## 13. Strict Liability

"'Danger! What danger do you forsee?'
Holmes shook his head gravely. 'It would cease to
be danger if we could define it,' said he."

– from "The Copper Beeches," by Arthur Conan Doyle, 1892

#### Introduction

The dominant form of legal action for compensation following an injury is the action for negligence, which we explored in Volume One. The action for negligence involves the injured plaintiff showing that the defendant was somehow blameworthy in causing the plaintiff's injury. In particular, laying blame is harnessed to a concept of carelessness. In the abstract wisdom of tort law, the thinking goes like this: Because the defendant was not appropriately careful, it is sensible to blame the defendant for injuries caused by that lack of care, thereby holding the defendant responsible for the injury. To put it another way, with negligence, the law is saying something like, "You are responsible for the damages caused by this incident because you did something wrong. And what you did wrong was not being careful enough."

Strict liability presents a stark contrast – it is missing the idea of blameworthiness that is at negligence's core. Where strict liability applies, the law will hold a defendant responsible *even though the defendant did nothing wrong* – that is, regardless of whether the defendant was being careful or not.

At first blush, it might seem extremely unfair that the law would make people responsible for accidents even when they did nothing wrong. And most of the time it would be. But strict liability only is available under very particular circumstances. You might find, as many others do, that in these limited circumstances, liability without blameworthiness seems instinctively fair.

Let's jump into an example. Suppose you decide to hold a pyrotechnic demonstration in a crowded downtown area. Your plan

is to wow a crowd of onlookers with fireballs created with a gasolineair mixture and generous heaps of aluminum perchlorate and other fireworks ingredients. (Aluminum perchlorate is the same compound that was used for the Space Shuttle's solid rocket boosters.) In this situation, if someone gets hurt by an errant fireball, strict liability applies. Carefulness will be irrelevant.

To emphasize the point, you could hire a team of the world's leading chemists and pyrotechnics experts and give them an unlimited budget for safety. It still wouldn't change anything. That's strict liability: If you set off explosive fireballs in the middle of downtown, you are on the hook if anything goes wrong.

It is as if the law says, "I don't care how careful you say you were. It doesn't matter. You're the one who decided to have a pyrotechnic display downtown. So, you are responsible if anyone gets hurt or anyone's property gets damaged."

There are defenses and limits to the doctrine. These are important to keep in mind because they do a lot of work to make strict liability conform to intuitive notions of fairness. If, for instance, at your downtown pyrotechnics display, some onlookers break past barricades and climb up a structure to get right up next to the fireballs, then the onlookers have brought the injury upon themselves, and you will be relieved of liability. (The defense of comparative fault or assumption of risk will do the trick.)

#### Strict Liability Basics, and Negligence Compared

Here are the elements of the cause of action for strict liability:

A plaintiff can establish a prima facie case for strict liability by showing: (1) the defendant owed the plaintiff an absolute duty of safety in regard to some condition or activity, and that condition or activity was (2) an actual cause and (3) a proximate cause of (4) an injury to the plaintiff's person or physical property.

Compare that to the cause of action for negligence:

A plaintiff can establish a prima facie case for negligence by showing: (1) the defendant owed

the plaintiff a duty of due care, (2) the defendant breached that duty, and that breach was (3) an actual cause and (4) a proximate cause of (5) an injury to the plaintiff's person or physical property.

You can see that the first two elements of the negligence case (duty of care and breach) have been replaced by a single element of an "absolute duty of safety." The rest of the cause of action is exactly the same as negligence. Actual causation is the same. Proximate causation is the same. The requirement that the plaintiff prove the existence of damages is the same. And, as it turns out, the same defenses that apply in a negligence case generally apply in a strict liability case as well.

Since those topics have all been covered in this casebook under the heading of negligence, the main thing we have to do in this chapter is to investigate the first element – the "absolute duty of safety." After that, we will then look at the economics of strict liability, discuss how defenses and limitations constrain strict liability's scope, and finally we will see strict liability in action at trial.

## The Absolute Duty of Safety

At the outset, a terminology note is in order. When it comes to talking about the "absolute duty of safety," some commentators take issue with the use of the word "absolute." They note that the duty is not technically "absolute." And they have a point. When it comes to law, almost nothing is truly absolute. Indeed, there are various limitations on strict liability, including proximate causation and comparative fault. Yet if you think of "absolute duty" as a term of art, there is no danger of confusion. The phrase "absolute duty" signifies that there is no need to show that the defendant did something wrong.

If you've become familiar with the cause of action for negligence, it might seem strange that the law would ever impose liability without fault. Indeed, scholars and judges have puzzled over whether strict liability is justified – in particular, many have questioned whether it is economically sound.

For the moment, however, it is helpful to realize that there is, at least, an intuitive sense in which we all recognize that some situations are appropriate for responsibility without fault. We have all heard someone say something like, "Okay, you can do it, but if something goes wrong, it's your butt on the line." Strict liability is when tort law says this to society at large.

So when does the law give this eyebrow-raised admonition? Here are the five general categories where the absolute duty of safety is imposed:

- wild animals
- trespassing livestock
- domestic animals with known vicious propensities
- ultrahazardous activities
- defective products

These categories do the lion's share of work in bending strict liability doctrine to conform to our intuitions of fairness. You can see immediately that this list is quite circumscribed, yet the categories carved out by strict liability – particularly the last two – have considerable economic significance.

The category of defective products requires considerable elaboration, so it is the subject of its own chapter, which follows immediately after this one. In this chapter, we focus on the first four categories.

#### **Animals**

Of the categories for the imposition of an absolute duty of safety, three of the five have to do with animals.

The first concerns **wild animals** – "ferae naturae" in Latin. If you keep a wild animal, then you are liable for whatever damage it causes. Memo to general counsels for zoos and circuses: If a lion escapes and hurts some one, you're on the hook.

What counts as a wild animal? Wild animals are defined in contradistinction to domestic animals: Wild animals are animals that

are not domesticated. Domesticated animals – in Latin "domitae naturae" or "mansuetae naturae" – are those that have been bred to be helpful to humans. Some examples are dogs, cats, cows, pigs, and chickens. So, if it hasn't been bred to be helpful to humans, it is wild.

It is important to keep in mind that whether an animal is wild has nothing to do with whether it seems dangerous. A lion is wild, of course, but so is a baby deer. If the baby deer you are keeping somehow causes someone injury, then you are on the hook for the damage – notwithstanding whatever cuteness it may radiate.

Whether or not an animal is wild also has nothing to do with whether it is being kept as a pet. If you keep a non-domesticated animal as a pet, it's still wild. Stories occasionally pop up in the news about someone keeping a tiger as a pet. If you own a tiger, be aware that that it doesn't matter if the tiger sits still while you dress it in funny outfits and has never eaten anything other than kibble from a bag, it's still a wild animal. And strict liability applies if it injures anyone.

An animal can be tamed and still be wild. Taming and domestication are two different things. An animal can be tamed during its lifetime, but a single animal cannot be domesticated. Domestication is something that happens over generations of animal breeding, and it is only this process that brings animals out of the realm of strict liability.

Of course, not all wild animals give rise to strict liability – only those that the defendant is keeping or possessing. A wild animal roaming across the defendant's property will not bring about strict liability. But doing something to keep the animal around – confining it, or maybe just feeding it and encouraging it to linger – will bring about an absolute responsibility for injuries it causes.

The second category imposing an absolute duty of safety is trespassing livestock. The first example to leap to mind might be something like an escaped bull that gores a neighbor. Certainly those facts would bring about the application of strict liability. But the rationale for the trespassing livestock doctrine is not so much that livestock are a threat to people, but rather that they are a threat to agriculture. That is, the archetypal injury in a strict liability action for

trespassing livestock would be crops that have been eaten or trampled.

Suppose a farmer is growing corn. Next door, a rancher has 200 pigs. The pigs escape their pen and tear up the corn field, rendering the year's crop a total loss. The farmer can sue the rancher in strict liability, and the rancher is on the hook – no matter how careful the rancher was in attempting to confine the pigs.

There is an important difference among jurisdictions in the application of strict liability in the case of trespassing livestock. The default is "fence in," meaning that it's up to keepers of livestock to keep their animals penned up – or else be liable for whatever damage they cause. In some places, however, the onus is on farmers to "fence out" marauding livestock. Respectively, these are *fence-in jurisdictions* and *fence-out jurisdictions*.

The fence-in/fence-out rule could be set at the level of the state, the county, or even a subdivision of a county. Roughly speaking, farm country tends to follow the fence-in rule, while ranch country tends to opt for the fence-out rule. So, generally speaking, if you want to grow crops in ranch country, you'll need to build a fence. If you want to raise livestock in farm country, you'll need to pen them in.

A key point to remember is that "livestock" is a distinct categorization from "domesticated animals." Cattle qualify both as livestock and as domesticated animals. But dogs and cats, while domesticated, are not livestock. The distinction is important, because it means that trespassing cats and dogs do not give rise to strict liability under the common law.

What animals count as livestock? Cattle, sheep, pigs, and horses definitely count as livestock. Cats and dogs do not. In general, livestock are animals raised by people as part of a farming or ranching operation. But the exact definition of "livestock" is not entirely settled. Various cases, regulations, statutes, and other authorities define the term in different ways. Many definitions require animals to be domesticated to qualify as livestock. But not all. Non-domesticated elk, for instance, might qualify as "non-traditional" livestock if they are raised for food. But at the end of the day,

whether wild animals can be counted as livestock does not matter much for purposes of strict liability. If a wild animal escapes its enclosure and trespasses on someone else's property, it creates strict liability for its owner merely by virtue of being a wild animal. It's additional qualification as livestock for strict-liability purposes would be redundant.

