Contaminated VERDICT

Don't blame the jury for its incoherent verdict in the W.R. Grace toxic tort trial. The judge's jury questions were so confusing that jurors never had a chance.

By Mitchell Pacelle

For four months juror Jean Coulsey listened to testimony in a suit brought by the families of eight leukemia victims from Woburn, Massachusetts. At issue was whether industrial dumping at W.R. Grace & Co. and Beatrice Companies, Inc. factories had poisoned the town drinking water. For the 62-year-old retired nurse and one-time forklift operator, the case seemed to illustrate one of her long-held beliefs: "Businesses can get away with murder."

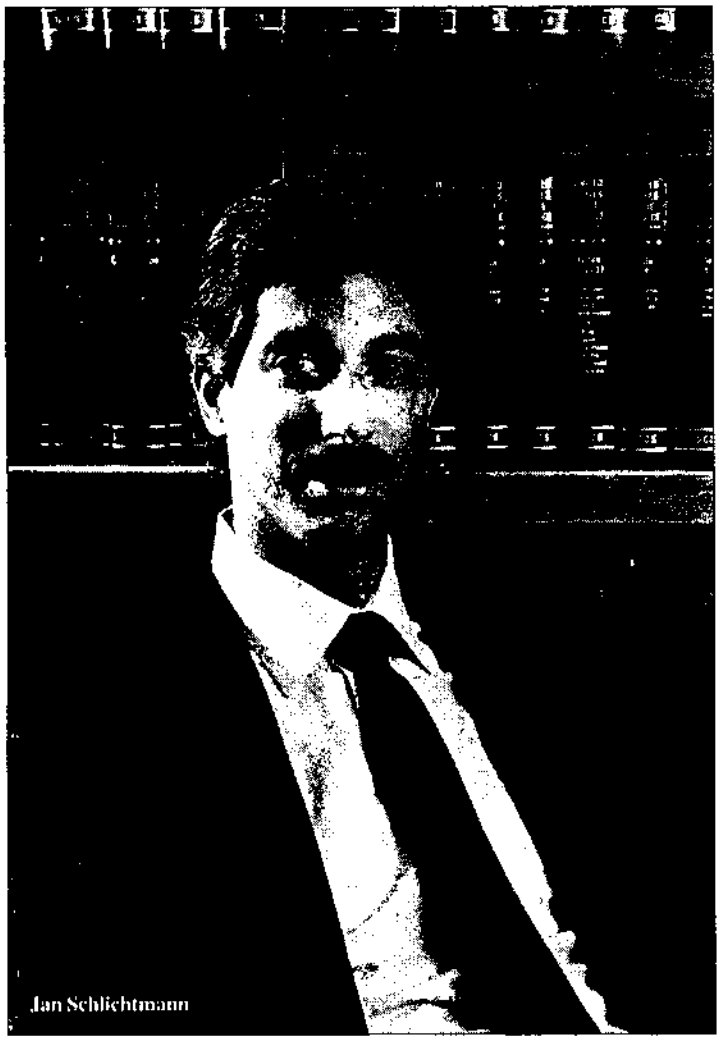
In her modest retirement condominium in Norton, Massachusetts, her parakeet noisily fluttering about its cage, Coulsey discusses what she anticipated when the jury retired for deliberations. "We thought we were going to go up, and sshhew!" she exclaims with a karate chop at the air, "find them guilty, and we'd come right down. But the paper," she says, shaking a list of four special interrogatories that the jurors were instructed to answer, "just cut us right down."

Fellow juror Harriett Clarke, 46, clashed with Coulsey over whether the two companies were responsible for contaminating the drinking water. But she too feels frustration over the trial's outcome. Seated at her kitchen table, Clarke, who has spent the day sloshing through cold bogs harvesting cranberries, echoes Coulsey's complaint. "I don't believe to this day that I did the right thing," she says, head in hands. "But this was all I had," she laments, pointing to the jury's list of questions.

Last July, after nine-and-a-half days of deliberations, the six-person jury found Grace, although not Beatrice, liable for negligent dumping that polluted the wells.

But because not one of the jurors understood all of the questions penned by federal district judge Walter Skinner, their answers to separate questions contradicted one another. As a result, Skinner threw out the verdict against Grace in September and ordered a new trial. Days later, the company settled with the plaintiffs for about $8 million—a fraction of the structured settlement the plaintiffs were demanding before trial, a settlement that defense lawyers calculated would cost Beatrice and Grace $400 million if paid out all at once.

W.R. Grace's head defense lawyer, Michael Keating of Boston's 110-lawyer Foley, Hoag & Eliot, believes that the case, which involved weeks of testimony by hydrogeologists, was just too complicated for a



Jan Schlichtmann

Jurors (left to right) Linda Kaplan, William Vogel, Harriett Clarke, Robert Fox, and Jean Coulsey couldn't answer one key jury question until they finally agreed on what it meant. Unfortunately, their interpretation was wrong. It was a mistake that would turn their verdict—and the case—upside down.

When Schlichtmann failed to explain to the jurors how important their answers to key questions would be, he opened the door—however inadvertently—for them to gut the plaintiffs' case.

lay jury. But interviews with five of the six jurors reveal that it wasn't the trial testimony that was too complicated. Rather, Judge Skinner had simply failed to write the jury interrogatories in plain English. One question was so incomprehensible that all six jurors completely misunderstood it.

