
"Our Challenge"

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*Remarks by William D. Ruckelshaus, Administrator of
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U.S. Environmental Protection Agency

Our Challenge

You have asked me to speak to you about the "state of the environment." Well, there is little question that the environment is in a better state than it was in when I first had this job thirteen years ago. Many major sources of gross and obvious pollution have been controlled. The number of days of unhealthy air in major cities has declined virtually without a break since 1974. Despite growth in the economy and population, we have seen no decline in water quality over the past several years and impor-

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tant rivers have made remarkable comebacks. In short, we have attained many of the environmental goals we set for ourselves a decade ago. Yet, if I had to sum up the present environmental situation in a phrase, I would say that we're doing better and feeling worse.

The reason for this is plain to see. We have shifted our attention and concern from problems that are relatively easy to see and solve to those that are subtle and vexing, from smoke and sewage to the attempt to eliminate toxic substances from the human environment.

I can tell you that this shift has caused substantial problems for EPA; I don't have to tell you the even greater problems it has created for the chemical industry. Having accumulated a good deal of experience and confidence in controlling the so-called conventional pollutants, we find, with no little dismay, that controlling toxics is an entirely different sort of business.

Where we once dealt with a dozen or so pollutants, we now must consider hundreds. Before, we concentrated on removing familiar substances by the ton; now, we often must cope

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with the exotic and worry about micrograms because we are confronted with materials that may be able to cause serious human health damage in vanishingly small concentrations. Most important, our base of scientific research in this area is inconclusive, which means that we often cannot *reliably* distinguish between trivial risks and important public health problems.

I am not sure that either EPA or the chemical industry has responded well to this new challenge. In any event, I want to share with you my ideas about the nature of that challenge, and about what the institutions we represent can do, both individually and together, to meet it more effectively.

You know, there's an old saying that goes, "It's easy to climb mountains and it's easy to fall off mountains. The hard part is climbing mountains *without* falling off." Similarly, I can think of easy ways to have a healthy environment and I'm certain you can think of easy ways to have a healthy chemical industry. The hard part is getting both at the same time.

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To proceed intelligently in this direction, we must begin by accepting as fact that large numbers of Americans are frightened that toxic chemicals in their environment may affect their health. The American people place an extraordinarily high premium on good health; we spend a greater proportion of our gross domes-

tic product on health than any other country. The notion that health is being insidiously affected by chemicals thus bears a particularly heavy emotional freight. For the moment we must forget about whether these fears are justified or rational; the fear itself is an undeniable reality and must be dealt with as such.

Equally apparent is the association made by much of the public between the perceived threat from toxic chemicals and the chemical manufacturing industry. The public at large is, I believe, quite indifferent to the proximate source of the contaminants that worry it. The great names in the industry, the major firms, are virtually household words. It is no surprise that when somebody uncovers a nasty dump or when there is a highly publicized debate about some toxic pollutant, most people think of the well-known chemical producers.

In a sense, EPA has done something similar, in that we usually look for opportunities to control major point sources of toxic pollutants, irrespective of the proportion of emissions such big sources represent. It's easier to control a dozen sources than a thousand. Also, when EPA comes under pressure to control a chemical, it is natural to look to firms that can afford controls. Once again, these are generally the major firms.

I must tell you that I find something unsettling about this. It reminds me of the story about the policeman who finds a drunk crawling around under a streetlight. He says he's looking for his keys. The policeman asks him if he dropped his keys under the streetlight, and the drunk replies, "No, I dropped them under my car, but it's too dark to look down there."

For the industry giants to bear the brunt of public and governmental blame is in one sense unfair. There is no industry that has devoted as much energy and resources to health concerns as the chemical manufacturing industry. Its worker health programs are a model for other industries, and I know from personal experience that when corporations in other fields want reliable information on the toxicity of products, they turn to the chemical industry.

On the other hand, the attitudes I describe are not entirely capricious. The mistakes of the past were real. For a long time—too long, in fact—reputable firms disposed of wastes they knew to be extremely hazardous in ways that can only be described as disreputable: the guiding philosophy seemed to be out of sight, out of mind. Hazardous waste dumps are real. People have been injured through carelessness on the part of industry.

Besides that, we all understand that there are bad apples in every bunch. In the press of competition, some firms may seek advantages in ways that reflect badly on the industry in general. As I noted, it is sometimes difficult for the public to distinguish between the good guys and the bad guys.