The third category of animal-related strict liability concerns **domestic** animals with known, vicious propensities. Theoretically, this could apply to a number of creatures, but as a practical matter, we are really talking about dogs that bite people. This doctrine is the subject of an enormous amount of neighborhood lore. Some people – even some lawyers – call this the "one bite rule" and recite the doctrine as "every dog gets one free bite." But that description is highly inaccurate. The real rule is more complicated.

Strict liability applies under the common law when the keeper of the animal has subjective knowledge of some propensity of the animal to cause harm. Thus, if a dog has previously bitten a person without provocation, the dog's keeper has subjective knowledge such that the next person to be bitten will be able to recover under strict liability.

Where this departs from the "one free bite" idea is that, in reality, a dog does not need to bite someone in order to give that dog's keeper knowledge of its abnormal propensity to cause harm. For instance, if the dog was tied up and mistreated, and then exhibited abnormal aggression toward people, that might well be enough for strict liability to apply – even if the dog had yet to bite someone. Some courts have held that a "beware of dog" sign constituted evidence that an owner had the requisite knowledge of a dog's dangerous propensity.

Another problem with the free-bite paraphrasing is that it ignores the fact that a dog-bite victim can always sue in negligence. Suppose an untrained Rottweiler has a brand new owner. Strict liability for a known dangerous propensity cannot apply, because the owner has no knowledge about the dog — much less any knowledge of dangerous propensities. Thus, strict liability will not apply. But if the Rottweiler's owner leaves a small child alone with the animal, and if

the child is bitten, a jury would likely find the Rottweiler's owner liable in negligence, since the reasonable person would not leave a small child alone with an untrained Rottweiler.

It also is frequently possible for dog bite victims to sue using negligence-per-se doctrine. For example, suppose an ordinance requires dogs to be leashed while in the city park. An injury caused by an unleashed dog in the park could then subject the dog's keeper to automatic liability via negligence per se. (See Volume One, Chapter 6 regarding negligence per se.)

The common law and ordinances are not the only important source of law on dog bites. In many states, statutory law specifically controls liability for dog bites. Frequently, such statutes dictate that dog owners are liable for all injuries their dog causes, with a few exceptions, such as that the victim was trespassing or that the victim provoked the dog.

It should be kept in mind that while strict liability for domestic animals with dangerous propensities is, in practice, mostly about dogs, it also applies to other domestic animals, including livestock. If a horse is known to have kicked people, then the horse's keeper may be held strictly liable for subsequent kicking injuries.

Finally, in many jurisdictions, it is important not just that the animal is vicious, but that its vicious propensity is somehow abnormal. A bull, for instance, is *normally* dangerous. Given such a rule, a person injured by a charging bull (assuming the bull is not trespassing) cannot use strict liability to sue for injuries sustained in the charge.

### Case: Isaacs v. Monkeytown U.S.A.

The following case illustrates many of the key points of strict liability for animals.

### Isaacs v. Monkeytown, U.S.A.

District Court of Appeal of Florida, Second District
October 4, 1972

267 So.2d 864. Scott ISAACS, a minor, by his father and natural guardian, Howard Isaacs, Appellant, v. Lester M. POWELL and

Arlyss R. Powell, doing business as Monkeytown, U.S.A., Appellees.

#### Judge JOSEPH P. McNULTY:

This is a case of first impression in Florida. The question posed is whether Florida should adopt the general rule that the owner or keeper of a wild animal, in this case a chimpanzee, is liable to one injured by such animal under the strict liability doctrine, i.e., regardless of negligence on his part, or whether his liability should be predicated on his fault or negligence.~

Plaintiff-appellant Scott Isaacs was two years and seven months old at the times material herein. His father had taken him to defendants-appellees' monkey farm where, upon purchasing an admission ticket, and as was usual and encouraged by appellees, he also purchased some food to feed the animals. While Scott was feeding a chimpanzee named Valerie, she grabbed his arm and inflicted serious injury.

The exact details of how Valerie was able to grab Scott's arm are in dispute. Appellees contend that Scott's father lifted the boy above reasonably sufficient protective barriers to within Valerie's reach, while appellants counter that the barriers and other protective measures were insufficient. But in any case, appellants do not now, nor did they below, rely on any fault of appellees. Rather, they rely solely on the aforesaid generally accepted strict or, as it is sometimes called, absolute liability doctrine under which negligence or fault on the part of the owner or keeper of an animal ferae naturae is irrelevant. Appellees, on the other hand, suggest that we should adopt the emerging, though yet minority, view that liability should depend upon negligence, i.e., a breach of the duty of care reasonably called for taking into account the nature and specie of the animal involved. We will consider this aspect of the problem first and will hereinafter discuss available defenses under the theory we adopt.

The trial judge apparently agreed with the appellees that fault or negligence on the part of the owners of a wild animal must be shown. He charged the jury on causation as follows: The issues for your determination are whether the proximate cause of Scott Isaacs' injuries was the improper protection for paying customers of the defendants in the condition of the cage, and whether the approximate cause of (sic) the placing of Scott by his father, Howard Isaacs, within the barrier placed by the defendants for the protection of customers of the defendant.

In other words the trial judge asked the jury to decide whether Scott was injured through the fault of defendants-appellees and/or through the fault of his father. The jury returned a verdict for the defendants; but obviously, it's impossible for us to determine whether, under the foregoing charge, the jury so found because they were unable to find fault on defendants' part, or whether they so found because they believed the cause of Scott's injury to be the fault of the father. If, of course, we adopt the negligence theory of liability there would be no error in submitting both issues to the jury. But we are of the view that the older and general rule of strict liability, which obviates the issue of the owner's negligence, is more suited to the fast growing, populous and activity-oriented society of Florida. Indeed, our society imposes more than enough risks upon its members now, and we are reluctant to encourage the addition of one more particularly when that one more is increasingly contributed by those who, for profit, would exercise their "right" to harbor wild animals and increase exposure to the dangers thereof by luring advertising. Prosser puts it this way:

... (Liability) has been thought to rest on the basis of negligence in keeping the animal at all; but this does not coincide with the modern analysis of negligence as conduct which is unreasonable in view of the risk, since it may not be an unreasonable thing to keep a tiger in a zoo. It is rather an instance of the strict responsibility placed upon those who, even with proper care, expose the community to the risk of a very dangerous thing. While one or two jurisdictions insist that there is no liability

without some negligence in keeping the animal, by far the greater number impose strict liability.

Additionally, we observe that Florida has enacted § 767.04, F.S.A., relating to dogs. This section provides, in pertinent part:

The owners of any dog which shall bite any person, while such person is on or in a public place, or lawfully on or in a private place, including the property of the owner of such dogs, shall be liable for such damages as may be suffered by persons bitten, regardless of the former viciousness of such dog or the owners' knowledge of such viciousness ...; Provided, however, no owner of any dog shall be liable for any damages to any person or his property when such person shall mischievously or carelessly provoke or aggravate the dog inflicting such damage; nor shall any such owner be so liable if at the time of any such injury he had displayed in a prominent place on his premises a sign easily readable including the words 'Bad Dog.~'

[This statute] abrogates the permissive "one bite" rule of the common law. That rule posited that an owner of a dog is liable to one bitten by such dog only if he is chargeable with "scienter," i.e., prior knowledge of the viciousness of the dog. Necessarily, of course, the cause of action therefor was predicated on the negligence of the owner in failing to take proper precautions with knowledge of the dog's vicious propensities. This indeed was also basis at common law of liability on the part of an owner of any animal domitae naturae. Our statute, however, has in effect imposed strict liability on a dog owner (from which he can absolve himself only by complying with the warning proviso of the statute). It would result in a curious anomaly, then, if we were to adopt the negligence concept as a basis for liability of an owner or keeper of a tiger, while § 767.04, supra, imposes potential strict liability upon him if he should trade the tiger for a dog. We are

compelled to adopt, therefore, the strict liability rule in these cases.

Concerning, now, available defenses under this rule we share the view, and emphasize, that "strict or absolute liability" does not mean the owner or keeper of a wild animal is an absolute insurer in the sense that he is liable regardless of any fault on the part of the victim. Moreover, we do not think it means he is liable notwithstanding an intervening, efficient independent fault which solely causes the result, as was possibly the case here if fault on the part of Scott's father were the sole efficient cause.

As to the fault of the victim himself, since the owner or keeper of a wild animal is held to a rigorous rule of liability on account of the danger inherent in harboring such animal, it has generally been held that the owner ought not be relieved from such liability by slight negligence or want of ordinary care on the part of the person injured. The latter's acts must be such as would establish that, with knowledge of the danger, he voluntarily brought the calamity upon himself. This general rule supports the Restatement of Torts, § 515, which we now adopt and set forth as follows:

- (1) A plaintiff is not barred from recovery by his failure to exercise reasonable care to observe the propinquity of a wild animal or an abnormally dangerous domestic animal or to avoid harm to his person, land or chattels threatened by it.
- (2) A plaintiff is barred from recovery by intentionally and unreasonably subjecting himself to the risk that a wild animal or an abnormally dangerous domestic animal will do harm to his person, land or chattels.~

This rule is duplicated in § 484, Restatement, Torts 2d, which states that the plaintiff's contributory negligence is not a defense to the strict liability of the possessor of an animal, except where such contributory negligence consists in voluntarily and unreasonably subjecting himself to the risk of harm from the animal.