The story of the scrambled interrogatories is one of good intentions gone awry. The use of written questions in jury trials has become something of a trend in recent years as judges grasp for ways to help jurors understand complex cases.

In the Woburn toxic dumping trial, however, this effort backfired.

Plaintiffs' lawyer Jan Schlichtmann of Boston's five-lawyer Schlichtmann, Conway & Crowley tried to persuade the judge to ask one simple question regarding each company: Did the company's disposal of several different chemicals contaminate the town wells? But Keating and Beatrice defense lawyer Jerome Facher of Boston's 244-lawyer Hale and Dorr convinced the judge that the case was too complex to be decided in a single sweeping verdict and that multiple questions were in order.

In deciding to draft several specific questions, the judge was striving to isolate key issues for the jury. But as the lawyers wrangled for days over the exact wording of the questions, most became blind to the fact that the turgid legalese they concocted was ambiguous, at best.

To make matters worse for the Woburn parents who brought the suit, their lawyer, Schlichtmann, failed to explain to the jury how important the jury's answers to key questions would be to the medical causation phase of the trial. By neglecting to do this, he opened the door for the jurors to gut the plaintiffs' case, however inadvertently.

The judge's unintelligible interrogatories, coupled with the plaintiffs' lawyer's inadequate explanation of them, robbed a diligent jury of its opportunity to decide the case.

A LEUKEMIA CLUSTER

Woburn, a working class suburb of 37,000 12 miles north of Boston, has a long industrial legacy. A century ago it was known as a leather tanning town. Since then it has seen pesticide and chemical factories come and go. Woburn is now home to corporate offices and industrial parks.

In the spring of 1979, the town was shaken by an alarming discovery. One hundred eighty-four metal barrels were found mysteriously dumped on undeveloped land in East Woburn. State officials immediately tested two nearby wells that pumped some of the town's drinking water. They determined that the wells were not tainted with the polyurethane contained in the barrels, but something else far more alarming. The wells contained dangerous levels of trichloroethylene (TCE) and other chemical solvents. TCE, a common groundwater pollutant, is known to cause neurological disorders, cell mutations, liver damage, and cancer in laboratory animals. The state shut the wells.

The discoveries came seven years after leukemia was diagnosed in Jimmy Anderson, a young boy who lived in a quiet neighborhood of bungalows not far from the wells. Even before the wells were closed, Jimmy's mother, Anne Anderson, had noted a frightening coincidence. At the same leukemia unit where her son was being treated, she recognized other parents with their children from the neigborhood. By 1982, eight children in a one-mile-square area adjacent to the wells had leukemia.

Anderson already suspected the Woburn drinking water, which had a notoriously foul smell and bad taste. The discovery of toxins in the wells confirmed her deepest fears. She and her minister rallied the neighborhood families whose children were stricken. When the Woburn *Daily Times Chronicle* broke the story of the leukemia cluster, sales of bottled water skyrocketed.

Health officials who investigated calculated that in Anderson's neighborhood the incidence of leukemia was seven-and-a-half times greater than would be expected. But as with other leukemia clusters they had studied around the country, investigators could not conclusively determine a cause.

The tainted wells had in fact been pumping water to the affected homes since October 1964, but because the wells hadn't been tested until 1979—and were closed immediately—it was unclear how long the leukemia victims had been exposed to the well's pollutants. Moreover, there was no medical literature suggesting that TCE or anything else found in the wells causes leukemia.

In the fall of 1980, a group of stricken neighborhood families turned to a lawyer recommended by one parent, who in turn asked Jan Schlichtmann, then just 30, to handle the case. After earning his degree at Cornell Law School, the lanky Massachusetts native had hung a shingle in a suburb of Boston and was handling medical malpractice and product liability cases.

Schlichtmann's first priority was to pinpoint the source of the contamination. At the time, the EPA was drilling test wells into the aquifer tapped by the tainted wells. The tests showed widespread contamination northeast of the wells, precisely where Grace and another company, UniFirst Corporation, operated. (EPA reports did not identify these plants.) A test well on nearby Beatrice property was also contaminated.

Schlichtmann investigated further. Grace's Cryovac Division machine

PHOTOGRAPHS BY LARRY JOUBERT

shop, he found, used TCE as a solvent to clean machinery. John J. Riley Company, a tannery then held by Beatrice, owned a 15-acre tract near the wells where midnight chemical dumping had allegedly occurred.

In 1981, just after Jimmy Anderson died, The Harvard School of Public Health launched a large-scale statistical health study of 8,000 Woburn households. The results showed a positive correlation between the well water and various health problems, including leukemia.

GOING AFTER GRACE AND BEATRICE

Even though the methodology of the Harvard health study had been widely criticized, and the EPA pumping tests didn't identify where the pollutants came from, in 1982 Schlichtmann filed suit against Grace and Beatrice. (A separate action against Unifirst was settled out of court in 1985 for roughly $1 million.)

The case was a monumental undertaking for Schlichtmann, then only five years out of law school. He scrapped his solo practice, taking on two partners to form his current firm. In 1982 he contacted Anthony Roisman, formerly head of the Justice Department's hazardous waste section, who agreed to help. Roisman, who had just founded Trial Lawyers for Public Justice, a Washington, D.C., public interest firm, saw the case as a chance to establish an important link between chronic low-level exposure to toxins and illnesses like leukemia.

