The remedies available to Ford included mounting the gas tank above the rear axle, which would cut down on trunk space, or installing a rubber bladder in the gas tank. Ford experimented with the installation of rubber bladders but apparently decided they were not cost-effective. Later, as part of a successful lobby effort against government regulations for mandatory crash tests (crash tests were delayed eight years, until 1977), Ford's cost–benefit analysis came to light in a company study entitled "Fatalities Associated with Crash-Induced Fuel Leakage and Fires." As the details previously outlined show, the costs of installing the rubber bladder vastly exceeded the benefits.

Ford took the $200,000 figure for the cost of a death from a study of the National Highway Traffic Safety Administration, which used the estimates in the table on the previous page.

Questions

1. Was the decision not to install the rubber bladder appropriate? Use the 5-question framework to support your analysis.
2. What faults can you identify in Ford's cost–benefit analysis?
3. Should Ford have given its Pinto customers the option to have the rubber bladder installed during production for, say, $20?

ETHICS CASE

The Kardell Paper Co.

Background

The Kardell paper mill was established at the turn of the century on the Cherokee River in southeastern Ontario by the Kardell family. By 1985, the Kardell Paper Co. had outgrown its original mill and had encompassed several facilities in different locations, generating total revenues of $1.7 billion per year. The original mill continued to function and was the firm's largest profit center. The Kardell family no longer owned shares in the firm, which had become a publicly traded company whose shares were widely held.

Kardell Paper Co. was a firm with a record of reporting good profits and had a policy of paying generous bonuses to the chief executive officer and other senior executives.

Kardell's original mill was located near Riverside, a community of 22,000. Riverside was largely dependent on the mill, which employed 500 people. The plant, while somewhat outdated, was still reasonably efficient and profitable. It was not designed with environmental protection in mind, and the waste water that discharged into the Cherokee River was screened only to remove the level of contaminants required by provincial regulation. There were other industrial plants upstream from the Kardell plant.

The residential community of Riverside, five miles downstream from the plant, was home to many of the Kardell plant's management, including Jack Green, a young engineer with two children, ages one and four.

Jack, who was assistant production manager at the Kardell plant, was sensitive to environmental issues and made a point of keeping up on the latest paper mill technology. Jack monitored activity at the plant's laboratory, which in 1985 employed a summer student to conduct tests on water quality in the Cherokee River immediately downstream from the plant.

These tests were taken across the entire width of the river. The tests conducted nearest the plant's discharge pipe showed high readings of an industrial chemical called sonox. Farther away from the plant, and on the opposite shore of the river, the water showed only small trace amounts of sonox. Sonox was used in the manufacture of a line of bleached kraft paper that Kardell had begun to make at its plant in recent years.

The Issue

The student researcher discovered that the plant lab was not including the high readings of sonox in its monthly reports to management, so the student showed the complete records to Jack. In the summer of 1985, Jack made a report to the CEO with a recommendation that in-depth studies be conducted into the situation and its implications for public health and long-term effects on the ecology.

In recommending that Kardell carry out an "environmental audit" of its operations, Jack pointed out that local doctors in Riverside had been expressing concern over what appeared to be an unusually high rate of miscarriages and respiratory disorders in the community. Jack told the CEO there were data suggesting a possible link between health problems and sonox, but no definite proof. Medical research into sonox's possible effects on humans was continuing.

In bringing his concerns to the CEO's attention, Jack offered as a possible solution the option of Kardell adopting a new processing technology which used recycling techniques for waste water. This technology, already employed by a handful of plants in Europe, enabled a plant to operate in a "closed cycle" that not only protected the environment but reclaimed waste material, which was then sold to chemical producers. Thus, in the long term the new process was cost-effective. In the short run, however, refitting the existing Kardell plant to incorporate the new technology would cost about $70 million, and, during the retrofit, the plant would have to operate at reduced capacity levels for about a year and possibly be closed down altogether for an additional year to make the change-over.

The Response

Kardell's traditional response to environmental concerns was reactive. The company took its cues from the regulatory climate. That is, the provincial environment ministry would apply control orders on the plant as new limits on emissions of various compounds came into effect, and Kardell would then comply with these orders.