With regard to an intervening fault bringing about the result we have no hesitancy in expanding the foregoing rule to include as a defense the willful or intentional fault of a third party provided such fault is of itself an efficient cause and is the sole cause. If a jury were to decide in this case, therefore, that the sole efficient cause of Scott's injury was the intentional assumption of the apparent risks on the part of the boy's father and his placing of the boy within reach of the danger, it would be a defense available to appellees. Clearly, though, this defense would be related only to causation and is not dependent upon any theory of imputation of the father's fault to the son, which is now irrelevant in view of the extent of strict liability in these cases and the limited defenses available thereunder.

The judgment is reversed and the cause is remanded for a new trial on the theory of strict liability, and the defenses thereto, as enunciated above.

Reversed.

HOBSON, A.C.J., and MANN, J., concur.

## Check-Your-Understanding Questions About Strict Liability

**A.** Suppose an exotic rancher raises non-domesticated ostriches for meat, eggs, feathers, and leather. Some ostriches leave the ranch and enter a patio café where they seriously injure a patron. Can the injured patron recover in strict liability? Why or why not?

**B.** A plaintiff sues a zoo for injuries sustained because of an escaped boa constrictor. The snake did not actually touch the plaintiff. Instead, the snake killed the plaintiff's friend's pet cat. But because of the cat's death, the plaintiff's friend was not available to help the plaintiff repair a stair railing, as had been the plan. The plaintiff was injured when the railing collapsed. Can the plaintiff recover against the zoo in strict liability?

## Ultrahazardous or Abnormally Dangerous Activities

In addition to the specific categories that the law sets out for strict liability in connection with animals, there is the large, general category of strict liability for "ultrahazardous" or "abnormally dangerous" activities.

This is another place where terminology might lead you to misunderstand the doctrine. Note that "ultrahazardous" and "abnormally dangerous" are not two different categories, but rather two different labels for one category. The courts employ the two terms about equally today. The American Law Institute favored "ultrahazardous" in its First Restatement of Torts, but then switched to "abnormally dangerous" for its Second Restatement. Both terms, however, have potential problems.

The danger posed by the term "abnormally dangerous" is that you might think the words mean what they say. That is, you might think that that for an activity to qualify as "abnormally dangerous," it needs to present a danger that is not normal. That, however, is not correct. There are many abnormal dangers that do not qualify for strict liability, and many familiar risks from common activities that do. "Abnormally dangerous" must be thought of as a term of art.

The hazard posed by the term "ultrahazardous" is that you might think that it is the magnitude of the potential harm that causes something qualify as an ultrahazard. But something can be "ultrahazardous" even if it threatens only one person. What is good about "ultrahazardous" as a label, however, is that it is clearly a made-up word, and thus it is easily identifiable as a term of art.

In this book, we'll use both terms as synonyms.

# What Activities Qualify as Ultrahazardous or Abnormally Dangerous?

What causes something to qualify as an ultrahazardous or abnormally dangerous activity for strict liability purposes? There is no simple, concise answer. With animals, the qualifications for strict liability are fairly specific. By contrast, the category of strict liability for ultrahazardous activities is a more recent development in the law, and its boundaries are considerably fuzzier.

The core idea is less about the characteristics of the activity and more about a policy judgment that people who undertake certain activities must be responsible for any harm that results, regardless of how much care is taken. The policy judgment inherent in the task mirrors the policy judgment involved in deciding whether a defendant owes a duty of care for purposes of a negligence action. And as is the case with the existence of a duty in negligence, whether an activity qualifies for strict liability is generally a legal question – to be determined by a court, rather than a jury.

Here are some examples of activities have that been held to give rise to strict liability under the ultrahazardous classification:

- blasting
- fumigation
- crop dusting
- activities involving nuclear reactions or radioactivity
- pile driving
- oil drilling
- activities involving explosives or highly toxic chemicals (including manufacturing, transporting, storing, and using)

You can see that many of these activities are quite "normal" in the sense that they go on all the time. To the extent one could say that there is something abnormal about them, perhaps it is that relatively few people in society engage in them. There are many farmers for instance, but there are comparatively few providers of crop-dusting services. And while everybody uses gasoline and other products derived from petroleum, very few people in society go drilling for petroleum.

Richard A. Epstein writes, "There is no obvious conceptual line that walls off abnormally dangerous activities from their relatively benign counterparts." Nonetheless, Epstein sees a thread that binds them all together: "Ultrahazardous activities and substances all fall into the class where small triggers, physical or chemical, can release far larger forces." RICHARD A. EPSTEIN, TORTS, p. 348 (1999).

One way to make sense of strict liability for abnormally dangerous activities is to note the conceptual similarities with the doctrine of strict liability for wild animals. Take, for instance, Justice Blackburn's pronouncement in *Rylands*, below, that whoever "brings, or accumulates, on his land anything which, if it should escape, may cause damage to his neighbour, he does so at his peril." That language could be talking about a lion just as much as it could be talking about a huge volume of water or a concentration of radionuclides.

### Case: Rylands v. Fletcher

The case credited with starting the general doctrine of strict liability for ultrahazards is the classic English case of *Rylands v. Fletcher*.

## Rylands v. Fletcher

House of Lords July 17, 1868

3 HL 330, [1868] UKHL 1. JOHN RYLANDS AND JEHU HORROCKS, PLAINTIFFS v. THOMAS FLETCHER, DEFENDANT.

## The Lord Chancellor, Lord CAIRNS (Hugh Cairns, 1st Earl Cairns):

My Lords, in this case the Plaintiff~ is the occupier of a mine and works under a close of land. The Defendants are the owners of a mill in his neighbourhood, and they proposed to make a reservoir for the purpose of keeping and storing water to be used about their mill upon another close of land, which, for the purposes of this case, may be taken as being adjoining to the close of the Plaintiff, although, in point of fact, some intervening land lay between the two. Underneath the close of land of the Defendants on which they proposed to construct their reservoir there were certain old and disused mining passages and works. There were five vertical shafts, and some horizontal shafts communicating with them. The vertical shafts had been filled up with soil and rubbish, and it does not appear that any person was aware of the existence either of the vertical shafts or of the horizontal works communicating with them. In

the course of the working by the Plaintiff of his mine, he had gradually worked through the seams of coal underneath the close, and had come into contact with the old and disused works underneath the close of the Defendants.

In that state of things the reservoir of the Defendants was constructed. It was constructed by them through the agency and inspection of an engineer and contractor. Personally, the Defendants appear to have taken no part in the works, or to have been aware of any want of security connected with them. As regards the engineer and the contractor, we must take it from the case that they did not exercise, as far as they were concerned, that reasonable care and caution which they might have exercised, taking notice, as they appear to have taken notice, of the vertical shafts filled up in the manner which I have mentioned. However, my Lords, when the reservoir was constructed, and filled, or partly filled, with water, the weight of the water bearing upon the disused and imperfectly filled-up vertical shafts, broke through those shafts. The water passed down them and into the horizontal workings, and from the horizontal workings under the close of the Defendants it passed on into the workings under the close of the Plaintiff, and flooded his mine, causing considerable damage, for which this action was brought.~

My Lords, the principles on which this case must be determined appear to me to be extremely simple. The Defendants, treating them as the owners or occupiers of the close on which the reservoir was constructed, might lawfully have used that close for any purpose for which it might in the ordinary course of the enjoyment of land be used; and if, in what I may term the natural user of that land, there had been any accumulation of water, either on the surface or underground, and if, by the operation of the laws of nature, that accumulation of water had passed off into the close occupied by the Plaintiff, the Plaintiff could not have complained that that result had taken place. If he had desired to guard himself against it, it would have lain upon him to have done so, by leaving, or by interposing, some barrier between his close and the close of the Defendants in order to have prevented that operation of the laws of nature.

As an illustration of that principle, I may refer to a case which was cited in the argument before your Lordships, the case of *Smith v. Kenrick* in the Court of Common Pleas.

On the other hand if the Defendants, not stopping at the natural use of their close, had desired to use it for any purpose which I may term a non-natural use, for the purpose of introducing into the close that which in its natural condition was not in or upon it, for the purpose of introducing water either above or below ground in quantities and in a manner not the result of any work or operation on or under the land, - and if in consequence of their doing so, or in consequence of any imperfection in the mode of their doing so, the water came to escape and to pass off into the close of the Plaintiff, then it appears to me that that which the Defendants were doing they were doing at their own peril; and, if in the course of their doing it, the evil arose to which I have referred, the evil, namely, of the escape of the water and its passing away to the close of the Plaintiff and injuring the Plaintiff, then for the consequence of that, in my opinion, the Defendants would be liable. As the case of Smith v. Kenrick is an illustration of the first principle to which I have referred, so also the second principle to which I have referred is well illustrated by another case in the same Court, the case of Baird v. Williamson, which was also cited in the argument at the Bar.

My Lords, these simple principles, if they are well founded, as it appears to me they are, really dispose of this case.