In the early fall of 1985, Schlichtmann brought in Thomas Kiley of Boston's Herlihy and O'Brien. Finally, in November 1985, Schlichtmann—who had handled only one other federal trial—convinced Harvard law professor and evidence expert Charles Nesson to help him prepare for trial.

Preparing the case was enormously complicated. Schlichtmann not only had to prove that the pollutants caused the leukemia, but that pollutants *from Grace and Beatrice* had trickled into the wells, hundreds of feet below ground.

As Grace defense lawyer Keating points out, "You simply can't go six hundred feet under the ground in the Woburn aquifer and have anyone tell you [what's happening]. No one could prove that the contamination got to the wells from Grace or that it didn't get there. It's like proving what's on the other side of the moon."

The answer for Schlichtmann was to send dozens of engineers and hydrogeologists into the field to test the sites. Others analyzed data from the EPA pumping tests.

To prove medical causation, explains Roisman, the plaintiffs' team did not rely on traditional epidemiological studies like the Harvard effort. Instead they attempted to prove that the families had the symptoms of long-term exposure to TCE. The lawyers dispatched cardiologists to study TCE's effect on the plaintiffs' hearts, neurologists to study nerve damage to the plaintiffs, and immunologists to study cell damage.

Schlichtmann funded the research with contingency fees from other cases, and capital from Kiley (not Kiley's firm). The plaintiffs kicked in the $1 million UniFirst settlement. Schlichtmann declines to disclose the cost of preparing the case, other than to confirm that it greatly exceeded $1 million.

For its defense, New York–based Grace turned to its New England environmental counsel, Foley, Hoag. When it was clear the case would go to trial, Foley, Hoag tapped 46-year-old litigation partner Michael Keating.

Chicago-based Beatrice turned to two of its regular law firms: Lowenstein, Sandler, Brochin, Kohl, Fisher, Boylan & Meanor of Roseland, New Jersey, where partner Michael Rodburg began to work on the groundwater aspect, and, as lead trial counsel, Hale and Dorr, where litigation department head Jerome Facher, 60, took the helm.

Both defendants mounted a full-court press. Facher, who for decades has taught trial practice at Harvard Law School, was willing to concede little about the mysterious dumping on Beatrice's Riley tannery property. "They had no evidence whatsoever that Beatrice dumped anything. It was never shown, never proved, and [Beatrice] never did," he rails.

Keating is less strident in denying Grace's culpability. "It was quite obvious that from time to time there had been disposal on our property," he concedes, acknowledging that this disposal would seem to today's environmentally conscious citizen "at best, kind of careless. . . . That was one of the things that worried us the most."

Discovery was monumental. In a January 1986 affidavit Facher filed in an effort to postpone the trial, he asserted that in the past year, 130 witnesses had been deposed, and roughly 24,000 pages of documents had been collected. "A rough estimate of the magnitude of medical, technical, and legal materials amassed thus far," wrote Facher, "stacked vertically, would exceed 60 feet or the equivalent of a three-story building."

THE DEFENSE STRIKES A BLOW

Just before the case went to trial, Facher and Keating struck what Schlichtmann calls "the most crippling blow we had." Responding to defense motions, Judge Skinner ruled that the whole case would not be tried at once. Skinner broke the case into four phases: The first would determine whether Grace or Beatrice was responsible for the pollution; the second would resolve whether the chemicals had caused the leukemia; the third would address other health claims; and the fourth would decide punitive damages. If the plaintiffs failed to prove phase one, the trial would end.

Harvard's Nesson, speaking for the plaintiffs, calls the ruling a "wipeout for us." What the plaintiffs had hoped to do, Nesson explains, was present the case as the Woburn families had experienced it: Leukemia strikes, the family suffers. Neighbors are seen at the hospital. The smelly water is suspect, then well contamination is discovered. Studies link the toxins to the disease, and finally, the poisons are traced to Grace and Beatrice.

The division of the trial into four parts, complains Nesson, took the "humanity" out of the crucial part of the case. Furthermore, he argues, evidence on when the victims started suffering ill effects—which couldn't be brought in until the second phase of trial—would have helped jurors decide when the toxins reached the wells, an issue in the first phase. Schlichtmann now protests, "The jury [was] never in a position to evaluate the relevance of one piece of information over another because they didn't have the whole story."

Not surprisingly, Beatrice counsel Facher responds with disdain: "You can't try a case for five months and say to a jury, 'Here's the whole mess. Now just go out and decide, was the defendant liable?' . . . There's no point in going into four months of medical evidence on contaminated water if the defendant didn't contaminate the water."

Last February, the lawyers spent a week selecting a six-member, six-alternate jury for all four phases. The six jurors seated were seasonal cranberry harvester Harriett Clarke; retired nurse Jean Coulsey; painting contractor and college graduate Robert Fox; insurance company clerical worker Linda Kaplan; postal worker Vincent O'Rourke; and William Vogel, a New England Telephone supervisor.

Judge Skinner appointed Vogel, the only one with previous jury experience, as foreman. The trial opened March 10. What unfolded over the next four months was expert testimony of staggering proportions.

