THE WALLOPS SMELTING & REFINING PROBLEM

Wallops, a medium sized industrial town, is facing a crisis. The problem centers on the future of a copper plant owned by the Wallops Smelting and Refining Company located just outside of the city boundary. The Wallops smelter is the only one in the nation that still uses copper ore with a high content of arsenic. Arsenic has been found to be a cancer causing agent. As authorized by the Clean Air Act, Dana Gladwell, head of the Environmental Protection Agency (EPA), is required to decide what to do about the plant; in particular, she must decide what constitutes an "ample margin of safety" in the plant's operation to protect public health.

The issue is both technically and politically difficult. In the years since the 1970 Clean Air Act Amendments have been written, scientists have discovered that many hazardous wastes lack a clear threshold of safety. Even tiny amounts of "non-threshold chemicals" can produce adverse effects. The Wallops plant has long been regarded as one of the major polluters in your country, but it has also provided employment to generations of people since it opening in 1890. Today, the plant employs about 575 workers in the town of Wallops and has a payroll of \$23 million. It contributes significantly to the local economy through its purchases of \$12 million worth of supplies, and it provides \$13 million of revenue to auxiliary businesses in addition to paying \$3 million in state and local taxes. If the plant were to close, government will have to pay as much as \$5.5 million in unemployment and welfare benefits. Closing the plant will be a devastating blow to a region where several major industries have not yet recovered from previous economic recessions.

It will also profoundly affect the local and regional culture. A way of life has been woven around the plant. Seventy-year old Owen Gallagher, a former mayor of Wallops and an employee of the plant for forty-three years, spoke for many town residents when he told reporters from the *Wallops Tribune:*

"I've worked in the plant all my life. So have my brothers, and so have my neighbors. We're not sick. This town was built around that plant. People came here looking for fire and smoke in the 1900's to find work. Now the government's complaining about that same smoke and trying to take our children's livelihood away."

The Company itself is well aware of the pollution problem. Under pressure from the regional air pollution authority, Wallops has spent about \$40 million to reduce emissions since 1970. Most of this was for retrofitting of equipment and installing new materials handling practices. In the late 1970s, the plant owners agreed to install secondary converter hoods at a cost of roughly \$4 million to bring emissions down further. At the time, the hoods were considered the best available technology ("BAT") for reducing pollution at a smelter like Wallops. Going further now would require one of three options: develop a new technology to reduce emissions; ship in low arsenic ore at much higher cost; or convert the entire plant to electric smelting, a different process altogether, at a projected cost of \$150 million.

According to company owners, any of these three options will force the closing of the plant. World copper prices crashed several years ago from \$1.45 per pound to 70 cents per pound. To break even, the Wallops plant requires 90 cents per pound, which means that at current prices it is losing money.

The current battle pits health, jobs, and a way of life. According to the EPA, installing the converter hoods as planned will reduce the risk of arsenic related cancer from four persons a year to one. EPA's dilemma is whether this is acceptable. Does an "ample margin of safety" to protect public health require more? Should regulations demand zero emissions? Or is the livelihood generated by the plant worth the added risk of one case of cancer per year?

Complicating these questions is the fact that the emissions, and thus the risks of cancer, are spread out over a twelve mile area that involves people even at a distance from the plant and its jobs. For example, Bagong Island, lies two miles offshore, but because of prevailing winds, it becomes, as one resident puts it, "the dumping grounds for these pollutants without any benefits such as jobs or Wallops tax payments." Many islanders are afraid of the high levels of arsenic found in the urine samples of their children and in the soil from their local gardens. Should they bear the side-effects of Wallops? People in the city of Wallops are in the same predicament. Receiving tons of air pollution a year from the plant, and few tax benefits, one member of the Wallops city council said it was as if "somebody were standing on the other side of the city line with a high power rifle and firing it into Wallops."

What should be done? By habit and statute, the EPA, and Dana Gladwell, its head, are supposed to decide this issue. The company and many of its workers look to the EPA to confirm the acceptability of the actions they are about to take by spending \$4 million on converter hoods. They are using the best available technology to reduce emissions from their plant. They look to the EPA to resist taking action that would push them economically over the brink. Yet many area residents, along with environmental activists, look to the EPA to provide "an ample margin of safety," and are quite willing to push the plant to the edge, if not over it, to reduce emissions significantly further.