The same result is arrived at on the principles referred to by Mr. Justice Blackburn in his judgment, in the Court of Exchequer Chamber, where he states the opinion of that Court as to the law in these words: "We think that the true rule of law is, that the person who, for his own purposes, brings on his land and collects and keeps there anything likely to do mischief if it escapes, must keep it in at his peril; and if he does not do so, is primâ facie answerable for all the damage which is the natural consequence of its escape. He can excuse himself by shewing that the escape was owing to the Plaintiff's default; or, perhaps, that the escape was the consequence of vis major, or the act of

God; but as nothing of this sort exists here, it is unnecessary to inquire what excuse would be sufficient. The general rule, as above stated, seems on principle just. The person whose grass or corn is eaten down by the escaping cattle of his neighbour, or whose mine is flooded by the water from his neighbour's reservoir, or whose cellar is invaded by the filth of his neighbour's privy, or whose habitation is made unhealthy by the fumes and noisome vapours of his neighbour's alkali works, is damnified without any fault of his own; and it seems but reasonable and just that the neighbour who has brought something on his own property (which was not naturally there), harmless to others so long as it is confined to his own property, but which he knows will be mischievous if it gets on his neighbour's, should be obliged to make good the damage which ensues if he does not succeed in confining it to his own property. But for his act in bringing it there no mischief could have accrued, and it seems but just that he should at his peril keep it there, so that no mischief may accrue, or answer for the natural and anticipated consequence. And upon authority this we think is established to be the law, whether the things so brought be beasts, or water, or filth, or stenches."

My Lords, in that opinion, I must say I entirely concur. Therefore, I have to move your Lordships that the judgment of the Court of Exchequer Chamber be affirmed, and that the present appeal be dismissed with costs.

#### Lord CRANWORTH (Robert Rolfe, 1st Baron Cranworth):

My Lords, I concur with my noble and learned friend in thinking that the rule of law was correctly stated by Mr. Justice Blackburn in delivering the opinion of the Exchequer Chamber. If a person brings, or accumulates, on his land anything which, if it should escape, may cause damage to his neighbour, he does so at his peril. If it does escape, and cause damage, he is responsible, however careful he may have been, and whatever precautions he may have taken to prevent the damage.~

### The Economics of Strict Liability

Strict liability has been a focal point for theorists of law and economics. They question whether strict liability can be justified as sound economic policy.

Negligence, in general, does not face this criticism. The doctrine of negligence seems to lend itself to economic justification quite readily: We want to provide an incentive for people to engage in the appropriate level of care when undertaking their activities. Therefore, we hold them liable when injury results from their care falling below this level.

So, since we have negligence, why should we ever need strict liability? If we want to encourage transporters of explosives to engage in the appropriate level of care, then why not leave intact the requirement that plaintiffs prove negligence?

A response might be to say that there are some activities that are potentially so social pernicious, we not only want people to be careful, we want them to think long and hard about whether they should engage in the activity at all. If people are responsible for all injuries caused by a certain activity – regardless of how careful they are – then people might engage in that activity less often, or they might move the location of their activity to someplace where less harm is likely to result if something goes wrong.

#### Case: Indiana Belt Harbor R.R. v. American Cyanamid

In this modern classic, Judge Richard A. Posner, a leading figure in the law-and-economics movement, brings economic analysis to bear on the decision of whether the transportation of toxic chemicals should be subject to strict liability. This case has been praised by some and lambasted by others. Ask yourself whether you find the analysis convincing.

### Indiana Belt Harbor R.R. v. American Cyanamid

United States Court of Appeals for the Seventh Circuit October 18, 1990 916 F.2d 1174. INDIANA HARBOR BELT RAILROAD COMPANY, Plaintiff-Appellee, Cross-Appellant, v. AMERICAN CYANAMID COMPANY, Defendant-Appellant, Cross-Appellee. Nos. 89-3703, 89-3757. United States Court of Appeals, Seventh Circuit. Before POSNER, MANION and KANNE, Circuit Judges.

#### Circuit Judge RICHARD A. POSNER:

American Cyanamid Company, the defendant in this diversity tort suit governed by Illinois law, is a major manufacturer of chemicals, including acrylonitrile, a chemical used in large quantities in making acrylic fibers, plastics, dyes, pharmaceutical chemicals, and other intermediate and final goods. On January 2, 1979, at its manufacturing plant in Louisiana, Cyanamid loaded 20,000 gallons of liquid acrylonitrile into a railroad tank car that it had leased from the North American Car Corporation. The next day, a train of the Missouri Pacific Railroad picked up the car at Cyanamid's siding. The car's ultimate destination was a Cyanamid plant in New Jersey served by Conrail rather than by Missouri Pacific. The Missouri Pacific train carried the car north to the Blue Island railroad vard of Indiana Harbor Belt Railroad, the plaintiff in this case, a small switching line that has a contract with Conrail to switch cars from other lines to Conrail, in this case for travel east. The Blue Island vard is in the Village of Riverdale, which is just south of Chicago and part of the Chicago metropolitan area.

The car arrived in the Blue Island yard on the morning of January 9, 1979. Several hours after it arrived, employees of the switching line noticed fluid gushing from the bottom outlet of the car. The lid on the outlet was broken. After two hours, the line's supervisor of equipment was able to stop the leak by closing a shut-off valve controlled from the top of the car. No one was sure at the time just how much of the contents of the car had leaked, but it was feared that all 20,000 gallons had, and since acrylonitrile is flammable at a temperature of 30° Fahrenheit or above, highly toxic, and possibly carcinogenic (*Acrylonitrile*, 9 International Toxicity Update, no. 3, May-June 1989, at 2, 4), the local authorities ordered the homes near the

yard evacuated. The evacuation lasted only a few hours, until the car was moved to a remote part of the yard and it was discovered that only about a quarter of the acrylonitrile had leaked. Concerned nevertheless that there had been some contamination of soil and water, the Illinois Department of Environmental Protection ordered the switching line to take decontamination measures that cost the line \$981,022.75, which it sought to recover by this suit.

One count of the two-count complaint charges Cyanamid with having maintained the leased tank car negligently. The other count asserts that the transportation of acrylonitrile in bulk through the Chicago metropolitan area is an abnormally dangerous activity, for the consequences of which the shipper (Cyanamid) is strictly liable to the switching line, which bore the financial brunt of those consequences because of the decontamination measures that it was forced to take.~

The question whether the shipper of a hazardous chemical by rail should be strictly liable for the consequences of a spill or other accident to the shipment en route is a novel one in Illinois, despite the switching line's contention that the question has been answered in its favor by two decisions of the Illinois Appellate Court that the district judge cited in granting summary judgment. In both Fallon v. Indiana Trail School, 148 Ill.App.3d 931, 934~(1986), and Continental Building Corp. v. Union Oil Co., 152 Ill.App.3d 513, 516~(1987), the Illinois Appellate Court cited the district court's first opinion in this case with approval and described it as having held that the transportation of acrylonitrile in the Chicago metropolitan area is an abnormally dangerous activity, for which the shipper is strictly liable. These discussions are dicta. The cases did not involve acrylonitrile – or for that matter transportation – and in both cases the court held that the defendant was not strictly liable. The discussions were careless dicta, too, because the district court had not in its first opinion, the one they cited, held that acrylonitrile was in fact abnormally dangerous. It merely had declined to grant a motion to dismiss the strict liability count for failure to state a claim. We do not wish to sound too censorious; this court has twice made the same mistake in interpreting the district court's first opinion.

Martin v. Harrington & Richardson, Inc., 743 F.2d 1200, 1203 (7th Cir.1984); City of Bloomington v. Westinghouse Elec. Corp., 891 F.2d 611, 615 (7th Cir.1989). But mistake it is. The dicta in Fallon and Continental cannot be considered reliable predictors of how the Supreme Court of Illinois would rule if confronted with the issue in this case. We are not required to follow even the holdings of intermediate state appellate courts if persuaded that they are not reliable predictors of the view the state's highest court would take. No court is required to follow another court's dicta. Here they are not even considered or well-reasoned dicta, founded as they are on the misreading of an opinion.

The parties agree that the question whether placing acrylonitrile in a rail shipment that will pass through a metropolitan area subjects the shipper to strict liability is, as recommended in Restatement (Second) of Torts § 520, comment / (1977), a question of law, so that we owe no particular deference to the conclusion of the district court. They also agree (and for this proposition, at least, there is substantial support in the Fallon and Continental opinions) that the Supreme Court of Illinois would treat as authoritative the provisions of the Restatement governing abnormally dangerous activities. The key provision is section 520, which sets forth six factors to be considered in deciding whether an activity is abnormally dangerous and the actor therefore strictly liable.

The roots of section 520 are in nineteenth-century cases. The most famous one is *Rylands v. Fletcher*, 1 Ex. 265, aff'd, L.R. 3 H.L. 300 (1868), but a more illuminating one in the present context is *Guille v. Swan*, 19 Johns. (N.Y.) 381 (1822). A man took off in a hot-air balloon and landed, without intending to, in a vegetable garden in New York City. A crowd that had been anxiously watching his involuntary descent trampled the vegetables in their endeavor to rescue him when he landed. The owner of the garden sued the balloonist for the resulting damage, and won. Yet the balloonist had not been careless. In the then state of ballooning it was impossible to make a pinpoint landing.

Guille is a paradigmatic case for strict liability. (a) The risk (probability) of harm was great, and (b) the harm that would ensue if the risk materialized could be, although luckily was not, great (the balloonist could have crashed into the crowd rather than into the vegetables). The confluence of these two factors established the urgency of seeking to prevent such accidents. (c) Yet such accidents could not be prevented by the exercise of due care; the technology of care in ballooning was insufficiently developed. (d) The activity was not a matter of common usage, so there was no presumption that it was a highly valuable activity despite its unavoidable riskiness. (e) The activity was inappropriate to the place in which it took place - densely populated New York City. The risk of serious harm to others (other than the balloonist himself, that is) could have been reduced by shifting the activity to the sparsely inhabited areas that surrounded the city in those days. (f) Reinforcing (d), the value to the community of the activity of recreational ballooning did not appear to be great enough to offset its unavoidable risks.