FOUR REASONS FOR A JURY'S CONFUSION

Following are the judge's four interrogatories that bewildered the jurors and ultimately undermined their deliberations. As a result of confusion over questions two and four, the jury's answers contradicted one another.

1. Have the plaintiffs established by a preponderance of the evidence that any of the following chemicals were disposed of at the Grace site after October 1, 1964 *and* substantially contributed to the contamination of Wells G and H by these chemicals prior to May 22, 1979?

A. TRICHLOROETHYLENE Yes_____ No_____
B. TETRACHLOROETHYLENE Yes_____ No_____
C. 1,2 TRANSDICHLOROETHYLENE Yes_____ No_____

[If you have answered "No" to all these chemicals, you need not proceed further.]

2. If you have answered "Yes" in question 1 as to any chemical(s), what, according to the preponderance of the evidence, was the earliest time that such chemical(s) disposed of on the Grace site after October 1, 1964 made a substantial contribution to the contamination of Wells G and H—with respect to

	Month	Year
A. TRICHLOROETHYLENE?	_____	_____
B. TETRACHLOROETHYLENE?	_____	_____
C. 1,2 TRANSDICHLOROETHYLENE?	_____	_____

[If, on the evidence before you, you are unable to determine by a preponderance of the evidence the appropriate date, write "ND" for Not Determined.]

3. If you have answered "Yes" in question 1 as to any chemical(s), please answer the following question:

Have the plaintiffs established by a preponderance of the evidence that the substantial contribution to the contamination of Wells G and H prior to May 22, 1979 by chemicals disposed of on the Grace site after October 1, 1964 was caused by negligence of Grace, that is, the failure of Grace to fulfill any duty of due care to the plaintiffs—with respect to

A. TRICHLOROETHYLENE? Yes_____ No_____
B. TETRACHLOROETHYLENE? Yes_____ No_____
C. 1,2 TRANSDICHLOROETHYLENE? Yes_____ No_____

[Only answer with respect to a chemical as to which you answered "Yes" on question 1.]

4. If you have answered "Yes" to any part of question 3, what, according to the prepondereance [sic] of the evidence, was the earliest time at which the substantial contribution referred to in question 3 was caused by the negligent conduct of this defendant—with respect to

	Month	Year
A. TRICHLOROETHYLENE?	_____	_____
B. TETRACHLOROETHYLENE?	_____	_____
C. 1,2 TRANSDICHLOROETHYLENE?	_____	_____

[If, on the evidence before you, you are unable to determine by a preponderance of the evidence the appropriate date, write "ND" for Not Determined.]

A LESSON IN HYDROGEOLOGY?

On the simplest level, there was eyewitness testimony on what went on inside and outside the plants. Against Beatrice, Schlichtmann called to the stand, among others, a man who described playing on the waste-fouled Riley land as a boy. He called one polluted ditch "Death Valley." Against Grace, Schlichtmann summoned several employees who told of regular and large scale dumping of paint sludge and solvents, including TCE. One employee testified that a supervisor threatened "to get" the person who had notified the EPA about dumping.

But it was the expert hydrogeological testimony that consumed the lion's share of time. One plaintiffs' witness, geologist John Drobinski, testified that he found evidence at the Beatrice site that the chemical solvents had been dumped. EPA pumping tests, he continued, proved that the town wells drew water off the Beatrice property, even though a small river flowed between the property and the wells.

Facher hammered the expert on cross-examination. In addition to mocking Drobinski by uncorking bottle after bottle of common household products that contain TCE—which Drobinski declined to sniff—Facher forced the geologist to admit that he had lied about what year an Australian university awarded him his master's degree.

Another expert witness for the plaintiffs had dream credentials. George Pinder had a doctorate in hydrogeology and was teaching at Princeton, where he was researching the movement of contaminants in underground water. The upshot of Pinder's testimony: The contaminants came from the two companies' properties, not from the small river near the wells.

Once again, Facher cut down Schlichtmann's point man, blowing holes in Pinder's testimony by showing that the expert had not studied the EPA data on how the wells drew water from the river.

Facher and Grace's Keating spent a month with their own experts. Beatrice held that any pollutants from its site couldn't possibly pass under the river to the wells. Grace attributed contaminants to the river, arguing that it would take roughly 25 years—not three years, as Pinder suggested—for pollutants to reach the wells from the Grace plant.

When Keating rested his case at the end of June, it seemed that victory would go to the side whose experts seemed most credible. But interviews with jurors reveal that—whatever score the lawyers may have been keeping—many jurors had judged it all but impossible to believe one expert over another.

