance of such permits would violate several federal acts. Can *Save the Cave* bring these suits both procedurally and substantively? Should the court grant an injunction? Name and discuss all

federal statutes involved and the legal issues relevant to each. State results on the procedural and substantive issues.

END OF QUESTION I.

II.
(30 minutes)

Briefly identify and define the following:

- (1) effluent limitations
- (2) PSD area
- (3) public nuisance
- (4) cost-benefit analysis
- (5) state implementation plan
- (6) dormant commerce clause
- (7) public trust doctrine
- (8) TMDL
- (9) NAAQS
- (10) National Contingency Plan

END OF QUESTION II.