These are, of course, the six factors in section 520. They are related to each other in that each is a different facet of a common quest for a proper legal regime to govern accidents that negligence liability cannot adequately control. The interrelations might be more perspicuous if the six factors were reordered. One might for example start with (c), inability to eliminate the risk of accident by the exercise of due care. The baseline common law regime of tort liability is negligence. When it is a workable regime, because the hazards of an activity can be avoided by being careful (which is to say, nonnegligent), there is no need to switch to strict liability. Sometimes, however, a particular type of accident cannot be prevented by taking care but can be avoided, or its consequences minimized, by shifting the activity in which the accident occurs to another locale, where the risk or harm of an accident will be less ((e)), or by reducing the scale of the activity in order to minimize the number of accidents caused by it ((f)). Bethlehem Steel Corp. v. EPA, 782 F.2d 645, 652 (7th Cir.1986); Shavell, Strict Liability versus Negligence, 9 J. Legal Stud. 1 (1980). By making the actor strictly liable – by denying him in other words an excuse based on his inability to avoid accidents by being more careful – we give him an incentive, missing in a negligence regime, to experiment with methods of preventing accidents that involve not greater exertions of care, assumed to be futile, but instead relocating, changing, or reducing (perhaps to the vanishing point) the activity giving rise to the accident. *Anderson v. Marathon Petroleum Co.*, 801 F.2d 936, 939 (7th Cir.1986). The greater the risk of an accident ((a)) and the costs of an accident if one occurs ((b)), the more we want the actor to consider the possibility of making accident-reducing activity changes; the stronger, therefore, is the case for strict liability. Finally, if an activity is extremely common ((d)), like driving an automobile, it is unlikely either that its hazards are perceived as great or that there is no technology of care available to minimize them; so the case for strict liability is weakened.

The largest class of cases in which strict liability has been imposed under the standard codified in the Second Restatement of Torts involves the use of dynamite and other explosives for demolition in residential or urban areas. Restatement, *supra*, § 519, comment d; *City of Joliet v. Harwood*, 86 Ill. 110 (1877). Explosives are dangerous even when handled carefully, and we therefore want blasters to choose the location of the activity with care and also to explore the feasibility of using safer substitutes (such as a wrecking ball), as well as to be careful in the blasting itself. Blasting is not a commonplace activity like driving a car, or so superior to substitute methods of demolition that the imposition of liability is unlikely to have any effect except to raise the activity's costs.

Against this background we turn to the particulars of acrylonitrile. Acrylonitrile is one of a large number of chemicals that are hazardous in the sense of being flammable, toxic, or both; acrylonitrile is both, as are many others. A table in the record~ contains a list of the 125 hazardous materials that are shipped in highest volume on the nation's railroads. Acrylonitrile is the fifty-third most hazardous on the list. Number 1 is phosphorus (white or yellow), and among the other materials that rank higher than acrylonitrile on the hazard scale are anhydrous ammonia, liquified petroleum gas, vinyl chloride,

gasoline, crude petroleum, motor fuel antiknock compound, methyl and ethyl chloride, sulphuric acid, sodium metal, and chloroform. The plaintiff's lawyer acknowledged at argument that the logic of the district court's opinion dictated strict liability for all 52 materials that rank higher than acrylonitrile on the list, and quite possibly for the 72 that rank lower as well, since all are hazardous if spilled in quantity while being shipped by rail. Every shipper of any of these materials would therefore be strictly liable for the consequences of a spill or other accident that occurred while the material was being shipped through a metropolitan area. The plaintiff's lawyer further acknowledged the irrelevance, on her view of the case, of the fact that Cyanamid had leased and filled the car that spilled the acrylonitrile; all she thought important is that Cyanamid introduced the product into the stream of commerce that happened to pass through the Chicago metropolitan area. Her concession may have been incautious. One might want to distinguish between the shipper who merely places his goods on his loading dock to be picked up by the carrier and the shipper who, as in this case, participates actively in the transportation. But the concession is illustrative of the potential scope of the district court's decision.

No cases recognize so sweeping a liability. Several reject it, though none has facts much like those of the present case.~ With National Steel Service Center v. Gibbons, 693 F.2d 817 (8th Cir.1982), which held a railroad strictly liable for transporting propane gas - but under Iowa law, which uses a different standard from that of the Restatement - we may pair Seaboard Coast Line R.R. v. Mobil Chemical Co., 172 Ga.App. 543, 323 S.E.2d 849 (1984), which refused to impose strict liability on facts similar to those in this case, but again on the basis of a standard different from that of the Restatement. Zero Wholesale Co. v. Stroud, 264 Ark. 27 (1978), refused to hold that the delivery of propane gas was not an ultrahazardous activity as a matter of law. But the delivery in question was to a gas-storage facility, and the explosion occurred while gas was being pumped from the tank truck into a storage tank. This was a highly, perhaps unavoidably, dangerous activity.

Siegler v. Kuhlman, 81 Wash.2d 448, 502 P.2d 1181 (1972), also imposed strict liability on a transporter of hazardous materials, but the circumstances were again rather special. A gasoline truck blew up, obliterating the plaintiff's decedent and her car. The court emphasized that the explosion had destroyed the evidence necessary to establish whether the accident had been due to negligence; so, unless liability was strict, there would be no liability – and this as the very consequence of the defendant's hazardous activity. 81 Wash.2d at 454-55, 502 P.2d at 1185. But when the Supreme Court of Washington came to decide the New Meadows case, supra, it did not distinguish Siegler on this ground, perhaps realizing that the plaintiff in Siegler could have overcome the destruction of the evidence by basing a negligence claim on the doctrine of res ipsa loquitur. Instead it stressed that the transmission of natural gas through underground pipes, the activity in New Meadows, is less dangerous than the transportation of gasoline by highway, where the risk of an accident is omnipresent. 102 Wash.2d at 502-03, 687 P.2d at 216-17. We shall see that a further distinction of great importance between the present case and Siegler is that the defendant there was the transporter, and here it is the shipper.

Cases such as McLane v. Northwest Natural Gas Co., 255 Or. 324 (1970)<sup>~</sup> that impose strict liability for the storage of a dangerous chemical provide a potentially helpful analogy to our case. But they can be distinguished on the ground that the storer (like the transporter, as in Siegler) has more control than the shipper.

So we can get little help from precedent, and might as well apply section 520 to the acrylonitrile problem from the ground up. To begin with, we have been given no reason, whether the reason in *Siegler* or any other, for believing that a negligence regime is not perfectly adequate to remedy and deter, at reasonable cost, the accidental spillage of acrylonitrile from rail cars. Cf. *Bagley v. Controlled Environment Corp.*, 127 N.H. 556, 560 (1986). Acrylonitrile could explode and destroy evidence, but of course did not here, making imposition of strict liability on the theory of the *Siegler* decision premature. More important, although acrylonitrile is flammable even at relatively low temperatures, and toxic, it is not so corrosive or otherwise destructive that it

will eat through or otherwise damage or weaken a tank car's valves although they are maintained with due (which essentially means, with average) care. No one suggests, therefore, that the leak in this case was caused by the *inherent* properties of acrylonitrile. It was caused by carelessness – whether that of the North American Car Corporation in failing to maintain or inspect the car properly, or that of Cyanamid in failing to maintain or inspect it, or that of the Missouri Pacific when it had custody of the car, or that of the switching line itself in failing to notice the ruptured lid, or some combination of these possible failures of care. Accidents that are due to a lack of care can be prevented by taking care; and when a lack of care can (unlike *Siegler*) be shown in court, such accidents are adequately deterred by the threat of liability for negligence.

It is true that the district court purported to find as a fact that there is an inevitable risk of derailment or other calamity in transporting "large quantities of anything." 662 F.Supp. at 642. This is not a finding of fact, but a truism: anything can happen. The question is, how likely is this type of accident if the actor uses due care? For all that appears from the record of the case or any other sources of information that we have found, if a tank car is carefully maintained the danger of a spill of acrylonitrile is negligible. If this is right, there is no compelling reason to move to a regime of strict liability, especially one that might embrace all other hazardous materials shipped by rail as well. This also means, however, that the amici curiae who have filed briefs in support of Cyanamid cry wolf in predicting "devastating" effects on the chemical industry if the district court's decision is affirmed. If the vast majority of chemical spills by railroads are preventable by due care, the imposition of strict liability should cause only a slight, not as they argue a substantial, rise in liability insurance rates, because the incremental liability should be slight. The amici have momentarily lost sight of the fact that the feasibility of avoiding accidents simply by being careful is an argument against strict liability.

This discussion helps to show why *Siegler* is indeed distinguishable even as interpreted in *New Meadows*. There are so

many highway hazards that the transportation of gasoline by truck is, or at least might plausibly be thought, inherently dangerous in the sense that a serious danger of accident would remain even if the truckdriver used all due care (though *Hawkins* and other cases are *contra*). Which in turn means, contrary to our earlier suggestion, that the plaintiff really might have difficulty invoking res ipsa loquitur, because a gasoline truck might well blow up without negligence on the part of the driver. The plaintiff in this case has not shown that the danger of a comparable disaster to a tank car filled with acrylonitrile is as great and might have similar consequences for proof of negligence. And to repeat a previous point, if the reason for strict liability is fear that an accident might destroy the critical evidence of negligence we should wait to impose such liability until such a case appears.

