MID-TERM EXAM

Instructions

DO NOT GO BEYOND THIS PAGE UNTIL THE EXAM ACTUALLY BEGINS. THIS IS A CLOSED BOOK EXAM!

While you are waiting for the exam to begin, be sure that you have written the LAST FOUR DIGITS OF your SOCIAL SECURITY NUMBER and "TORTS—Summer '97—MIDTERM EXAM" on EACH bluebook, that you have read these instructions, and that you are otherwise ready to begin.

<u>IMPORTANT</u>: This exam will last THREE HOURS. You should plan on spending AT LEAST 20 minutes reading the questions carefully and outlining your answers on a separate sheet of paper. Before writing your answers, REREAD each question to be sure you haven't missed anything.

DOUBLE-SPACE your answers in the bluebook.

Use SEPARATE BLUEBOOKS for EACH QUESTION. Label each bluebook according to each question and, if necessary, book number, *e.g.*, "Question 1, Book 1"; "Question 1, Book 2"; "Question 2"; etc. When you are finished, turn to the back cover of the first bluebook, and place the second, third, fourth, etc. bluebook in order inside the end of the first bluebook, so the whole makes a single package. Then put it in the box at the front.

You are welcome to use abbreviations, but indicate what they are, *e.g.*, `Andropov ("A") would be sued by Brezhnev ("B"), alleging that A would be liable to B'

In answering the questions, you are responsible for Chapters 1, 2 and 3A of the casebook. Please DO NOT DISCUSS ANY of the following ISSUES:

- Contributory negligence on the part of any plaintiff;
- Comparative fault as between defendants;
- Claims against governmental bodies;
- Any affirmative claims or defenses that would be raised by any defendant.

In other words, you should concentrate on the evaluation of the prima facie case that would be presented by your client(s) (if you represent plaintiff(s)) or against your client(s) (if you represent the defendant(s)).

The following scenarios occur in the hypothetical state of West York.

Plan on spending at least 15 minutes at the end PROOFREADING your answers. You may not write ANOTHER WORD after time is called.

Each question has been assigned a point total, and the exam as a whole has a point total of **135**. Spend the amount of time on each question reflecting its relative worth.

You may KEEP your copy of the exam questions if you wish.

REMEMBER THE HONOR CODE! Don't identify yourself.

DOUBLE SPACE! DOUBLE SPACE!

DOUBLE SPACE!

QUESTION 1 (**50** points)

On 15 December 1996 Joseph Peneschi was an employee of Koppers Company, Inc., when a coke oven battery located on Browns Island in the Ohio River that Koppers was building for the National Steel Corporation exploded. Mr. Peneschi was standing on a water tank approximately one hundred feet from the explosion; he was knocked from the tank and fell 25 feet, suffering several broken bones. He can now walk only with considerable pain. The law firm at which you are employed has been asked to analyze whether Mr. Peneschi has potential tort claims for the damages he has suffered. Please provide an analysis based upon the following facts:

National Steel Corporation, is a Delaware Corporation, operating in Weirton, Pleasant County, West York, as Weirton Steel Division. The Weirton Steel Division, a fully integrated steel-producing facility, decided to expand the coke-producing capacity of its plant by building a new coke facility on an undeveloped island in the Ohio River known as Browns Island. National Steel personnel met with representatives of Koppers to develop preliminary specifications for a coke-producing facility and after these preliminary specifications were developed, National solicited competitive bids from companies engaged in the construction of coke ovens. Three bids were received by National, and Koppers was selected as the successful bidder.

Following the selection of Koppers to build the coke oven battery, representatives of Koppers and National met extensively to design the project. Koppers had blueprints and drawings prepared for each facet of the construction, and these drawings were inspected by representatives of National. National's representatives would either approve the drawings for construction or would suggest changes. The process of consultation on design and specifications continued as the project was being built.

