George Armstrong Lecture 2000

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ABBR EVIATIONS. APA, Ambulatory Pediatric Association; POPs, persistent organic pollutants; PVC, polyvinyl chloride; EPA, US Environmental Protection Agency; IV, intravenous; HCWH, Healthcare Without Harm.

I am honored to accept the Ambulatory Pediatric Association’s (APA’s) George Armstrong Lecture Award 2000 on behalf of Greenpeace. We greatly appreciate your recognition of Greenpeace’s global efforts to protect the earth and its children. Because of my campaign’s work on toxic pollution, and the effects of chemicals on the health of children everywhere, Greenpeace asked me to accept this award and address you today.

Greenpeace was founded almost 30 years ago when on September 15, 1971, a group of 12 Canadians and US citizens sailed the Phyllis Cormack, an 80-foot sailboat, to Amchitka, Alaska, to protest the testing of US nuclear weapons. That protest by a small group of people in the face of serious physical and legal threats set in motion 3 decades of activism, best known for people putting their lives on the line for what they believe. I have been arrested and jailed for protest against toxic waste incineration, but I didn’t spend as many days in jail as my colleague here today, Niaz Dorry, who was named one of Time Magazine’s 50 “heroes of the planet” (October 5, 1998) for her work in Gloucester, Massachusetts, to preserve our fisheries from overfishing by factory trawlers. Sometimes it is called “bearing witness” other times “speaking truth to power.” But it is always about nonviolent direct action in the tradition of Gandhi, King, and Chavez.

Greenpeace uses creative means to expose conditions that threaten the earth like the potential extinction of whales or the threatened exploitation of Antarctica. Although Antarctica is now protected by an international treaty, countries such as Norway and Japan are attempting to resume the slaughter of whales. Continued vigilance is essential. Whatever the issue, no matter the odds, Greenpeace has pledged to defend the planet from the multitude of attacks on its well-being that are uncovered each day. Greenpeace has millions of supporters and active programs in approximately 30 countries around the world.

In the United States we have 5 major campaigns: Toxics, Global Warming, Genetic Engineering, Marine Mammals, Fisheries, and Forests and Nuclear Weapons. In the area of industrial pollution, a lot has happened since the 1950s when smoke stacks blackened the skies of Pittsburgh and rivers caught fire or wreaked of untreated sewage. However, today’s challenge regarding these threats is more serious and insidious because most of the threats we face today are invisible. You cannot see acid rain, the hole in the ozone layer, the incremental increase in global temperatures or the super toxins in parts per trillion that contaminate our food from smoke stacks 2000 miles away.

It is these global poisons, called persistent organic pollutants or POPs that I work on. When you think about these substances, I urge you to keep 4 facts in mind:

- The 75% of the “high production volume” chemicals (more than 1 million pounds produced a year) in commerce today have been incompletely tested for their effects on human health and the environment.
- US laws and regulations assume these chemicals are “innocent” until proven guilty, usually assuming a threshold of harm.
- These policies grandfather (legally allow old chemicals and facilities to continue operating) in thousands of substances and industrial processes until there is a tragedy such as the Union Carbide accident in Bhopal, India, in 1984 that left thousands dead almost instantly.
- No one knows or may ever know the cumulative effects of the ongoing exposures to chemicals and their by-products now circulating in our environment.

In a sense we are undergoing a huge, uncontrolled experiment on the environment and the human race. And no part of the population is more vulnerable or innocent than our children.

Greenpeace believes that we must consistently invoke the precautionary principle. The precautionary principle says that we should not wait for harm to occur to human health and the environment before acting to ban or phase-out a dangerous chemical or process.

Some POPs have reached the Arctic where indig-
Dioxins are chlorinated super toxins that are produced anytime chlorine chemistry is used by industry to produce materials such as polyvinyl chloride (PVC) plastics, solvents, and bleached paper. Dioxins are produced every day as by-products of combustion at thousands of factories, incinerators, and paper mills throughout the industrialized world when chlorine waste products are burned. From factory and incinerator smoke stacks, dioxins are deposited on our farmlands the same way that radioactive fallout from atmospheric testing of nuclear weapons contaminated our prairie and grasslands where animals graze. From there, they accumulate in the fatty tissue of steer or in the milk of cows. According to the US Environmental Protection Agency (EPA), more than 90% of the dioxin in our own bodies comes to us from our food.6

According to the EPA’s latest assessment of dioxin, it is a potent human carcinogen and also a powerful endocrine disrupter that is linked to a wide range of illnesses such as diabetes, endometriosis, and developmental and reproductive toxicity. According to the EPA, “Some of these effects may be occurring in humans at general population background levels and may be resulting in adverse impacts on human health.” The EPA’s latest estimate for cancer risk from current dioxin exposures to the average American now ranges from 1 in 1000 to a phenomenal 1 in 100.6

The largest single use of chlorine is in making PVC plastics.7 These products range from pipes and siding to toys and medical products. To make PVC, 2 carcinogens, ethylene dichloride and vinyl chloride monomer, are combined. This process is concentrated at factories on the Gulf of Mexico in Louisiana and Texas. Whole communities in Louisiana (Morrisonville and Revieltown) have been up-rooted from the contamination that these huge facilities inflict mostly on low-income African-American communities in Louisiana’s “cancer alley.”