The district judge and the plaintiff's lawyer make much of the fact that the spill occurred in a densely inhabited metropolitan area. Only 4,000 gallons spilled; what if all 20,000 had done so? Isn't the risk that this might happen even if everybody were careful sufficient to warrant giving the shipper an incentive to explore alternative routes? Strict liability would supply that incentive. But this argument overlooks the fact that, like other transportation networks, the railroad network is a hub-andspoke system. And the hubs are in metropolitan areas. Chicago is one of the nation's largest railroad hubs. In 1983, the latest year for which we have figures, Chicago's railroad yards handled the third highest volume of hazardous-material shipments in the nation. East St. Louis, which is also in Illinois, handled the second highest volume. Office of Technology Assessment, Transportation of Hazardous Materials 53 (1986). With most hazardous chemicals (by volume of shipments) being at least as hazardous as acrylonitrile, it is unlikely - and certainly not demonstrated by the plaintiff – that they can be rerouted around all the metropolitan areas in the country, except at prohibitive cost. Even if it were feasible to reroute them one would hardly expect shippers, as distinct from carriers, to be the firms best situated to do the rerouting. Granted, the usual view is that common carriers are not subject to strict liability for the carriage of materials that make the transportation of them abnormally dangerous, because a common carrier cannot refuse service to a shipper of a lawful commodity. Restatement, *supra*, § 521. Two courts, however, have rejected the common carrier exception. *National Steel Service Center, Inc. v. Gibbons*, 319 N.W.2d 269 (Ia. 1982); *Chavez v. Southern Pacific Transportation Co.*, 413 F.Supp. 1203, 1213-14 (E.D.Cal. 1976). If it were rejected in Illinois, this would weaken still further the case for imposing strict liability on shippers whose goods pass through the densely inhabited portions of the state.

The difference between shipper and carrier points to a deep flaw in the plaintiff's case. Unlike Guille, and unlike Siegler, and unlike the storage cases, beginning with Rylands itself, here it is not the actors - that is, the transporters of acrylonitrile and other chemicals - but the manufacturers, who are sought to be held strictly liable. Cf. City of Bloomington v. Westinghouse Elec. Corp., supra, 891 F.2d at 615-16. A shipper can in the bill of lading designate the route of his shipment if he likes, 49 U.S.C. § 11710(a)(1), but is it realistic to suppose that shippers will become students of railroading in order to lay out the safest route by which to ship their goods? Anyway, rerouting is no panacea. Often it will increase the length of the journey, or compel the use of poorer track, or both. When this happens, the probability of an accident is increased, even if the consequences of an accident if one occurs are reduced; so the expected accident cost, being the product of the probability of an accident and the harm if the accident occurs, may rise.~ It is easy to see how the accident in this case might have been prevented at reasonable cost by greater care on the part of those who handled the tank car of acrylonitrile. It is difficult to see how it might have been prevented at reasonable cost by a change in the activity of transporting the chemical. This is therefore not an apt case for strict liability.

We said earlier that Cyanamid, because of the role it played in the transportation of the acrylonitrile – leasing, and especially loading, and also it appears undertaking by contract with North American Car Corporation to maintain, the tank car in which the railroad carried Cyanamid's acrylonitrile to Riverdale – might be viewed as a special type of shipper (call it a "shipper-transporter"), rather than as a passive shipper. But neither the district judge nor the plaintiff's counsel has attempted to distinguish Cyanamid from an ordinary manufacturer of chemicals on this ground, and we consider it waived. Which is not to say that had it not been waived it would have changed the outcome of the case. The very fact that Cyanamid participated actively in the transportation of the acrylonitrile imposed upon it a duty of due care and by doing so brought into play a threat of negligence liability that, for all we know, may provide an adequate regime of accident control in the transportation of this particular chemical.

In emphasizing the flammability and toxicity of acrylonitrile rather than the hazards of transporting it, as in failing to distinguish between the active and the passive shipper, the plaintiff overlooks the fact that ultrahazardousness or abnormal dangerousness is, in the contemplation of the law at least, a property not of substances, but of activities: not of acrylonitrile, but of the transportation of acrylonitrile by rail through populated areas. Natural gas is both flammable and poisonous, but the operation of a natural gas well is not an ultrahazardous activity.~ The plaintiff does not suggest that Cyanamid should switch to making some less hazardous chemical that would substitute for acrylonitrile in the textiles and other goods in which acrylonitrile is used. Were this a feasible method of accident avoidance, there would be an argument for making manufacturers strictly liable for accidents that occur during the shipment of their products (how strong an argument we need not decide). Apparently it is not a feasible method.

The relevant activity is transportation, not manufacturing and shipping. This essential distinction the plaintiff ignores. But even if the plaintiff is treated as a transporter and not merely a shipper, it has not shown that the transportation of acrylonitrile in bulk by rail through populated areas is so hazardous an activity, even when due care is exercised, that the law should seek to create – perhaps quixotically – incentives to relocate the activity to nonpopulated areas, or to reduce the scale of the activity, or to switch to transporting acrylonitrile by road rather

than by rail, perhaps to set the stage for a replay of *Siegler v. Kuhlman*. It is no more realistic to propose to reroute the shipment of all hazardous materials around Chicago than it is to propose the relocation of homes adjacent to the Blue Island switching yard to more distant suburbs. It may be less realistic. Brutal though it may seem to say it, the inappropriate use to which land is being put in the Blue Island yard and neighborhood may be, not the transportation of hazardous chemicals, but residential living. The analogy is to building your home between the runways at O'Hare.

The briefs hew closely to the Restatement, whose approach to the issue of strict liability is mainly allocative rather than distributive. By this we mean that the emphasis is on picking a liability regime (negligence or strict liability) that will control the particular class of accidents in question most effectively, rather than on finding the deepest pocket and placing liability there. At argument, however, the plaintiff's lawyer invoked distributive considerations by pointing out that Cyanamid is a huge firm and the Indiana Harbor Belt Railroad a fifty-mile-long switching line that almost went broke in the winter of 1979, when the accident occurred. Well, so what? A corporation is not a living person but a set of contracts the terms of which determine who will bear the brunt of liability. Tracing the incidence of a cost is a complex undertaking which the plaintiff sensibly has made no effort to assume, since its legal relevance would be dubious. We add only that however small the plaintiff may be, it has mighty parents: it is a jointly owned subsidiary of Conrail and the Soo line.

The case for strict liability has not been made. Not in this suit in any event. We need not speculate on the possibility of imposing strict liability on shippers of more hazardous materials, such as the bombs carried in *Chavez v. Southern Pacific Transportation Co., supra,* any more than we need differentiate (given how the plaintiff has shaped its case) between active and passive shippers. We noted earlier that acrylonitrile is far from being the most hazardous among hazardous materials shipped by rail in highest volume. Or among materials shipped, period. The Department of Transportation has classified transported

materials into sixteen separate classes by the degree to which transporting them is hazardous. Class number 1 is radioactive material. Class number 2 is poisons. Class 3 is flammable gas and 4 is nonflammable gas. Acrylonitrile is in Class 5. 49 C.F.R. \$\frac{172.101}{173.2(a)}\$.

Ordinarily when summary judgment is denied, the movant's rights are not extinguished; the case is simply set down for trial. If this approach were followed here, it would require remanding the case for a trial on whether Cyanamid should be held strictly liable. Yet that would be a mistake. The parties have agreed that the question whether the transportation of acrylonitrile through densely populated areas is abnormally dangerous is one of law rather than of fact; and trials are to determine facts, not law. More precisely - for there is no sharp line between "law" and "fact" - trials are to determine adjudicative facts rather than legislative facts. The distinction is between facts germane to the specific dispute, which often are best developed through testimony and cross-examination, and facts relevant to shaping a general rule, which, as the discussion in this opinion illustrates, more often are facts reported in books and other documents not prepared specially for litigation or refined in its fires. Again the line should not be viewed as hard and fast. If facts critical to a decision on whether a particular activity should be subjected to a regime of strict liability cannot be determined with reasonable accuracy without an evidentiary hearing, such a hearing can and should be held, though we can find no reported case where this was done. Some courts treat the question whether an activity is abnormally dangerous as one of fact, and then there must be an evidentiary hearing to decide it." Here we are concerned with cases in which the question is treated as one of law but in which factual disputes of the sort ordinarily resolved by an evidentiary hearing may be germane to answering the question. An evidentiary hearing would be of no use in the present case, however, because the plaintiff has not indicated any facts that it wants to develop through such a hearing.~

The defendant concedes that if the strict liability count is thrown out, the negligence count must be reinstated, as requested by the cross-appeal. It is not over now. But with

damages having been fixed at a relatively modest level by the district court and not challenged by the plaintiff, and a voluminous record having been compiled in the summary judgment proceedings, we trust the parties will find it possible now to settle the case. Even the Trojan War lasted only ten years.

The judgment is reversed (with no award of costs in this court) and the case remanded for further proceedings, consistent with this opinion, on the plaintiff's claim for negligence.

REVERSED AND REMANDED, WITH DIRECTIONS.

#### Questions to Ponder About Indiana Belt Harbor

- **A.** Are you persuaded that economic analysis is the correct basis upon which to decide whether strict liability ought to be applied in a particular context?
- **B.** Speaking more broadly, do you think economic analysis is the right yardstick by which to measure the wisdom of legal doctrines in general? If not, what else could be?
- **C.** Supposing that economic analysis is the correct basis upon which to decide whether strict liability ought to apply, are you persuaded that this case does a good job with the economic analysis? Are some aspects of the economic analysis weak?
- **D.** Again, supposing that economic analysis is the correct basis upon which to decide whether strict liability ought to apply, do you think courts are the appropriate entities to engage in such reasoning? Would legislatures or administrative agencies do better?

#### **Defenses and Limitations on Strict Liability**

In general, the same defenses that apply to negligence also apply to strict liability, with one important exception: Contributory negligence, in those jurisdictions still using it, is generally *not* considered a viable defense in a strict liability action.