The most important factor fueling negative attitudes toward the industry is, I believe, the attitude of the industry itself toward the public's concern about danger from toxic chemicals. The public often sees industry representatives pursuing a strategy made up of delay, of making excuses, of avoiding responsibility, and of self-serving assurances that there is really nothing whatever to worry about. If this strategy was designed to allay public fears and reduce the pressure on the industry, then it has certainly failed. Unfortunately, the perception that economic interests are involved in statements from the industry about the health effects of chemicals renders suspect in the public mind all such statements.

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I think you have to accept the industry's lack of credibility on health questions as a fact of life deriving from complex historical and institutional factors. I understand how the many competent and reputable scientists who work in the industry might resent it. Decrying public ignorance of factors involving their health may

assuage such resentment, but it only fuels negative public perceptions about the chemical industry's social conscience.

Nevertheless, you must continue to put forward the facts at your disposal; indeed, it is essential that you do so. The chemical industry is our greatest and most reliable source of information on chemical species, on their behavior under all conditions of physical state and mixture, on controlling hazards and recycling wastes. Despite this acknowledged expertise, I would caution you not to dismiss public fears because your calculations show them to be "irrational."

We know, of course, that some public fears do not stand up well before statistical tests. For example, a recent poll published in *Scientific American* asked people from different groups to place in rank order the risk of death from various causes. It was clear from the results that many people have ideas about relative risk that are at variance with any strictly statistical evidence we have.

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If, as the poll suggests, college students believe that pesticides and nuclear power plants present greater risks than boating or motorcycle accidents (a supposition, I might add, not strongly supported by actuarial statistics), then they will seek to impose stricter controls on the risks they believe to be more important. There is nothing inherently wrong with this; public safety is a judgment, not a mathematical calculation. As such, it is properly housed in the political process. We can try to change these judgments over time, with evidence, with research, but we do ourselves a disservice if we pretend that the concerns these political judgments address are not "real."

We may ask, why is rational argument less than convincing in discussions about toxic chemicals? Why aren't the judgments more in line with our calculations? I believe it is because

public concern is centered on those dreaded diseases that are plausibly connected with low concentrations of toxic substances; that is, cancer and the genetic and reproductive disorders,

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and because, at the heart of our risk assessments, there is, undeniably, a hollow place. I think people sense that we really don't know how and under what circumstances chemicals cause cancer; they're right, we don't.

There are over 400,000 deaths from cancer each year. About two percent of children are born with some defect. How much of this toll is associated with exposure to toxic chemicals? Almost none? A lot? There are credentialed scientists supporting extreme points on this spectrum and many in between. This uncertainty imposes upon those with a responsibility to the public, and I trust that includes all of us here, a position of prudent concern.

I have no doubt some of this concern may prove mistaken in years to come, but in this we are very much in the position of the early European sanitarians, who fought for sewer systems and other basic public health measures in the early nineteenth century. These people did not know about germs, and were roundly mocked by people who believed there was no provable connection between dirt and disease. In fact, some of the justifications the sanitarians put forward to defend their projects appear quaint and ridiculous to us now, and no doubt our solemn pronouncements about cancer will so appear to our posterity. But they built sewers anyway. There is a lesson for us here about action in the face of ignorance.

Let me explain how EPA is responding to this problem, which we share, of acting in the face of ignorance. First, we accept risk assessment as

an important tool. Given the very great numbers of possible regulatory objects of interest, it is indispensable for setting priorities. It is also useful as a means of demonstrating to a concerned public that we are working on the most significant risks. But note this: risk assessment can seriously backfire if there is any suspicion that policy interests (other than concern for public health) have intruded into our calculations of risk. At EPA we have tried to disentangle risk assessment, as a process, from the policy considerations that go into making a final decision about regulating a substance, which we call risk management. I realize there is not an obvious bright line between the two; still, I believe that good public policy obliges us to make it as bright as we can.

This is something that industry has not always done, and the idea that economic interests prevail over health concerns in industry statements about risk has stuck in the public mind. I should add that there are some hopeful signs that this is changing. Much of the industry has embraced the principle that risk assessments must emerge from disinterested establishments. I trust that this trend—whose exemplar is the Chemical Industry Institute of Toxicology—will continue.