It was anticipated that construction of the Browns Island coke oven battery would require twenty-four months. During this time several hundred construction workers were employed by Koppers and its sub-contractors to complete the project. At one point during the consultations on design a representative of National suggested the inclusion of a water spray device on a piece of equipment known as a preheater. A preheater is used to raise the temperature of fuel gas burned to heat the coke ovens in the battery. (The coke battery was designed to be heated by coke oven gas that is composed principally of methane and carbon dioxide and ignites at approximately 1500E F.) As the gas temperature is raised by the preheater, impurities are removed from the fuel gas. This process enables the fuel gas to burn more efficiently; however, the removal of such impurities results in those impurities accumulating as a type of a sludge in the preheater and related gas lines. The intended purpose of the water spray washing device was to eject a stream of water into the preheater to wash out these deposits. Through the floor on which the preheater was located, the water then drained at the base of the preheater from two, four-inch drain lines into the basement of the coke oven battery and entered an open pit.

Fuel gas was first introduced into the Browns Island coke battery in August 1996 and the process of heating-up the batteries continued until 15 December 1996, the date of the explosion.

The fuel gas used to heat the batteries was produced by National at its mainland coke plant that was located in Pleasant County, West York, near the river bank across from Browns Island. The gas produced at that plant was pumped under pressure, through gas mains, across a bridge and onto Browns Island. There was a temporary reducing station at the point where the bridge touched down on Browns Island in order to regulate the pressure in the gas mains. From this point the fuel gas lines entered the basement of the Browns Island coke oven battery and made their way through that structure to the flues or burners.

On 15 December 1996 gas escaped from the preheater washing system (that had no warning or protective devices of any kind) and its attendant drain because the drains at the base of the heater were not closed. The pit into which the drain lines emptied did not have a continuously maintained level of liquid as a seal or lid, nor a vent pipe to carry any escaping gas. The explosion resulted.

QUESTION 2 (85 points)

In 1989 the Leaf River Paper Mill began operation in New Augusta, Perry County, West York. The mill is located on the Leaf River, which eventually combines with the Chickasawhay River to form the Pascagoula River. The mill processes timber into a paper pulp product for domestic and foreign sale. In 1990 2,3,7,8-tetrachlorodibenzo-p-dioxin ("dioxin"), a toxic substance, was detected in the sludge, or solid waste material, produced by certain paper mills in Maine. It was subsequently determined that this type of dioxin was a by-product of the pulp-making process, particularly resulting where chlorine was used to bleach pulp to make it whiter. Dioxin was eventually found in the effluent, or waste water, and sludge produced by the Leaf River mill. Testing for dioxin was subsequently performed on fish caught in the Leaf River. As a result of these tests the West York Department of Wildlife and Fisheries closed the Leaf, Pascagoula and Escatawpa Rivers to commercial fishing from October 1995 to January 1996, and issued consumption advisories for fish caught from the Leaf and Pascagoula Rivers. The consumption advisory for the Pascagoula was lifted in December 1995, but remained in effect for the Leaf River.

Thomas Ferguson, Jr., his wife, Bonnie Jane Ferguson, and Louise H. Mitchell filed suit in Jackson County Circuit Court against Leaf River Forest Products, Inc. The plaintiffs alleged that the defendants, through the operation of the Leaf River mill, had discharged toxic chemicals into the Leaf River, causing injury to the plaintiffs, who lived along the Pascagoula River. The plaintiffs alleged that they had suffered emotional distress. Louise Mitchell's property was located approximately one hundred miles down river from the mill; the Fergusons' property was approximately one hundred twenty-five miles downriver from the mill.