Other defenses apply as they would with negligence. Comparative negligence, in those jurisdictions following it, functions as a defense for strict liability as it does for negligence: The plaintiff's negligence will serve to reduce the total recovery. The only sticky issue is the name "comparative *negligence*." Indeed, comparative negligence is often called "comparative fault" – at least in part so that it does not seem out of place in the strict liability context.

Assumption of the risk also may be used as a defense in strict liability situations as well, and where it applies, it will bar recovery altogether.

There is also an important limitation on strict liability that grows out of the application of proximate causation. For strict liability to apply, there must be a tight connection between the means of injury and the reason for invoking strict liability.

An example will illustrate this: Suppose the defendant retail store is cleaning floors with a nuclear vacuum cleaner. The plaintiff trips over the vacuum when a careless employee pushes it into the plaintiff's path, and as a result the plaintiff suffers a broken arm. The plaintiff can sue in negligence, but a cause of action for strict liability will not apply. Why not? After all, nuclear technologies are generally categorized as ultrahazardous. The plaintiff's problem lies in proximate causation. Proximate causation is lacking for strict liability because the ultrahazardous nature of the activity is not germane to the injury. Stated in other terms: The strict liability case here fails the harm-within-the-risk test: Was the kind of harm suffered by the plaintiff the kind that caused the absolute duty of safety to arise? No, so strict liability does not apply.

Note that the plaintiff could still sue in negligence. Proximate causation will not be a problem in the negligence case, since there is a tight connection between the careless pushing of the vacuum cleaner and the plaintiff's broken bone.

Another limitation on strict liability comes out of a line of cases holding that strict liability for abnormally dangerous activities will not apply where the injury would not have occurred but for an abnormally sensitive plaintiff. In the famous case of *Foster v. Preston Mill Co.*, 44 Wash.2d 440 (Wash. 1954), the defendant's blasting operations disturbed operations on a nearby mink ranch. The ranch's manager testified that after a blast rattled cages, mother minks would run back and forth and kill their kittens. Between 35 and 40 kittens

were killed this way, according to testimony. The court refused to apply strict liability, writing:

The relatively moderate vibration and noise which appellant's blasting produced at a distance of two and a quarter miles was no more than a usual incident of the ordinary life of the community. The trial court specifically found that the blasting did not unreasonably interfere with the enjoyment of their property by nearby landowners, except in the case of respondent's mink ranch.

It is the exceedingly nervous disposition of mink, rather than the normal risks inherent in blasting operations, which therefore must, as a matter of sound policy, bear the responsibility for the loss here sustained. We subscribe to the view that the policy of the law does not impose the rule of strict liability to protect against harms incident to the plaintiff's extraordinary and unusual use of land.

## Strict Liability at Trial: Silkwood v. Kerr-McGee

The following case nicely illustrates how strict liability can work to the benefit of a plaintiff by short-circuiting the many pitfalls of a negligence case. Unlike most of the case readings in this book, this is not a judicial opinion written by a judge. Instead, it is a neutral view of the facts, followed by the closing argument of one of the attorneys.

#### Silkwood v. Kerr-McGee

United States District Court for the Western District of Oklahoma 1979

Bill M. SILKWOOD, Administrator of the Estate of Karen G. Silkwood, deceased, Plaintiff, v. Kerr-McGee CORPORATION et al., Defendants. Civ. A. No. 76-0888-Theis. In the United States District Court for the Western District of Oklahoma. Hon. Judge Frank G. Theis, U.S. District Judge, District of Kansas, sitting by designation. Except for the first paragraph

and the last two paragraphs, the facts derive nearly verbatim from James F. McInroy, "A True Measure of Exposure: The Karen Silkwood Story," 23 *Los Alamos Science* 252 (1995) (see remarks in Aftermatter at the end of this book).

#### The FACTS:

In August 1972, Karen Silkwood took a job as a technician at the Cimarron Fuel Fabrication Site in Crescent, Oklahoma, operated by Kerr-McGee Corporation. The plant produced mixed-oxide plutonium-uranium fuel for use in power-generating nuclear reactors. As a plant-worker, Silkwood became involved in the Oil, Chemical & Atomic Workers Union and participated in a strike. Later, in the fall of 1974, Silkwood investigated health and safety issues on behalf of the union and reported serious violations to the Atomic Energy Commission.

On November 5, 1974, Silkwood was working in a glovebox in the metallography laboratory where she was grinding and polishing plutonium pellets that would be used in fuel rods. At 6:30 P.M., she decided to monitor herself for alpha activity with the detector that was mounted on the glove box. The right side of her body read 20,000 disintegrations per minute, or about 9 nanocuries, mostly on the right sleeve and shoulder of her coveralls. She was taken to the plant's Health Physics Office where she was given a test called a "nasal swipe," which measures a person's exposure to airborne plutonium, but might also measure plutonium that got on the person's nose from their hands. The swipe showed a radioactivity level of 160 disintegrations per minute ("dpm"), a modest positive result.

The two gloves in the glovebox Silkwood had been using were replaced. Strangely, the gloves were found to have plutonium on the "outside" surfaces that were in contact with Silkwood's hands; no leaks were found in the gloves. No plutonium was found on the surfaces in the room where she had been working and filter papers from the two air monitors in the room showed that there was no significant plutonium in the air. By 9:00 P.M., Silkwood's cleanup had been completed, and as a precautionary measure, Silkwood was put on a program in which her total urine and feces were collected for five days for plutonium

measurements. She returned to the laboratory and worked until 1:10 A.M., but did no further work in the glove boxes. As she left the plant, she monitored herself and found nothing. Silkwood arrived at work at 7:30 A.M. on November 6. She examined metallographic prints and performed paperwork for one hour, then monitored herself as she left the laboratory to attend a meeting. Although she had not worked at the glovebox that morning, the detector registered alpha activity on her hands. Health physics staff members found further activity on her right forearm and the right side of her neck and face, and proceeded to decontaminate her. At her request, a technician checked her locker and automobile with an alpha detector, but no activity was found.

On November 7, Silkwood reported to the Health Physics Office at about 7:50 in the morning with her bioassay kit containing four urine samples and one fecal sample. A nasal swipe was taken and significant levels of alpha activity were detected (about 45,000 disintegrations per minute (dpm) in each nostril and 40,000 dpm on and around her nose). This was especially surprising because her left nostril had been almost completely blocked since a childhood accident. Other parts of her body also showed significant alpha activity (1,000 to 4,000 dpm on her hands, arm, chest, neck, and right ear). A preliminary examination of her bioassay samples showed extremely high levels of activity (30,000 to 40,000 counts per minute in the fecal sample). Her locker and automobile were checked again, and essentially no alpha activity was found.

Following her cleanup, the Kerr-McGee health physicists accompanied her to her apartment, which she shared with another laboratory analyst, Sherri Ellis. The apartment was surveyed. Significant levels of activity were found in the bathroom and kitchen, and lower levels of activity were found in other rooms.

On November 13, 1974, when Silkwood was driving her white Honda Civic to meet a reporter from the New York Times to deliver documents concerning health and safety violations at the plant, she was killed in a suspicious accident. No other cars were involved. Many suspected that Silkwood was murdered.

The plaintiff's attorney was Gerry L. Spence of Spence, Moriarity & Schuster of Jackson Hole, Wyoming. Kerr-McGee was represented by William G. Paul of Crowe, Dunlevy, Thweatt, Swinford, Johnson & Burdick of Oklahoma City.

## GERRY L. SPENCE, Esq., delivered the plaintiff's CLOSING ARGUMENT:

~Well, what we're going to talk about here isn't hard. If a country lawyer from Wyoming can understand it – if I can explain it to my kids – if Mr. Paul [lead defense attorney] can understand it – and his kids – then we all can understand it.

"What's going on, and who proves what?" Well, we talked about "strict liability" at the outset, and you'll hear the court tell you about "strict liability," and it simply means: "If the lion got away, Kerr-McGee has to pay."

It's that simple. That's the law. You remember what I told you in the opening statement about strict liability? It came out of the Old English common law. Some guy brought an old lion on his ground, and he put it in a cage – and lions are dangerous – and through no negligence of his own – through no fault of his own, the lion got away.

Nobody knew how – like in this case, "nobody knew how." And, the lion went out and he ate up some people, and they sued the man. And they said, you know, "Pay. It was your lion, and he got away." And, the man says, "But I did everything in my power. I had a good cage, had a good lock on the door. I did everything that I could. I had security. I had trained people watching the lion. And it isn't my fault that he got away." Why should you punish him? They said, "We have to punish him. We have to punish you; you have to pay. You have to pay because it was your lion – unless the person who was hurt let the lion out himself."

That's the only defense in this case. Unless in this case Karen Silkwood was the one who intentionally took the plutonium out,

and "let the lion out," that is the only defense, and that is why we have heard so much about it.

Strict liability: If the lion gets away, Kerr-McGee has to pay. Unless Karen Silkwood let the lion loose.

What do we have to prove? Strict liability. Now, can you see what that is? The lion gets away. We have to do that. It's already admitted. It's admitted in the evidence. They admit it was their plutonium. They admit it's in Karen Silkwood's apartment. It got away. And, we have to prove that Karen Silkwood was damaged. That's all we have to prove.

Our case has been proved long ago, and I'm not going to labor you with the facts that prove that. It's almost an admitted fact, that it got away, and that she was damaged.

