
FINAL EXAMINATION – ESSAY

Limited open-book. Three-and-a-quarter hours.**Write your exam number here: _____**

All exam materials (including this booklet and your response) must be turned in at the end of the period. You will not receive credit unless you return this booklet with your exam number written above. Do not turn the page until instructed to begin.

General Notes and Instructions

1. Assume that today's date is May 9, 2008, unless indicated otherwise.
 2. You may write anywhere on the examination materials – e.g., for use as scratch paper. Only answers and material recorded in the proper places, however, will be graded.
 3. Your goal is to show your mastery of the material presented in the course and your skills in analyzing legal problems. It is upon these bases that you will be graded.
 4. Unless expressly stated otherwise, assume that the facts recited herein occur within one or more hypothetical states within the United States, and base your exam answer on the general state of the common law and typical statutory law in the United States, including all rules, procedures, and cases as presented in class, as well as, where appropriate, the theory and history discussed in class. For the sake of clarity, please note that if the name of a real state is used, your exam response should conform accordingly.
 5. During the exam: You may not consult with anyone – necessary communications with the proctors being the exception. You may not view, attempt to view, or use information obtained from viewing student examinations or from viewing materials other than your own.
 6. After the exam: You may discuss the exam with anyone, except that you may not discuss the exam, at all, with any enrolled member of the class who has not yet taken the exam.
- b. Note all issues you see. More difficult issues will require more analysis. Spend your time accordingly.
 - c. Organization counts.
 - d. Read all exam question subparts before answering any of them – that way you can be sure to put all of your material in the right place.
 - e. Feel free to use abbreviations, but only if the meaning is entirely clear.
 - f. **Bluebooks:** Make sure your handwriting is legible. I cannot grade what I cannot read. Skip lines and write on only on one side of the page. Please use a separate bluebook when you move to a new question. It is not, however, necessary to put each subpart in a separate bluebook.
 - g. **Computers:** Please clearly label each subpart of your answer.
 - h. This portion of the exam is “limited open book.” The only material to which you may refer during the exam, other than this exam booklet, is the authorized copy of the Torts Wypadki, which will be distributed to you during the exam session. (Where the Dean of Students office has authorized additional materials, the direction of the Dean of Students office takes precedence over this rule.) You may not consult or access any other piece of paper, including, but not limited to, a copy of the Torts Wypadki that you have printed out yourself. No materials may be shared during the exam.
 - i. Do not write your name on any part of the exam response or identify yourself in anyway, other than to use your examination I.D. number appropriately. Self-identification on the exam will, at a minimum, result in a lower grade, and may result in disciplinary action.
 - j. **Do not dwell on negligence or other concepts from Torts I.**
 - k. This Part Two is worth approximately 5/6 of your exam grade.

Specific Notes and Instructions For PART TWO:

- a. Being mindful of instruction no. 4, above, it is appropriate, if you wish, to note differences between minority and majority approaches in your answer, as well as statutory or other differences among jurisdictions.

Note: Part One, the multiple-choice portion of the Fall 2008 exam, is omitted.

“Atomic Avalanche”

SNOWY TOP 1 AND SNOWY TOP 2 are first-of-their-kind generation-V fast-neutron-spectrum supercritical-liquid-metal-cooled commercial nuclear reactors. They are located at the Snowy Top Nuclear Generating Facility, perched on the summit of Mount Azucasta. In the valley below is the posh ski resort village of Vaspen, Colorutah, where a mix of celebrities, trust-fund babies, law-firm partners, plastic surgeons, and various leisure-class narcissists make turns on the powdery slopes by day and toast one another with Perrier-Jouët Belle Epoque by night.

The Snowy Top Nuclear Generating Facility is owned by Hexetron Systems, Inc., along with partner Vayatom, S.A., a French firm. Under their joint-venture operating agreement (the “JVOA”), Hexetron operates the facility on a day-to-day basis and supplies the specially enriched nuclear fuel needed for the reactor. In return for this, Hexetron takes 70 percent of the power-generating revenues. Vayatom, having financed half the construction costs, receives the used fuel from the reactor, which will end up containing high concentrations of plutonium-239 and other key fissile materials with substantial commercial value to Vayatom’s other nuclear facilities around the world. In order to fully staff the facility, Hexetron contracts with Medfield College of Technology to supply undergraduate interns who get academic credit for working at the plant. Medfield College of Technology is a private, co-educational, nonprofit entity offering four-year bachelor’s degrees as well as graduate degrees in various fields of engineering and science.

AT THE TRIPLE-CIRCLE T BAR AND GRILL, Hexetron executive Sandra Seabrook is buying drinks for Vaspen mayor, Marc Meisner. Unwelcome, as far as Sandra is concerned, is Vaspen’s resident eccentric scientist, Dr. Jeff Joulebloom, who has hijacked Sandra’s meeting and is bending the ear of the mayor with his quirky staccato style of talking.