Your assignment: You work on the legal staff of Leaf River Forest Products, Inc. The company would like your evaluation of their potential liability in this lawsuit. Although there are only three plaintiffs at this time, the company is concerned that others may file similar suits. Please consider the following information in providing your assessment:

THE NAMED PLAINTIFFS

Thomas Ferguson, Jr., was born in Georgia but had lived in south West York since 1950. In 1965, Ferguson purchased fifteen acres of land on the Pascagoula River. He cleared the land and built bayous, two boat sheds, a house, a bait shop and a trailer park. He had hoped to leave the property to his son. He stated that he could no longer swim or fish in the river and he had developed a fear of cancer, as he had eaten large amounts of fish caught in the Pascagoula before knowing about the dioxin problem. Ferguson also stated that his property had flooded several times recently and this had worsened his fear that his property was contaminated with dioxin.

Ferguson testified that if he had known that the mill was discharging dioxin into the river, he would have made "different arrangements with [his] lifestyle." He had first noticed the river water getting darker in 1991-92. Ferguson had seen Dr. Charlton Stanley, a psychologist, and Dr. Donald Guild, a psychiatrist, but had not taken the medicine prescribed for him. He had not been informed of any kind of evaluation or diagnosis until his pretrial deposition was taken. Ferguson had not had his property or his well water tested for dioxin, and had not tried to sell his property. He had not had his blood tested for determination of dioxin levels. Ferguson had a separate fear of cancer claim in asbestos-related litigation, and he had been tested in connection with that particular claim.

Bonnie Jane Ferguson, wife of Thomas Ferguson, Jr., was born and raised in south West York. She was a housewife and she also ran their marina, which included collecting the rent and keeping the records of the rent money. She stated that over the past few years the river had gotten darker, a light coffee color, and the fish did not bite like they once had. She had first noticed the change in the color of the river in 1990. Her greatest sense of loss came from the belief that the property she and her husband had planned to leave to their son was now worthless. She had declined Leaf River's offer to pay for her blood to be tested, stating that if dioxin was in her system and could not be removed she did not want to know about it. She claimed to have developed a fear of cancer because of the large amount of catfish she had eaten which had been caught in the Pascagoula. The fear was not something that paralyzed her or kept her from functioning.

OTHER RIVER RESIDENTS

O.V. Stringer had been fishing and camping on the Pascagoula River since 1945. Stringer had first noticed a change in the color of the Pascagoula in 1995. He had also noticed that the sandbars were copper or dark tea-colored from where the water had settled on them, and that the water had turned the color of dark, strong tea. He had also noticed in 1992 a decline in the fishing quality of the river. He particularly noticed a scarcity of catfish and a large quantity of dead mussels.

Kenneth McGuire had come to south West York from Kansas in 1964 for military service and had settled on the Pascagoula. He and his wife had owned a fishing camp on the Pascagoula for twelve years. McGuire noticed a change in the river color in 1990 or 1991. He stated that the

river at that time was "about the consistency and the color of Tang drink" for about three or four weeks and there had been a fish kill. He said that the river had become darker over recent years and had developed a fibrous consistency. There were fewer fish being caught and some of those being caught had open sores. McGuire testified that he was a plaintiff in the dioxin litigation against another pulp company and that he had "a financial interest in the outcome of this case and the litigation in general."

THE PLAINTIFFS' EXPERTS

Dr. Arnold Schecter, physician and professor of preventative medicine at the State University of New York, Binghamton, referred to 2,3,7,8- tetrachlorodibenzodioxin, or dioxin, as a "super toxin," because a very tiny amount would produce increased ill effects in an animal. Schecter testified that dioxin was fat-soluble, that it could enter the body through breathing, ingestion or through contact with the skin; that the dioxin in food that was eaten and not eliminated through waste would be absorbed into the bloodstream and throughout the body's organs; and that dioxin was a persistent compound, with an estimated half-life of seven years. Schecter testified that studies showed that human health effects resulting from exposure to dioxin included several different cancers; malformation and death of unborn children; weakening of the immune system; liver damage; lipid alteration; damage to the central nervous system; skin rashes; and learning disabilities. Schecter felt that there was no doubt that dioxin caused cancer in humans. He had visited with the appellees for less than an hour and had reviewed a number of fish studies performed by the State of West York as well as medical and psychological tests concerning the appellees. He stated that he felt that, based on a reasonable degree of medical probability, the appellees' fear of developing cancer from eating fish from the Pascagoula River was reasonable. Schecter agreed that a comprehensive medical evaluation, including blood tests, was the best method of determining exposure to dioxin, and stated that he had his own blood and fat tested for dioxin after he became involved with a chemical cleanup in Binghamton, New York. He could not say that the appellees' health was actually at risk because of their exposure to dioxin. He also did not know the level of dioxin in the appellees' bodies, either before or after their alleged exposure due to eating fish from the river.