Does Silkwood prove how the lion got away? You remember this – Mr. Paul walking up to you and saying, at the beginning of the trial, "Listen, it's important to find out how the lion got away." Well, it is important, because they have to prove how. But we don't. And the court will instruct you on that. As a matter of fact, I think you will hear the court say exactly this, and listen to the instruction: It is unnecessary for you to decide how plutonium escaped from the plant – how it entered her apartment – or how it caused her contamination, since it is a stipulated fact – stipulated between the parties – that the plutonium in Silkwood's apartment was from the defendants' plant.

So, the question is, "Who has to prove how the lion got away?" They have to prove it. They have to prove that Karen Silkwood carried it out. If they can't prove that by a preponderance of the evidence, they've lost. Kerr-McGee has to prove that.

Why? Well, it's obvious. It's their lion – not Karen Silkwood's lion. It's the law. It's that simple.

Now, I told you there was only one legal defense, didn't I? That's defense of Karen Silkwood having supposedly taken this stuff from the plant. Well, I'll tell you a bigger defense than that, and that's getting drowned in mud springs. Now, that isn't an original statement by me. One of my favorite – I guess my

favorite – jurist, and one you know very well, has an old saying he has told us many times. He says if you want to clear up the water, you've got to get the hogs out of the spring. And, if you can't get the hogs out of the spring, I guarantee you can't clear up the water. And I want you to know that getting jurors confused is not a proper part of jurisprudence, and getting people down in mud springs is not the way to try a case.

Somehow, somebody has the responsibility, as an attorney, to help you understand what the issues are – to come forward and hold their hand out and say: These are the honest issues, this is the law, this is what you can rely on, because I am reliable, and I'm not going to confuse you with irrelevancies and number-crunching and number games and word games and gobbledygook and stuff and details – and on and on and on. And the thing that I say to you is: Keep out of the mud springs in your deliberations.

You are not scientists. I'm not a scientist – my only power is my common sense. Keep out of the mud springs. You'll be invited there. Use your common sense. You'll be invited to do number-crunching of your own. You'll be invited to play word games. You'll be invited to get into all kinds of irrelevancies. And I only say to you that you have one hope – don't get into mud springs. Keep your common sense, and take it with you into the jury room.~

## SPENCE delivered the rebuttal of plaintiff's CLOSING ARGUMENT:

The issue that seems to be one that everyone wants to talk about is not really an issue – it is the only possible defense that Kerr-McGee has, and it is one that they have talked about. We are right back where we started from: "If the lion gets away, Kerr-McGee has to pay."

You remember Mr. Paul was critical of me for not trying to explain to you how the lion got away. Do you remember his criticalness, his sort of accusation that somehow we had failed in our obligation?

It is like this – listen to the story: "My lion got away. Why is my lion on your property?" That is the question he asked me. "Why is my lion on your property? It is on your property. Tell me why my lion is on your property. Explain it."

And, I say, "But, ah hah, ah hah." And, he says: "It wasn't there two hours ago. It wasn't there last night." And, he says, "Wait a minute. Your kids don't get along with my kids. That is why my lion is on your property." And, then he says, "Why did you let my lion eat you? You let my lion on your property," he says. "I accuse you – I accuse you – I blame you, and why don't you explain it?"

And, I say, "But, it isn't my lion; it is your lion. It is your lion that got away."

Now, the court says – and I want this, I want to put it to rest, because I don't want you jumping in mud springs on this one – there are too many other places for you to jump into mud springs on. Please hear it. It is unnecessary for you to decide how plutonium escaped from the plant, how it entered her apartment, or how it caused her contamination, since it is a stipulated fact that the plutonium in Karen Silkwood's apartment was from the defendants' plant.

Now, Mr. Paul, that is why we haven't explained how your lion got on our property. The court says that is not our obligation. It is your lion, Mr. Paul. You must explain it.

[The law says] that it is for the defendants to prove to you, by a preponderance of the evidence, that it was Karen Silkwood who took it. Failing their proof – please hear the word "proof" – it is the word "proof" – failing which proof Kerr-McGee has to pay.

The lion got away, Karen Silkwood was damaged. Does Karen Silkwood prove how the lion got away? The court says no. You will hear it again tomorrow. Why? Because it is their lion.

So if the lion got away, and Kerr-McGee can't prove how, then Kerr-McGee has to pay. Now, that's the law, the law of strict liability, and it is that simple.

Now, I heard Mr. Paul say this: "My heart reaches out praying for answers based upon the evidence." "Praying for answers based upon the evidence."

I would think he would pray for answers based upon the evidence, because he hasn't got any.

He doesn't have any more now that he ever did. All that you ever heard Mr. Paul say, as he stood up here and pointed his finger toward Karen Silkwood – and I want you to stop and remember, ladies and gentlemen, please, that this is a free country – and the one thing that makes this country different from all the other countries in the world is that when somebody makes the accusation against a citizen of this country, alive or dead, they have to make the proof.

Mr. Paul doesn't have the right to come into a court and say, "I think this happened." and "I think that happened." and "Maybe this happened." and "Isn't it probable that that happened." and "I think the circumstances of this, and the circumstances of that." And to take a whole series of unrelated events and put them together and try to tell you somehow that I have the responsibility that the judge and the law doesn't place upon me, and to mislead you in that fashion. And I'm angry about that.

I expect that when a corporation of the size of this one comes into this courtroom that they should bring to you honest, fair, documented evidence, that they shouldn't hide behind little people, and that they should bring you the facts that they know.

Now, listen. I have some problems here in being straight with you, and I want to put them right here on the table. If we want to play guess-um – that is, point the finger, the game of playing, of pointing the finger – I can play that game. But when I do that I become as bad as Mr. Paul. You want me to do that? Is that the way you want to decide the case? Tell me. If that is the way you think the case ought to be decided in a court of American jurisprudence, to see who can make the biggest accusations against the other one, then I'm willing to play that game. But, when I do it, I want you to know it isn't right, because I can't prove that any more than they can prove it.

I can give you motive. What was the motive for them to do that? "She was a troublemaker. She was doing union negotiations. She was on her way – she was gathering documents – every day in that union, everybody in that company, everybody in management knew that." Nobody would admit it, but they knew it."

Compare the motive, just for the fun of it. Supposing that you've got to weigh those motives. Here is Karen Silkwood. The motive was she was furious. We found out that she wasn't furious. Their own witness, Mr. – what is his name – Phillip, says she was miffed, wasn't that the word? Their witness, under oath, said she was miffed. "Was she furious?" "No, she wasn't furious. She was miffed." "She was furious," he said.

Did Karen Silkwood – and you have listened to her voice talking in private to Steve Wodka [a union official] – did she sound like a kook to you? Did she sound nuts? Did she sound like she was acting under some kind of compulsive behavior that suggested it? There isn't any proof to that. It comes out of Mr. Paul's mouth. He says it over and over, and over, and over again.

Compare that motive with the motive of people to stop her. "She knew too much." What would she do had she gotten to the New York Times? These people, if you want to talk about motives, had a motive to stop her, and she was stopped. We are not to talk about her – I won't talk about it – but she never got there with her X rays.

Now, I don't think that is the way I want to defend my case. I don't think that is the way I want to present it to you. I've only brought these matters out because in the course of this trial it seems too patently unfair to continually point their finger at a woman who can't defend herself about matters that they have no proof of and never had any proof of to begin with, and knew from the beginning that they would never have any more proof of, as evidenced by Mr. McGee's initial letter: "It is not likely that the source of her contamination will ever be known."

He knew that. Mr. Paul knew it. It was the only thing available to them, and I congratulate them for making a lot out of that, but it is sad to me that they didn't call the witnesses that knew – they didn't give us the information, and that is sad to me.

It is sad to me that one of the mightiest – you know, in history it will go down, this case, I can see it in the history books: "One of the mightiest corporations of the United States of America, a multinational corporation, with, two billion dollars in assets, and two billion dollars in annual income, goes down in history with all that power, with all of those resources, with the only thing that they could do was to accuse, and not prove."

Well, the key – please forgive my raging, but you are listening to a man who is angry – the key, ladies and gentlemen, is simple. I will have to tell you what it is. It is proof. They have the burden of proving that she took it. The judge says they have the burden to proving it. They have to prove it by a preponderance of the evidence.

Now, that is something, that phrase "preponderance of the evidence," which you will hear His Honor use tomorrow, isn't just a phony phrase. It means the greater weight of the evidence. There isn't any evidence here that she did it, not one iota of evidence. There are only the accusations. But, if there was any evidence, it would have to be the greatest weight of evidence, not suspicions, not the greatest weight of suspicions, not the one who can accuse the worst – but the greatest weight of the evidence.

The burden of proof is on the defendant Kerr-McGee Nuclear Corporation to establish that Karen Silkwood took the plutonium from work to her apartment where she was injured. That is the court's instruction.

#### Questions to Ponder About Silkwood v. Kerr-McGee

**A.** To the extent you can extrapolate from this example, how is a closing argument to a jury different from a judge's written opinion? How are they similar?

- **B.** What was your reaction to this as a law student? Do you think your reaction would have been different if you had read this before beginning law school? What do you think your reaction would have been if you had sat through the entire trial and were watching it in person?
- **C.** Mr. Spence uses a powerful metaphor for legally irrelevant arguments and evidence: He calls them "mud springs." What does Mr. Spence point out as being legally irrelevant on Kerr-McGee's side of the case? How much of that do you agree is actually irrelevant?
- **D.** Does Mr. Spence lead the jury into mud springs himself? If so, how and for what purpose?
- **E.** One might say that judges are not immune from getting into mud springs in their written opinions. Can you think of anything you've read in a judicial opinion that strikes you as mud springs?