“Marc, your honor, the kind of control that Hexetron is attempting – it’s just not ... it’s not possible. Nuclear power is the most awesome force this planet has ever seen. And if there’s one thing chaos theory teaches us, it’s that radioactive material wants to be free. It can’t be contained. It crashes through barriers. It expands to new territories...”

“But Dr. Joulebloom, the reactors have performed perfectly,” Sandra counters. The mayor, of course, is her real audience. “The computational models have been proved fully accurate. When we go to full power tomorrow at noon, Vaspen will have the electricity to heat a million hot tubs and power a million nightclubs. Vaspen needs this energy!”

“I’m no lawyer, Ms. Seabrook,” Joulebloom says, “but I’ve read the NRC regs. In particular, 10 C.F.R. 170.57 states: ‘All commercial nuclear reactors must be equipped with a secondary fail-safe cooling system capable of preventing reactor-core meltdown in the event of failure of the primary cooling system.’”



FIG. 1. The seal of the United States Nuclear Regulatory Commission (“NRC”).



FIG. 2. Artists' conception of what the mountains over Vaspen, Colorutah would have looked like if the cooling towers for the Snowy Top Nuclear Generating Facility had been built.

"We do have a secondary fail-safe cooling system," Sandra says, lying. She wonders how Joulebloom has figured this out.

"No, you don't, actually. And I know this, you see, because the plans you filed included giant cooling towers for your secondary system. Ah! Where are they? You ended up not building the towers because of pressure from residents. There were fears ... if you will, that they would ruin the mountain vistas." Joulebloom says, stroking his chin. "I have an appointment tomorrow morning with Rachael Ruden, reporter for the *Vaspen Press-Interrogator*. We're going to do a little hike to check out the equipment and see what we can pick up with my Geiger counter. I'm willing to bet that you have greater respect for the power of the press than you do for the power of the atom."

A scream suddenly pierces the restaurant. It is Veronica Vanders, Hollywood A-list it-girl movie-star and well-known stumper for environmental causes.

"That dirty nuclear-power company put me on their poster!" Vanders screams, running into the bar. Within seconds, she is on the phone with her lawyer: "Larry, they put me on a poster saying I support nuclear power! As if! And the picture they used shows me with my Hummer! I cannot be seen with my Hummer, Larry! It gets like 7 miles per gallon. And it's totally not fair - it makes me look like I don't care about the environment. And anyway, it's my own private business what kind of car I use up here in Vaspen when I'm away from the press. I use a hybrid everywhere else I go, but I need a Hummer for the snow. It's not fair. Larry, I want you to sue them! I'm going to send you the picture now."

**Veronica Vanders'
ski vacation is
nuclear powered ...**



**Nuclear Power's
Got the
Green Light!**

To learn more about how nuclear power is
the environmentally friendly choice, visit
www.ecofriendlynukes.org.
Paid for by the Vaspem Coalition for Clean Energy

FIG. 3. *The poster for the Vaspem Coalition for Clean Energy, featuring Veronica Vanders.*

Vanders snaps a photo with her cell phone. The illuminated five-foot-by-seven-foot poster at the bus-stop shelter just outside the bar shows the picture Vanders described with the headline, "Veronica Vanders' ski vacation is nuclear powered ... Nuclear Power's Got the Green Light!" Then, in smaller letters, it reads, "To learn more about how nuclear power is the environmentally friendly choice, visit www.ecofriendlynukes.org. Paid for by the Vaspem Coalition for Clean Energy."

Meanwhile, Sandra Seabrook gets a text message from Hexetron colleague Paul Paloverde, the plant operations director:

some minor problems.
just had small
radiation leak. don't
let press know. still
going full pwr @ noon

The last thing she needs now is Joulebloom sneaking around with a reporter and a radiation detector. Thinking quickly, she dials her cell phone. "Hello? Vaspem Police

Department? ... I want to report that Dr. Jeff Joulebloom just threatened to plant a bomb tomorrow morning at the Snowy Top Nuclear Generating Facility. ... Yes. ... He said it to me directly, and he said he has the chemical and engineering know-how to pull it off. ... I figure he's almost certainly drunk and bluffing, but he didn't say it was a joke, so, I imagine, the threat should be taken seriously."

Based on Sandra's phone call, and after getting the okay of the mayor, the police arrest Dr. Joulebloom and hold him overnight – that way, they figure, they can foil whatever plot he might have for the morning. Not that the police think there's really a chance he is a terrorist. A kook? Definitely. Mad bomber? Not likely.