THE FINAL BLOW TO THE PLAINTIFFS

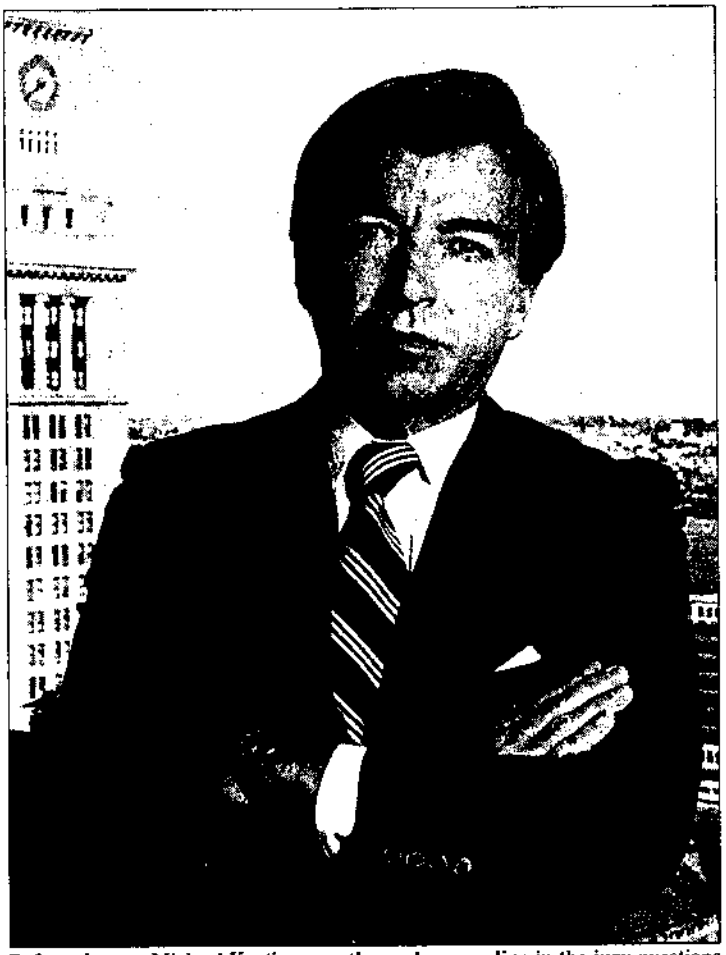
When he delivered his charge to the jury on July 15, Judge Skinner explained several critical decisions he had made in reponse to earlier Beatrice and Grace motions. Skinner told the jurors that—contrary to the arguments in Schlictmann's complaint—Beatrice would not be held to strict liability. In his ruling on the question, the judge found that there was no evidence that Beatrice knowingly dumped the harmful chemicals. So even though the dumping itself was clearly an "ultrahazardous" activity, Beatrice lacked the necessary intent to be held strictly liable, the judge said. Skinner reserved ruling on whether Grace was strictly liable until after phase one of the trial.

These rulings made it necessary for the judge to later ask the jury whether either company had been negligent. In asking for strict liability, Schlichtmann had argued that the companies should be held liable even if negligence was not proved.

In perhaps the most important decision of the entire trial, Skinner instructed the jury, "There can be no reasonably foreseeable risk of harm by reason of the contamination of drinking water unless there exists a group of people likely to drink the water involved." Grace, he said, had no reason to suspect anyone would be harmed until one of the drinking-water wells was finished in October 1964. Beatrice, he continued, would have had no reason to believe that its activity would affect the wells until August 1968, when the company received a letter from a well digger informing it that pumping water from the town wells had lowered the water table under Beatrice's land.

Schlichtmann had bitterly opposed the dating. "According to the judge," Schlichtmann grouses, "Grace could have stopped dumping by October 1964—the day before the wells opened—and from 1960 to 1964 could have dumped cyanide, pesticides, run an open toxic dump . . . and then stopped all that activity the day before the wells opened . . . and is not responsible for the conduct."

While Schlichtmann had asked the judge to direct jurors to decide one simple fact issue—whether the two companies were guilty of polluting the wells—the judge sent them off with two nearly identical sets of four questions, one set dealing with Grace, the other with Beatrice (see sidebar). His ruling on the dates restricted the evidence relevant to the jurors. Skinner told the jurors not to move beyond question one unless they found evidence against Grace between 1964 and 1979, and against Beatrice between 1968 and 1979.



Defense lawyer Michael Keating says the unclear wording in the jury questions may have been the result of "too many cooks in the kitchen."

Because the jurors misunderstood the judge's questions, Keating gained an opportunity to erase the entire verdict, including the jury's finding of negligence against Grace.

THE DELIBERATIONS

Although the judge had explained the interrogatories in his charge, when jurors retired to the jury room on Tuesday, July 15, they were, foreman Vogel recalls, in "utter shock" over how specific the questions were: "We were all under the opinion it was either guilty or innocent." Says retired nurse Coulsey: "We got up to the jury room, we looked at the paper and said, 'Now what are we going to do?' . . . I said, 'We must be missing something, or Mr. Schlichtmann never would have let it happen.' "

Not quite sure how to start, Vogel suggested a straw poll for each defendant on question one, which asked jurors whether "a preponderance of the evidence" established that dumping at the company sites "substantially contributed" to the well contamination in the prescribed time period.

College graduate and painting contractor Fox recalls that it broke down as follows: Everyone but Harriett Clarke and Fox held that Grace contributed to the pollution; and everyone but Clarke thought Beatrice was responsible, with Fox undecided.

This initial vote set the stage for eight days of frequently heated debate on question one. Clarke and Fox were to be unwavering proponents of the defendants' position, while former nurse Coulsey and foreman Vogel became the torchbearers of the plaintiffs' case.

After diligently sorting all of the data, reports, and displays entered as evidence, the jurors turned to Beatrice. Their initial discussion reveals just how critical it was for Beatrice's defense that Judge Skinner ruled that the company's liability began in 1968.