Dr. Arthur Hume, a member of the Department of Pharmacology and Toxicology at the University of West York, testified that tests had shown that dioxin had a harmful effect on all the different systems in a mammal's body, with the most notorious effect being its ability to damage the immune system. Recent toxicological evidence had convinced Hume that dioxin was a human carcinogen, and Hume also believed that appellees, who had eaten fish from the Pascagoula River, had a reasonable basis for fear of an increased chance of contracting cancer. Dr. Hume agreed that no one could know the level of dioxin in the fish eaten by the appellees, however he maintained that it was probable that the fish had dioxin in them. Hume also agreed that the best way to measure increases in dioxin levels after exposure was to take fat or blood samples and test them.

Dr. Walter Roberts, a veterinarian and aquatic scientist who had taught in the Departments of Environmental Health and Natural Science at West York Valley State University, had gone to the

Leaf River, apparently in 1996, and had caught an unknown number of catfish specimens which he later checked for parasites and bacterial infections. Dr. Roberts found that some of the fish he had caught had lesions on them. His opinion was that the lesions were caused by chemical stress, and he did not find any lesions on fish caught above the mill. Dr. Roberts did not know what chemical had induced the stress in these fish, and he did not claim that dioxin or anything produced by the mill was at fault.

Dr. Charlton Stanley, a psychologist, was admitted as an expert in the field of human psychology and particularly in the area of human psychological effect of environmental disasters. Dr. Stanley had seen the Fergusons on May 13, 1996. He interviewed them jointly, and took a history. He found that the Fergusons' primary fear besides contracting cancer was not being able to leave something of value, their property, to their son. Stanley believed that the Fergusons suffered from an adjustment disorder. He believed that the Fergusons' fears and distress were genuine and reasonable under the circumstances. Dr. Stanley had not informed the Fergusons of his findings concerning them and it was his understanding that they had not sought any follow-up psychotherapy or counseling.

TESTING FOR DIOXIN

As the Fergusons did not have themselves or their property tested for the presence of dioxin, they relied on tests of wildlife in the area of the Leaf River to support their claims of emotional distress and nuisance. Appellants used the same test results in an effort to repudiate these claims. The testing took place from 1993 to 1995. The majority of the test results dealt with fish caught in the vicinity of the Leaf River mill. The earlier results showed detectable levels, in parts per trillion or quadrillion, of dioxin in fish caught on the Leaf River. Some of the later results showed a reduction of dioxin levels in the fish tested. None of the testing of fish took place in the vicinity of the Fergusons' property. The testing sites closest to the Fergusons' property were at Merrill, approximately eighty miles upriver from the Fergusons.

COMPANY PERSONNEL

Warren Richardson, general manager of the Leaf River mill, had on-site responsibility for its operation. Richardson had been at the mill since 1994. Acker Smith, manager of environmental affairs for the mill, had worked there since 1988. Both were named as defendants by the plaintiffs. Both testified as adverse witnesses and as witnesses on direct examination. Their testimony covered a number of areas as follows:

The Color Question—The mill discharged approximately nineteen million gallons of effluent, or waste water, into the Leaf River daily. The mill had received a permit from the State of West York which required it to control the color differential of the river from above the mill to below the mill. The color differential referred to the ability of light to be transferred through the water. The mill had performed no chemical color treatment on the Leaf River in 1996 until October, but both Richardson and Smith denied that this was related to the cost of the treatment. Smith

agreed that the mill's effluent changed the color of the Leaf River but denied that there was anything unnatural about the color change.