The public must be convinced that when we have a reasonable belief in an unreasonable risk we will move to reduce it, swiftly and decisively.

But risk assessment is not a solution to the problem of public fear and public trust. It is my belief that the key to the acceptance of any body of analysis is the public perception of action. The public must be convinced that when we have a reasonable belief in an unreasonable risk we will move to reduce it, swiftly and decisively.

Now, we may not agree on whether such actions are worthwhile. We all know how many

assumptions go into risk assessments and how radically the assessments change when you vary them. If we often disagree on things that appear eminently possible to pin down, such as control costs, then of course we're going to fight over numbers that inhabit what one of our scientists ruefully calls "a mathematical fairyland." But although we are deeply committed to finding the most cost-effective ways of controlling public health risks, we cannot wait for the last decimal point to be entered. I have no doubt that we will in the future require expenditures that your analysis shows control inconsiderable risks. I think that society has told us to pay that price as a sort of insurance. In a certain sense, the actual, quantifiable risk reduction we obtain thereby is beside the point. We are really buying freedom from fear, and most Americans are willing to pay a reasonable price to obtain it.

Moreover, if we do not act decisively under the conditions I have described, the public trust in EPA will erode. Indeed, in some quarters it already has. Our friends in the environmental movement would like us to be strictly bound by statutory mandates so that we would have little freedom to perform the balancing and priority-setting operations implied by the term

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risk management. I don't think this is a correct approach. In terms of efficient public health protection it is no substitute for Agency flexibility. But this flexibility will be granted us only if we are trusted, and in order to be trusted we must act where the facts warrant. This is an important point for the industry to consider because I believe the events of the last few years have shown that in the long run a strong and trusted EPA is the best friend the industry has.

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The chemical industry can help itself a great deal in this matter by adopting a similar policy. You can take actions that will capture the public imagination and make you appear, in the old phrase, part of the solution instead of part of the problem. As to what actions would be suitable, I will quote no less an authority than your past chairman, Bill Simeral:

"To start, we can clean up the dumps. . . . Abandoned dump sites are the single, most obvious symbol of everything the public believes to be wrong with the chemical industry. Whatever their impact on the environment, rusted drums are poisoning the climate for the chemical industry in Washington and across the nation. As long as we let the problem persist, we don't stand a chance at winning the confidence of the people."

I couldn't agree more, and the same goes for us in government. We have to stop playing "who

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struck John" around the issue of responsibility for hazardous waste sites. We have to go beyond public relations and the legal niceties. The public is not going to stand still when representatives of a multibillion-dollar industry and government officials at all levels dance a minuet around cleaning up a site that has some little town scared half to death.

As I noted, the management of your organization is aware of the need for movement on this issue, as are we. As you are probably aware, we have changed our policy regarding cleanup projects in that we now begin the actual site work before nailing down the details about who will ultimately bear the cost. In addition, I have encouraged an informal group made up of representatives of industry, the Agency and the environmental community to develop recommendations about how we can all work

together to speed the cleanup. We expect recommendations from them early in 1984.

I view this sort of effort as an initial step in the widening of the industry's assumption of responsibility concerning toxic chemicals in the environment. I think you will sooner or later have to confront hazardous waste disposal in a much more comprehensive way than you have in the past. I can't believe that the use of chemicals in general will increase as much as you would like it to if people who use them in

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commerce do not have a safe place to put potentially hazardous waste. It is in your ultimate interest to insure that your customers can dispose of their wastes safely even if this means, in some cases, taking care of them yourselves. The chemical industry must begin to prepare itself for helping police the whole cycle of use, disposal and recovery for a variety of toxic chemicals.

Why should you do this? Isn't it sticking your neck out? Isn't your job simply to make and sell chemicals and realize a profit? In answer I would turn to Peter Drucker's argument that profit is a necessary condition of enterprise, but not its ultimate end, which is to insure the survival and growth of the organization. I hope that what I've said today, and what you have heard from others both within and outside the industry, convinces you that the survival and growth of the institutions you represent is in some doubt if you do not act quickly, boldly and convincingly to rid the environment of toxic substances where you can and stem the public apprehension they engender.

This is your challenge, our challenge. I believe rising to meet it is a necessary ingredient in the prosperity of your industry and the well-being of our country. We should get on with it.