LATER THAT NIGHT, the snow starts falling. Between midnight and 1:00 a.m., one inch. The next hour, nearly two inches. Then the snow gets heavier. By 7:00 a.m., more than one-and-a-half feet of snow has accumulated, and still more is coming down. Hexetron engineers are trying hard to deal with the problems created by the Medfield interns when left unsupervised earlier the day before. The interns had shut down important computer monitoring programs to run a simulation. And their supervisor, Medfield College Adjunct Professor Gertie Gessup, was in town putting back tequila shots with Veronica Vanders.

By noon, nearly three feet of snow has fallen. Pressing ahead with the power-up to 100 percent output, the reactors are performing well when engineers see the lights in the control room go haywire. Snow has just collapsed the roof of the building holding the primary-system cooling pumps. There are no back-up primary-system cooling pumps, and there is no secondary fail-safe cooling system either. For the next several hours, engineers wrestle with a difficult situation, needing to balance scores of variables as they try to keep the reactors from melting down. They report the incident to the NRC, and at 10:03 p.m., NRC engineers arrive in the Snowy Top control room, taking control of the situation and questioning employees.

"I wanted to install back-up primary-system cooling pumps," explains Paloverde to an NRC staffer. "The JVOA says we have to. But higher ups at Astro-Cyber-Electro Corp., our parent company, directed us not to. Too expensive, they said."

NRC engineers huddle. Despite all their training, they make a major mistake. They decide to vent the containment building to the atmosphere, hoping the frigid outside air temperatures will help cool the reactor. The NRC engineers' calculations are wildly off. Much more radioactive gas and particulate matter is released into the atmosphere than they expected. Within minutes, the town of Vaspen is overcome with the silent, odorless, colorless radioactive cloud. Vaspen residents receive thousands of times more radiation than is deemed safe. Meanwhile, the reactor core of Snowy Top 1, is far too big and too hot to be cooled off with outside air. What the venting does accomplish is to ice over the control mechanisms for the reactor, rendering them useless. Out of control, the reactor quickly heats up to thousands of degrees and the metal parts and solid nuclear fuel inside turn liquid.

Meltdown.

The molten core pierces the bottom of the containment vessel and burns through the floor and walls, hitting the snowy slopes of Mount Azucasta's summit. The molten glowing radioactive slag triggers a slide of snow that grows into a massive avalanche. Thousands of tons of snow careens down Azucasta with a deafening roar. From the time the wall of white reaches the first chalets, it takes only seconds for whole neighborhoods to disappear under tens of feet of snow.



FIG. 4. *Artist's conception of the containment-building breach at Snowy Top 1. Courtesy of KCX-TV News.*

Nonetheless, most of Vaspen is spared. Knowing now that Dr. Joulebloom's predictions of disaster were correct, Mayor Meisner releases him from his jail cell to consult with him. Town officials understand the worst of the disaster might be yet to come. As they learn by radio, the avalanche took with it the auxiliary buildings serving the Snowy Top 2 reactor. Cut off from its cooling pumps and control systems, the temperature in Snowy Top 2 is slowly beginning to rise. Studying the mountainside through binoculars, and pouring over terrain maps, Dr. Joulebloom concludes that the resulting avalanche from a meltdown of Snowy Top 2 will bury all of Vaspen under as much as a hundred feet of snow.

The only way to prevent this ultimate catastrophe, Dr. Joulebloom concludes, is to start a smaller, controlled avalanche one-third of the way up the mountain right at Rachael Ruden's cabin, burying only a small portion of the northern part of town.

The police attempt to evacuate the northern neighborhoods, and Dr. Joulebloom brilliantly rigs a fire-fighting helicopter to carry out the task. Hovering over Ruden's cabin, the chopper sprays a cloud of jet fuel into the air, and Dr. Joulebloom daringly ignites the fuel-air mixture by dropping a flare into it.

BOOM! The concussion rocks the valley, vaporizing Ruden's cabin and unleashing a wave of snow that engulfs a dozen homes. Kelly Kalter, whom the police were not able to warn in time, tries futilely to outrun the advancing snow. But within seconds she is sent cartwheeling by the snowslide and is buried up to her neck next to her SUV.

