



An Environmental Bomb

"...I sat in a restaurant in New York, for example, and I looked out at the buildings and I began to think, you know, about how much the radius of the Hiroshima bomb damage was and so forth...Why are they making new things? It's so useless."

So writes Richard P. Feynman, the Nobel laureate physicist, in his book, *Surely You're Joking, Mr. Feynman!* He was reflecting on his involvement in the Manhattan Project and in the development of the atomic bomb. While the pessimistic outlook above probably stemmed from his disillusionment on how scientific progress ultimately led to a huge human tragedy, he does end that chapter on a note of relief and hope: "...But fortunately, it's been useless for almost forty years now, hasn't it? So I've been wrong about it being useless making bridges and I'm glad those other people had the sense to go ahead." This book initially came out in 1985; so 25 years have elapsed and we have managed to avert a nuclear war so far.

Unfortunately the same cannot be said for environmental disasters. Spectacular advances in technology and improvements in the quality of life, especially in the industrialized parts of the globe, have also left in their wake ravages to our resource base and damage to the eco-system and the environment. For example, around 23,000 tons of chemical wastes were dumped during 1942-1953 in the Love Canal in Niagara Falls, New York, leading to a health emergency in the state in 1976 and massive clean-up efforts. This environmental disaster long stood as an unfortunate poster child for irresponsible industry practice, at least in this country. The latest oil spill in the Gulf of Mexico may soon eclipse it. Certainly, this oil spill, which continues spewing tens of millions of crude oil into the ocean at the time of this writing, has the dubious distinction of surpassing the supertanker Valdez oil spill that dumped 11 million gallons of crude oil into Alaska's Prince William Sound in March, 1989.

An almost identical scale of oil spill (this one intentionally caused during the first gulf war) occurred in the Persian Gulf in January 1991. Notwithstanding the initial assessment by UNESCO and other sponsoring organizations of minimal long-term environmental damage, subsequent studies are beginning to show significant impact on the eco-system in areas surrounding Kuwait and Iraq. While the Valdez spill did kill thousands of birds and marine animals (yes, walruses included!), we literally dodged a bullet at that time because the spill occurred in one of the least populous regions in this country. We may not be so lucky this time around. It will be of interest to see what effect, if any, this latest oil spill will have on how the public views (and accepts) the dangers associated with tapping the increasingly less accessible petroleum reserves. The Three Mile Island and the Chernobyl nuclear disasters certainly made many people and policy makers wary of nuclear energy, especially in this country. Will this latest disaster also fuel (pun intended!) the drive to pass the climate change bill now stuck in the U.S. Senate?

Surely, very few would advocate Luddite solutions to set back the clock on technological advancement. Nor would anyone, except the most alarmist among us, conclude that we have reached an energy equivalent of the Malthusian catastrophe. We must continue to make "new buildings and bridges" as in the Feynman scenario above. However, the key lies in taking a long-term outlook that emphasizes sustainability, social responsibility, and safety, rather than seek next-quarter solutions or schemes to maximize stockholder profit. It is certainly not the system at fault, but often, the problem lies in how we regulate and safeguard growth without hindering it. Stay tuned.

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