The Sludge Question—Sludge is a solid waste product of the bleaching process. The Leaf River mill produced 75 to 100 tons of sludge per day. It was sold by the mill to the public for potting soil or to be spread on agricultural land. Warren Richardson agreed that the sludge sold by the mill had detectable levels of dioxin in it. He also agreed that a permit was required from the State before the sludge could be spread. Richardson denied that the mill was required to tell the farmers using the sludge that they should not graze cattle on that land for one year after use, saying that information was voluntarily disseminated by the mill. Acker Smith testified that the dioxin levels in the sludge were below that found to be a problem by the EPA, and there was no need to warn the farmers who purchased this material.

Reduction of Chlorine Use—The paper mills' practice of bleaching their pulp product with chlorine caused dioxin to be generated as a by-product. Warren Richardson and Acker Smith both maintained that the Leaf River mill had made a concerted effort beginning in 1992 to reduce the mill's use of chlorine as the bleaching agent and to substitute in its place chlorine dioxide. Both testified that the mill had used no chlorine since July 1995. Due to this and other steps, Richardson stated that the mill had achieved non-detectable dioxin levels in its effluent since the summer of 1995. Richardson agreed that one of the advantages of using chlorine as a bleaching agent was its lower cost, and that the use of chlorine dioxide in the bleaching process was not new to the paper industry.

Office Memoranda—Plaintiffs Exhibit 286 was a Great Northern Paper inter-office memorandum from V.V. Lapinoja, director of research, to D.K. Phenicie, manager of environmental affairs, dated October 7, 1990. Exhibit 286 dealt with detection of dioxin in the sludge of certain paper mills in Maine. Warren Richardson testified that the memorandum gave him little concern because it did not involve the plant in which he was working at the time. Acker Smith denied that Exhibit 286 should have alerted him and others at the mill that dioxin could be going into the Leaf River via the effluent. Smith also denied that dioxin could have been detected in the effluent if the mill had tested for it at that time, considering the low amounts present and the technology existing at that time. Smith added that the dioxin levels at Leaf River were so much lower than those found in the Maine paper mills that he felt that there was no problem.

THE COMPANY'S EXPERTS

Dr. Kenneth Dickson served as a professor of aquatic ecology at the University of North Texas in Denton, Texas. He was accepted as an expert in the fields of aquatic ecology and aquatic biology. Dickson testified that he had examined several studies done concerning the Leaf and Pascagoula Rivers and offered the following conclusions: (1) the Leaf and Pascagoula Rivers were in good condition; (2) the rivers had made a remarkable recovery from pollution problems of the 1950's-60's; (3) there was "no impact on the ecological health of the aquatic communities downstream of the mill, compared to upstream of the mill." He stated that it was extremely unlikely

that the mill's effluent could have any effect on aquatic life 100 to 125 miles below the mill. He also labeled as unlikely the effluent from the mill causing a color change in the river 100 miles down river.

Dr. Wood Hiatt, professor of psychiatry at the University of West York, had reviewed Dr. Stanley's file and the tests that Dr. Stanley had administered to the Fergusons. Dr. Hiatt found it unacceptable that the Fergusons had been seen together by Dr. Stanley instead of being evaluated as individuals. Dr. Hiatt found that the Fergusons' fear of cancer was not reasonable, as they had refused to have themselves tested to determine if they had potentially dangerous levels of dioxin in their bodies.

Dr. John Doull, professor of toxicology and pharmacy at the University of Kansas, specialized in pesticides, which included work with dioxin. Dr. Doull agreed that dioxin had caused cancer in some animals at high doses but had decreased breast cancer in other animals at low doses. Doull stated that the United States had been much more conservative in setting dioxin standards than the other industrialized nations. He testified that the Fergusons, considering the distance they lived downriver from the mill, should have no basis for concern for their health. Doull labeled the State of West York's standard on dioxin as very conservative and denied that the Fergusons had any increased risk of developing cancer.