Meanwhile, up on top of Mount Azucasta, Snowy Top 2 continues on a path toward meltdown. Deprived of their control systems, engineers figure the only way to safely shut down the reactor is to get over to the reactor building and close valves and lower the control rods manually. Three brave volunteers, Abby Aldermaston, Barry Braidwood, and Charlie Catawba, climb aboard the Icewalker 3000, a snowcat – a tracked vehicle for traversing snow-covered ground. Slowly, they make their way toward the reactor building. Coming across a hidden crevasse, the Icewalker 3000 drops and rolls. Unfortunately, the Icewalker

3000 is both old and cheap. When it was built, many years ago, every large tracked snow vehicle of the type had a reinforced roof. Even later models in the 3000 series made by Icewalker Industries. had reinforced roofs. But this particular vehicle does not. And when it rolls, the roof crumples. Abby is killed instantly. An unmarried, childless orphan, Abby has no next of kin. Barry's neck is broken in the accident. Cut off from sensation in the lower part of his body, he feels no pain. Although the nerves to Barry's lungs are severed, he is kept alive and conscious by Charlie for a minute or two as Charlie administers mouth-to-mouth rescue breaths. Charlie fares somewhat better than Barry and Abby. Although one hand is mangled and his left leg is crushed and pinned, Charlie is able to extract his cell phone and make a fleeting call to his wife and kids to tell them how much he loves them. But the battery quickly runs down and Charlie finds himself alone - trapped upside-down and exposed to the cold. Holding out hope for a rescue, Charlie struggles to stay conscious despite the incredible pain from his shattered thigh and broken hand. After a couple of hours, however, he gradually feels the deluded euphoria that freezing victims sometimes experience. And when death overcomes him, he thinks he is relaxing in his own bed at home.

Without intervention, engineers expect another meltdown to ensue. But a strange thing happens. The reactor begins cooling on its own. Gradually, the reactor shuts itself down. No one understands what has happened. Many people believe it to be a miracle.

Although the situation is stabilized, state and federal authorities, largely with the purpose of frustrating press coverage, order Vaspen town residents to stay in their homes for the next two days. The order is set to expire Saturday, when fewer people watch the evening newscasts. U.S. Marshals and state troopers enforce the order.

OVER THE COMING MONTHS, investigative boards will determine that had Snowy Top been equipped with back-up primary-system cooling pumps or a secondary fail-safe cooling system, no meltdown of Snowy Top 1 would have occurred. The investigators will also solve the mystery of the Snowy Top 2's happy self-cooling event. Was it a miracle? Quite to the contrary. It turns out Hexetron was using cheap, lightly enriched fuel in the reactor - fuel that, once used, would have had no value to Vayatom. Hexetron's internal documents show that Hexetron was scheming to concoct evidence of a conspiracy wherein Vayatom was supposedly funneling plutonium-239 to terrorists for use in nuclear weapons. By discrediting Vayatom, Hexetron hoped to gain complete control of the Snowy Top facility. So, ironically, in this particular instance of trying to save money, cut corners, and rip someone off, Hexetron actually saved lives.

But this postscript will be of little solace to the residents of Vaspen. The celebs will find other places to play. The doctors and lawyers will follow the glitterati to greener pastures. And the champagne will stay corked at the Triple-Circle T. With the valley declared a permanent radiation-hazard exclusion zone, the carefree frolicking days of Vaspen, Colorutah are very much over.



FIG. 5. A snowcat built by one of Icewalker Industries' competitors. Note the solidly constructed roof.

QUESTION ONE (*approximately 9/12 of your overall exam grade*)

Provide your legal analysis of the above facts, organized by reference to the subparts listed below. Please clearly label the subparts of your response. The subparts will not all be given equal weight. In fact, some subparts you may wish to dismiss with a few sentences. Others will require considerable attention. You should divide your time proportionately among the subparts according to which ones require the most discussion and analysis. Read them all right now, and plan ahead to put information where it belongs. Do not include any discussion of Abby Aldermaston, Barry Braidwood, or Charlie Catawba except in Subpart H. Lastly, do not dwell on negligence.

Subpart A: Analyze prospects for tort recovery against Hexetron.

Subpart B: Analyze prospects for tort recovery against Medfield College.

Subpart C: Analyze prospects for tort recovery against the federal government, including the NRC, and federal employees, including the U.S. Marshals and NRC engineers.

Subpart D: Analyze prospects for tort recovery against state and local authorities.

Subpart E: Analyze prospects for tort recovery against Dr. Jeff Joulebloom.

Subpart F: Analyze prospects for tort recovery against Sandra Seabrook.

Subpart G: Analyze prospects for tort recovery against the Vaspen Coalition for Clean Energy.

Subpart H: Analyze prospects for tort recovery against Icewalker Industries, and include separate analyses of damages in the deaths of Abby Aldermaston, Barry Braidwood, and Charlie Catawba.

QUESTION TWO (*approximately 1/12 of your overall exam grade*)

Aside from its intellectual interest and arguable place in the education of a well-rounded professional paid to think for a living, do the theoretical perspectives we studied in class have any applicability to the real world? Do the theorists and scholars we read offer anything useful for practicing attorneys?

Pick a position and support it. Remember, as always, your purpose is to show how much you have learned. Think broadly across the Torts II course, and feel free to discuss negligence where you feel appropriate in order to comment on subject matter from Torts II.

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