

Marginal Chemical

This scenario was developed by Popper and Highson and cited in *Ethical Problems in Engineering* by R. J. Baum and A. Flores. (New York: Center for the Study of Human Dimensions of Science and Technology, 1978)

Position One: Go Over His Head

The Marginal Chemical Corporation is a small outfit by Wall Street's standards, but it is one of the biggest employers and taxpayers in the little town where its plant is located. Production has been going up an average of 6 percent a year, so has the pollution from the plant's effluents that are dumped into the large stream that flows by the plant. This stream feeds a large lake that has become unfit for bathing or fishing.

The number of complaints from town residents has been rising about this situation and you, as a resident of the community and the plant's senior engineer, also have become increasingly concerned. Although the lake is a gathering place for the youth of the town, the city has applied only token pressure on the plant to clean up. Your boss, the plant manager, has other worries because the plant is being caught in a cost/price squeeze, and is barely breaking even.

After a careful study, you propose to your boss that, to have an effective pollution-abatement system, the company must make a capital investment of \$1 million. This system will cost another \$100,000 per year in operating expenses.

The boss's reaction is, "It's out of the question. As you know, we don't have an extra million around gathering dust—we'd have to borrow it at 10 percent interest per year and, with the direct operating expenses, that means it would actually cost us \$200,000 a year to go through with your idea. The way things have been going, we'll be lucky if this plant clears \$200,000 this year, and we can't raise prices. You can create a lot of new production—and new jobs—for a million bucks. And this town needs jobs more than it needs crystal-clear lakes, unless you want people to fish for a living."

He does agree to spend \$10,000 to remove one pollutant and offers to pay for any system you can find that will pay for itself via product recovery.

What do you do?

This issue is important enough to take more drastic action. If your boss can't be persuaded, you need to go over his head to his supervisor or the board of directors. If that doesn't work you will need to talk to pollution control officials.

The issue is important enough to justify serious concern. The pollutants may detract from fishing and recreational use of the lake but it is very possible that they could also endanger drinking water for the town. We have a moral obligation to protect our environment from harm, even if no one else objects or complains.

Position Two: Do What He Says

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What do you do?

Blowing the whistle on your boss will never work. You will probably lose your job and your reputation. The company will get a bad rap, which could harm sales and lead to layoffs or the closing of the business. The town would be more upset about the loss of the company or tax revenues than they are now about the pollution.

It would be better to keep trying to persuade your boss and try to find a process that he will approve.

You have a clean conscience because you have done everything you can and it hasn't worked. Your boss has the power and authority over major decisions like this and he hasn't responded. It's his decision, not yours.