Clarke reminded her fellow jurors that plaintiffs' expert Drobinski had dated much of the Beatrice dumping from the late 1950s to the mid-1960s. "We had hardly any evidence of dumping after 1968," says Vogel. Coulsey recalled hearing only two witnesses testify that they saw dumping after 1968, and no one knew just what was dumped.

Foreman Vogel says that Clarke convinced him that Beatrice couldn't be held responsible. Although retired nurse Coulsey would later concede there was no preponderance of evidence against Beatrice, she continued to insist on finding against the company.

On the third day, temporarily stalled on Beatrice, the jury turned to Grace. Again focusing only on question one, the jurors sorted through evidence of Grace dumping and

struggled over the travel time of the pollutants to the wells. As clerical worker Kaplan points out, jurors found it impossible to decide on the travel time, on which the experts had held widely differing opinions.

The six jurors quickly reached an impasse on Grace, one that would not be broken for a week. By Friday, deliberations on Grace had ground to a halt with a 3-to-3 vote, with Coulsey, clerical worker Kaplan, and foreman Vogel insisting that Grace did contaminate the wells.

When the second week of deliberations began, the battle lines had been drawn. Fox steadfastly maintained that there wasn't enough proof that the companies polluted the wells. He paced the room, doing nearly all of the talking. He "took over," says one juror. Other jurors grew annoyed. Kaplan, for one, was left with the irritating impression that Fox "thinks he's a lawyer."

Fox readily admits that he did most of the talking but points out that he too was frustrated. Some jurors, he claims, simply wouldn't debate him on the evidence. Fox quickly realized that his prime opponent was Coulsey. When drawing his conclusions, Fox says, "I would say, 'This is how I feel, Jean. Let's talk about it.' "

Coulsey, the retired nurse, had less to say, as did her ally, clerical worker Kaplan. "[Coulsey] disagreed with [Fox] on a lot of things," explains Vogel. "But she really couldn't explain why, other than her feelings." Says Fox: "She wanted for us to be able to say the companies did something wrong."

Coulsey got so overwrought during the deliberations—especially over her inability to articulate her feelings about the case—that during a weekend break in the trial she visited a doctor. "I couldn't express myself. I couldn't get my words out right," she recalls. (When the trial ended, Coulsey again visited a doctor and was told that her problems were probably stress-related).

Coulsey occasionally showed anger. "No matter what [Linda Kaplan and I] said, [Fox] would rebut us," complains Cousley. According to one juror, Coulsey would get "furious" with Fox. "They were at odds all the time," says this juror. "It was just like bucking horns in that room."

Fox acknowledges that tempers flared. "I was getting a little angry, I'm sure," Fox admits. "I tried to curb it." Harriett Clarke, Fox's chief ally in holding that the companies could not be held responsible, quietly tried to keep things calm. Says Fox: "Harriett would give me the eye once in a while to try to curb me." Vogel notes with a laugh, "No one came to blows."

The jury was making no progress. Says Vogel: "We felt like we were banging our heads against the wall and getting nowhere."

Fox was the first juror to suggest throwing in the towel and announcing a deadlock, but others would hear none of it. "Jean and I didn't care how long we had to go," Linda Kaplan recalls.

On Tuesday, July 22, exactly one week after deliberations had started, foreman Vogel told jurors that he would have to leave that Friday for heart bypass surgery. If they weren't done by then, the jurors would either have to announce a deadlock or start over with a new juror.

They got nowhere on Wednesday, so Vogel sent a letter to the judge announcing that, after seven days of grappling with only the first question, the jurors had reached a deadlock. On Thursday morning, the judge met with Vogel and asked him to tell his fellow jurors to try again.

Vogel shot back a letter asking to be dismissed for his heart surgery. Skinner met with Vogel again and asked him to stay through the following Monday, when the judge would replace him with an alternate.

Vogel returned to the jury room and told the group that if they weren't finished by Monday, the five others would have to "start back at square one." Coulsey recalls remarking, "I don't feel an alternate taking Bill's place is going to change things." The others agreed.

Hale and Dorr's Jerome Facher conceded little in his defense of Beatrice. They had no evidence whatsoever that Beatrice dumped anything, he railed.

Discovery was monumental. Facher complained that if all the documents collected were stacked vertically, they "would exceed . . . the equivalent of a three-story building."

BREAKING THE DEADLOCK

The specter of starting over seemed to make jurors more flexible. "People started changing their opinions," says Vogel. "The kettle was starting to boil." Having failed to answer one question in eight days, that Friday the jury nearly got through all four.

Foreman Vogel deserves some credit for breaking the logjam. For each defendant, Vogel drew a chart with two lists: evidence supporting the company and evidence against it. "I asked each juror to look at the list from the other side, to reverse their position," explains Vogel, "and to see if they could prove [that side]."

"What we came up with was a preponderance [of evidence against] Grace but just two things on Beatrice," recalls Coulsey. Fox and Clarke—who had previously argued that neither company was responsible—agreed that Grace had "substantially contributed" to the well contamination. Coulsey conceded that Beatrice had not.

Finally, jurors had agreed on an answer to the first question, a question they had no trouble understanding. Grace had contributed to the contamination. Beatrice had not. As instructed, the jury dropped Beatrice from further consideration.

As if the hard decisions had already been made, the jurors raced through the other three questions for Grace, the very questions that had stunned them that first day of deliberations.