Dr. Renate Kimbrough, a physician who had worked for several governmental agencies, including the Center for Disease Control, the Food and Drug Administration, and the Environmental Protection Agency, was accepted as an expert in public health and epidemiology. She was familiar with the ten to fifteen major studies done on dioxin exposure. Kimbrough testified that there had been no convincing study showing an excess of cancer in those exposed to many times the levels of dioxin alleged to be present in the Leaf and Pascagoula Rivers. She further stated that it would be important to test the blood of the plaintiffs to see whether they had been exposed at all, and to see whether their levels were any different than a normal person's. Dr. Kimbrough had suggested the blood testing protocol offered by the defendants and rejected by the plaintiffs. Kimbrough testified that, assuming dioxin levels of four parts per trillion in fish around the Leaf River mill, and assuming that the plaintiffs lived one hundred miles downriver, she would not expect the plaintiffs to have anything other than normal background exposure. She denied that eating fish from the Leaf or Pascagoula River would pose any health risk. Kimbrough agreed that people who ate large amounts of fish regularly would get higher exposure rates, but not necessarily increased risk.

OTHER WITNESSES

Noel Hillman, wildlife supervisor for the West York Department of Wildlife, Fisheries and Parks in Hancock, Harrison, Jackson, Greene, Stone and George Counties, had lived in Greene County all of his life and was familiar with the Leaf/Pascagoula River systems. He testified for the Fergusons that there had been a color change in the water and sandbars of the river system since the Leaf River mill had been built. He also noticed a different smell from the river during the same time, though this had been south of the Ferguson property in the vicinity of the International Paper

mill. Hillman stated that before the Leaf River mill was built one could see down into the Leaf River at dead low water, but this was no longer true. The color change was less marked the further down the Pascagoula one went. Hillman had not seen any change in the number, health or kinds of fish in the Leaf River. He had seen numerous fish with sores in several rivers besides the Leaf, particularly in the summer months.

John Lambeth, outdoors editor for the Sun Herald newspaper, testified for the defendants that he had fished the Leaf, Pascagoula and Chickasawhay Rivers, as well as their tributaries, for 30 years. He had noticed the color and clarity of the Leaf and Pascagoula Rivers before and after the mill had opened, and could see no significant difference in the colors. According to Lambeth, the fish he had caught in these rivers were in better health than before the mill opened. Lambeth stated that he would eat catfish from the rivers, but that he had also abided by consumption limits posted by the State and had not fished during the ban.

Charles Chisolm served as director of the Office of Pollution Control for the West York Department of Environmental Quality. He directed the Office's activities, including permitting, enforcement and oversight, and testified as a witness for the defendants. Chisolm agreed that the DEQ had issued one fish consumption advisory on the Pascagoula River in the latter part of 1995 for a period of two to three months. He said that the advisory was issued out of an abundance of caution because of one flathead catfish with a dioxin level of 42 parts per trillion which was caught near Merrill in August 1995. The DEQ had concluded since that time that there should be no health concerns about eating fish from the Pascagoula River. Chisolm testified that the Leaf River mill had a good compliance record with its discharge permit, that the mill's permit allowed a dioxin discharge limit of 40 parts per quadrillion, while the EPA standard would allow 160 parts per quadrillion. He further testified that the mill was complying with the schedule in its permit concerning color. The DEQ had investigated the reports of fish with sores, and had not found anything abnormal showing the mill to be the cause. Chisolm denied that the fishing ban was lifted because of pressure from the Governor's office, and in turn from the pulp mill. He agreed that the DEQ had never fined the mill for discharge violations. Chisolm denied that the DEQ knew before the mill was built that the result would be pollution problems for the Leaf and Pascagoula Rivers.