Greenpeace has confronted this industry in Louisiana for years resulting in arrests of protesters but more importantly greater scrutiny of this industry. In 1997 Greenpeace released test results of the wastes of Louisiana PVC factories. We found levels of dioxin that in 1 case exceeded the levels found by the EPA in the wastes from Agent Orange production.8 In 1999 the Agency for Toxic Substances and Disease Registry tested dozens of people living near these facilities in the Lake Charles area of Louisiana and found dioxin in their blood at 3 times the national average.9 However, the PVC industry is asking the EPA’s permission to expand in Louisiana. Greenpeace and community leaders are opposing that expansion and exposing the environmental racism associated with locating these facilities in low-income African-American communities.

At the product level Greenpeace became curious when in 1996 PVC miniblinds were found to be loaded with biologically available lead. The lead is necessary in PVC as a stabilizer and it comes to the surface of the product after exposure to light. After we were refused data on PVC and its ingredients from the US and European toy industry, Greenpeace began our own testing of PVC toys. In October 1997, we released our test results that revealed high levels of both lead and cadmium in most PVC items tested.10 However, in November 1997, the US Consumer Product Safety Commission issued a report claiming that “none” of the vinyl products we tested were hazardous. Ultimately, the US Consumer Product Safety Commission did ask the toy industry to “voluntarily” remove all lead from its products but there is no penalty if they refuse. In 1998 and 1999, Greenpeace also tested PVC toys11 and medical products12 for another toxic chemical, phthalates. These additives can make up 50% of a PVC product because they are the ingredient that makes PVC flexible and soft in products such as children’s toys and intravenous (IV) bags. Some phthalates can cause cancer in animals as well as damage to the liver, kidneys, and reproductive organs. Again Greenpeace found very high levels that leach out when the product is chewed on or used to carry medical fluids such as saline, or commercial sugars such as sucrose.

PVC is the only plastic that requires such high levels of so many toxic additives. Fortunately, virtually all PVC uses, including both toys and IV bags, have widely available safer alternatives. And even more promising, Mattel, the world’s largest toy maker, pledged in 1999 to move away from PVC to vegetable-based plastics for all of its products and packaging. In the United States, McGaw makes a PVC-free IV bag that represents about 20% of the IV bag market. Baxter has pledged to pursue PVC-free products in the United States but in Europe they already have them available.

PVC and its resulting dioxins reach all of us in another way, through the burning of PVC production wastes and products in 3 kinds of incinerators: hazardous, municipal garbage, and medical waste.2 All of these incinerators produce dioxins that reach our food supply. In the communities where they are located they represent a threat of not only dioxin deposition on locally grown food but also accidents, and can serve as fountains of other toxic emissions such as lead, mercury, and other materials known as “products of incomplete combustion.”13
One such community is East Liverpool, Ohio. It is a below average income town on the Ohio River with a very large hazardous waste incinerator sited 1100 feet from an elementary school and 320 feet from the nearest homes. Twenty trucks a day bring in about 60 000 tons of toxic waste a year to be burned in East Liverpool at the WTI incinerator. The cancer rate in East Liverpool is far above the national average, which may also disguise additional hazards posed by the incinerator.

More than 200 people have been arrested in non-violent demonstrations against WTI, including local doctors, teachers, parents, grandparents, school board members, Greenpeace people like Niaz and myself, and actor Martin Sheen. In fact, when Martin Sheen and 50 others were arrested, their trial was televised on Court TV. The jury returned a verdict of not guilty based on the “necessity defense.” In essence, they found that the protesters acted in defense of their community.

The sad thing is that incinerators such as WTI are not even needed. Since the 1980s the generation of hazardous waste has declined so much that incinerators like WTI are short on customers. And much more waste can be prevented, especially if we phase-out the production and use of inherently toxic materials such as PVC plastic and the many chlorinated toxic chemicals it is made from.

Plastics can be made with other materials including vegetable matter, solvents can be made with soapy water, paper can be bleached with oxygen, pesticides can be replaced with organic farming techniques and incinerators can be made obsolete by comprehensive recycling programs.

The APA has already helped by joining Healthcare Without Harm (HCWH), a coalition of more than 260 organizations, including the American Nurses Association and the American Public Health Association. HCWH’s mission is to transform the health care industry so it is no longer a source of environmental harm.

You can ask for PVC-free medical products and devices when ordering through consortiums and other purchasing institutions. You can also log on to HCWH’s Web site at: www.noharm.org or contact Greenpeace at (800) 326-0959 or log on to our Web site at www.greenpeaceusa.org.

Thank you again for recognizing and honoring Greenpeace so generously. We promise to live up to your expectations and remain vigilant on behalf of the earth and our children. We look forward to working with you all in the near future.

REFERENCES

5. UN Environmental Program’s POPs Mandate. Available at: http://irptc.unep.ch/pops/gc/pops.e.html
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