Question two asked jurors to determine when the Grace chemicals had "made a substantial contribution to the contamination" of the wells. First, the jurors had to decide at what point between 1964 and 1979 enough waste chemical had been dumped at the site to eventually contaminate the wells. Then they had to factor in the travel time it would have taken the pollutants to reach—and substantially contaminate—the town wells.

"We just really couldn't determine from the testimony," says Vogel. The experts had disagreed markedly on travel times. Vogel and the others threw up their hands and answered the question, "Not determined."

Neither Coulsey nor Kaplan nor Vogel—the jurors most anxious to hold Grace culpable—realized that the jury had just driven a stake into the heart of Schlichtmann's case. In phase two of the trial, Schlichtmann would have to prove that the low-level contamination caused leukemia. But with the "not determined" answer, he would be unable to assert that the drinking water had been polluted any earlier than the day the wells were closed.

Grace would be able to argue, as it later did in a post-trial motion, that "plaintiffs have failed to prove that these chemicals were in the wells at any specific time prior to May 22, 1979. This failure of proof is fatal to plaintiffs' case." The answer also undercut the claims involving several victims whose leukemia was diagnosed before the wells closed.

Amazingly, in his closing statement, plaintiffs' lawyer Schlichtmann failed to fully explain to jurors the importance of coming up with specific dates in answer to question two. Keating says he strongly suspected that the jurors would not realize the ramifications of the "not determined" answer. "I was waiting to hear whether [Schlichtmann] would explain [the importance of the dates in his closing statement]," recalls Keating, who was relieved that the plaintiffs' lawyer did not.

In his closing, Schlichtmann supplied jurors with specific dates to use and pointed out that the dates "are very important." He now concedes that he was "too subtle" and "should have been more forceful" in suggesting how damaging it would be if jurors didn't come up with dates.

Only one juror, pro-defense juror Fox, caught the nuance of the jury's "not determined" answer. But he

made no effort to tell everyone. Says Fox: "I knew that with that answer, we didn't give Schlichtmann much to work with. That's why I was comfortable with [finding Grace liable in question one]." Fox did seek to reassure Harriett Clarke, who was anguished over blaming Grace. Recalls Fox: "I said, 'Listen, Harriett. Don't feel bad. It's not a very severe guilty verdict.' "

Question three asked the jurors whether Grace's "substantial contribution to the contamination of Wells G and H prior to May 22, 1979, by chemicals disposed of on the Grace site after October 1, 1964, was caused by negligence of Grace. . . ." This was the question Coulsey was aching to answer yes, for she wanted to label Grace negligent. She had no argument from the others, who took it as a given that any dumping after the wells opened was negligent.

STYMIED BY SYNTAX

Jurors had no more trouble answering question four than they had with the previous two—once they agreed on what it meant. Unfortunately, the meaning they agreed upon was wrong, and would eventually turn their verdict—and the entire case—upside down.

The question read, "If you have answered 'Yes' to any part of question 3, what, according to a preponderance [sic] of the evidence, was the earliest time at which the substantial contribution referred to in question 3 was caused by the negligent conduct of this defendant[?]"

With good reason, jurors scratched their heads over just what this meant. In his charge, Judge Skinner's attempt to explain question four didn't help at all: "The fourth question with respect to each Defendant requires you to further refine the question of time to determine the time at which the substantial contribution to the pollution of Wells G and H was attributable to negligent conduct by each Defendant. This may be the same as the answer to question two, or it may be different."

Vogel eventually suggested—and the others agreed—that Skinner was asking the jurors to decide by what date Grace had dumped enough chemicals to eventually contaminate the wells.

But what Skinner really meant was to ask question two again, adding the negligence factor; in other words, "When did the chemicals *negligently* dumped at the Grace site between the prescribed dates substantially contaminate the wells?" According to the jurors interviewed, if they interpreted it this way, they would have answered, "Not determined," because that is how they answered question two. (If they couldn't determine when the chemicals got to the wells, how could they decide when the *negligently dumped* chemicals got there?) And that, as it did in question two, would have hurt Schlichtmann's case.

According to Keating, the lawyers spent a day and a half in the judge's chambers debating how the questions should be worded. Transcripts of these discussions show that the judge was indeed concerned about clarity. Said Skinner of one suggestion: "My God, to ask them a question like that, you are not going to get any answer at all." Some of the suggested instructions, he pointed out to the lawyers, were incomprehensible. "You could not [deliver them]," he complained, "even if you were a combination of Laurence Olivier and Milton Berle, without driving everyone into a coma."

The unclear wording of question four, says Keating, may have been the result of "too many cooks in the kitchen. . . . Everybody [had] their own axe to grind and [was] trying to advance the phraseology best to them. . . . We lost sight of the way [the jurors] would receive it."

Schlichtmann says that he protested to the judge that questions three and four were completely unnecessary anyway. The wording, he says, was worked out by Skinner and defense lawyers.

Because of the muddled wording of question four, the jury ended up debating the wrong issue: When had Grace dumped enough chemicals to substantially contaminate the wells?

"It's like you're waiting for a big bang, and you get a pop," says one Woburn politician of the trial. "Both sides think they won, and neither side thinks they lost."