In raising his concerns in 1985, Jack pointed out that the Ministry of Environment, responding to the serious nature of concerns raised by the sonox issue, was considering internal proposals from its staff that additional research be done into the sources and implications of sonox. Given the early stage of work in this area, Jack could offer no indication of when, if ever, the Ministry would enact new regulations to do with sonox. He argued, however, that the ground rules might change, as they had with previous compounds, and that Kardell should give some thought to the worst-case scenario of how the sonox issue could turn out down the road.

Kardell's CEO was sympathetic to the concerns raised by Jack, a valued employee of the company who had proved himself in the past by identifying many cost-efficiency measures. The CEO felt obliged, however, to match Jack's concerns about sonox against the substantial cost of refitting the plant. The CEO felt there simply was not enough data upon which to base such an important decision, and he was wary of any external force that attempted to influence the company's affairs. The CEO told Jack, "We simply can't let these 'greens' tell us how to run our business."

While the CEO did not feel it would be appropriate for Kardell to adopt the recommendations in Jack's report, the CEO did take the step of presenting the report to the board of directors, for discussion in the fall of 1985.

Kardell's board of directors represented a cross-section of interest groups. Everyone on the board felt a responsibility toward the shareholders, but, in addition, some members of the board also paid special attention to community and labor concerns. The board was composed of the CEO and president of the firm, along with several "outside" directors: two local businesspeople from Riverside, a representative of the paperworkers' union at the plant, a mutual fund manager whose firm held a large block of Kardell shares on behalf of the fund's investors, an economist, a Riverside city councillor, and the corporation's legal counsel.

Each member of the board spoke to Jack's report from his or her perspective. The Riverside representatives—the city councillor and the two businesspeople—wanted assurances that the community was not in any danger. But they also said, in the absence of any firm proof of danger, that they were satisfied Kardell probably was not a source of harmful emissions.

The lawyer pointed out that legally Kardell was in the clear: it was properly observing all existing regulations on emission levels; in any case, there was no clear indication that the Kardell mill was the only source of sonox emissions into the Cherokee River. While acknowledging the health concerns that had recently arisen over sonox, the lawyer thought it prudent to wait for the government to establish an acceptable limit for sonox emissions. Besides, the lawyer added, while liability actions had been initiated against two or three other mills producing sonox, these claims had been denied through successful defense actions in court on the grounds of lack of clear evidence of a significant health hazard.

The labor representative expressed concern about any compound that might affect the health of Kardell employees living in the area. But the labor official also had to think about the short-term consideration of job loss at the plant and the fact that, with the plant shut down, there were few other employment opportunities in the area to fill the gap. The board representatives from Riverside pointed out that, obviously, the local economy would be severely affected by the shutdown to refit the plant. And the mutual fund manager agreed with the CEO that, at least in the short term, Kardell's profitability and share price would suffer from a decision to undertake a costly overhaul of the facility.

The Decision

After much debate, the board decided to defer consideration of Jack's proposals pending the results of government research into this issue. It also asked Jack to continue monitoring the regulatory climate so that the plant would always be in basic compliance with provincial emission standards.

During the next two years, Jack presented similar warnings to the board regarding sonox and continued to meet with the same response. As a precautionary measure, he kept copies of his reports in his own files so there could never be any question of the timing or substance of his warnings to the board. During this same period, an above-average incidence of miscarriages, birth defects, and respiratory ailments was reported in the Riverside area.

Questions

1. Who are the stakeholders involved, and what are their interests?
2. Which stakeholders and interests are the most important? Why?
3. What was wrong with the quality of the board of directors' debate?
4. What is the downside if the right decision is not made? Consider economic factors and also what Jack might do.

Source: The Kardell Case was prepared by David Olive, Graham H. Tucker, Tim J. Leech, and David Sparling, *Agenda for Action Conference Proceedings*, the Canadian Center for Ethics & Corporate Policy, 1990, pp. 20-21. Reprinted with the permission of the Canadian Center for Ethics & Corporate Policy.