As they did on question two, the jurors had a hard time coming up with a specific date. At first, they were stuck with a "not determined." But then Fox came up with a date. He explained to the others that in September 1973, the factory closed a storm drain into which workers were dumping TCE. Fox suggested that the negligent dumping had occurred before the drain was closed, but he couldn't say how much before. September 1973 was the earliest date of which he could be certain. The others agreed, and foreman Vogel wrote down September 1973 to answer the last question.

It appears that no one but Fox gave the date much thought. Asked about it now, Vogel says, "I don't recall coming up with that date at all." Comments Clarke: "I can't recall why anyone wanted to put a date on it. Now looking back . . . that doesn't make a hell of a lot of sense."

When question four was recently rephrased and explained to him, Fox conceded that the jurors had misunderstood it. "It doesn't have anything to do with when the chemicals were put into the ground," he says.

On Monday, July 29, the jurors filed into the courtroom, and the verdict was read. On her way out the back door of the courthouse, juror Coulsey recalls telling one of the plaintiffs lawyers, "The paper [with the questions] never should have been given to us."

THE FALLOUT

Beatrice, of course, was elated with the verdict. Hale and Dorr's Facher motioned for entry of final judgment. The judge granted it, and the case was officially over for Beatrice. Not surprisingly, Facher asserts that the jury understood the case perfectly. (In early November, Schlichtmann appealed the decision, arguing, among other things, that it was improper for the judge to so restrict Beatrice's period of liability.)

Grace lawyer Keating, however, was puzzled. The September 1973 date didn't jibe with any expert testimony on chemical travel times. Keating correctly assumed that the jurors had misunderstood question four.

For Grace, the misunderstanding cut two ways. On the one hand, it took away an opportunity for Keating. If the jurors had understood the questions, they would have answered questions two and four "not determined"—as they almost did. This would have left Schlichtmann unable to argue that the plaintiffs had been exposed to the toxins for any longer than the instant before the wells closed. Even Schlichtmann concedes, "Had they answered both 'not determined,' the judge would have been able to enter judgment for Grace." Says Harvard's Nesson: "It would have been extremely scary." Keating is cautious about predicting what would have happened, remarking that he was "not optimistic" that Grace would have won a directed verdict.

But because the jurors misunderstood the questions, Keating gained an opportunity to erase the jury's entire verdict, including its finding of negligence against Grace. Within a month, Keating had filed a motion to dismiss, a motion for a new trial, and a motion for entry of final judgment. All of the motions seized on the inconsistency between questions two and four.

On Wednesday, September 17, the judge ordered a new trial because of the inconsistencies in the verdict. He told the lawyers that he would not make the ruling public until the following Monday, when he could explain it to the jurors when they came back to start phase two of the trial.

Serious talks between the two sides began immediately. The ruling had given Grace a great initiative to settle. According to one informed source, Grace would have been unlikely to settle with a finding of negligence standing against the company. Now—with the verdict thrown out—it had an opportunity to save face.

Although none of the lawyers involved in the talks would discuss the negotiations, the terms of the settlement make it clear that Schlichtmann had been crippled. Before the trial he had proposed a structured settlement that defense lawyers calculated would cost $400 million. That Saturday night, Grace settled with the eight families, plus seven other families who had filed or planned to file suit, for $8 million. Grace admitted no guilt. A condition of settlement was not to discuss its terms.

On Monday morning, telling the jurors that he had some "good news and bad news," Judge Skinner announced that he had ordered a new trial because of "problems" with their answers. Skinner admitted, "I did not make it as clear as I should have what the relationship was between these various elements of time and, in particular, how critical that was with respect to the second stage." Then Skinner announced the settlement. Skinner now declines comment on any aspect of the case.

In the wake of the settlement, some have raised questions about just how far the $8 million will go. Although plaintiffs' lawyers will not reveal the cost of putting on the case or what they will take, it almost certainly totals in the millions.

Nesson says that each plaintiff will receive "a substantial amount of money," but he admits that the plaintiffs lawyers did not fulfill their goal of winning a verdict "that really would have gotten the attention of corporate directors across the country."

Grace certainly didn't sound repentant. Keating, speaking on behalf of Grace, told reporters after the announcement, "The settlement agreement specifically states that there is no admission of guilt by W.R. Grace." According to lawyers involved in the Woburn trial, a federal grand jury is currently investigating whether Grace lied to the EPA about chemical use and disposal.

Grace settled the Woburn case, Keating now asserts, because it was cheaper than it would have been to retry phase one and face the possibility of trying the medical causation phase.

Nesson admits he is disappointed that the muddled verdict and subsequent settlement left the plaintiffs without the legal precedent for which they were angling. But in a note of perhaps unjustified optimism, Nesson maintains that the Woburn toxic dumping case will one day be looked at by the public as one that "crystalized, as no case before had done, the issue of corporate responsibility for low-level contamination."

That doesn't seem to be the case in Woburn, however. State representative Nicholas Paleologos says the community has the right to be frustrated with the trial's outcome. "It's like you're waiting for a big bang," he says of the case. "And you get a pop. Then you ask people what happened. Both sides think they won, and neither side thinks they lost."

The frustration felt by Paleologos and others is understandable. For in a case that deals with the crucial issues of life and death, it is hard to accept that the outcome was largely determined by a striking deficiency on the part of the judge and lawyers involved: the inability to ask a simple question. □