

LINNEA SAUKKO

LINNEA SAUKKO was born in Warren, Ohio, in 1956. After receiving a degree in environmental quality control from Muskingum Area Technical College, she spent three years as an environmental technician, developing hazardous waste programs and acting as adviser on chemical safety at a large corporation. Concerned about the lack of safe methods for disposing of hazardous waste, Saukko went back to school to earn a BA in geology (Ohio State University, 1985) so that she could help address this issue. She currently lives in Hilliard, Ohio, and works as a groundwater manager at the Ohio Environmental Protection Agency, evaluating various sites for possible contamination of the groundwater.

How to Poison the Earth

"How to Poison the Earth" was written in response to an assignment given in a freshman composition class and was awarded a Bedford Prize in Student Writing. It was subsequently published in *Student Writers at Work: The Bedford Prizes*. Saukko's essay is largely a directive process analysis, but it is also a SATIRE: By outwardly showing us one way to guarantee the fate of the earth, the author implicitly urges us not to do it.

Poisoning the earth can be difficult because the earth is always trying to cleanse and renew itself. Keeping this in mind, we should generate as much waste as possible from substances such as uranium-238, which has a half-life (the time it takes for half of the substance to decay) of one million years, or plutonium, which has a half-life of only 0.5 million years but is so toxic that if distributed evenly, ten pounds of it could kill every person on the earth. Because the United States generates about eighteen tons of plutonium per year, it is about the best substance for long-term poisoning of the earth. It would help if we would build more nuclear power plants because each one generates only 500 pounds of plutonium each year. Of course, we must include persistent toxic chemicals such as polychlorinated biphenyl (PCB) and dichlorodiphenyl trichloroethane (DDT) to make sure we have enough toxins to poison the earth from the core to the outer atmosphere. First, we must develop many different ways of putting the waste from these nuclear and chemical substances in, on, and around the earth.

Putting these substances in the earth is a most important step in the poisoning process. With deep-well injection we can ensure that the earth is poisoned all the way to the core. Deep-well injection involves drilling a hole that is a few thousand feet deep and injecting toxic substances at extremely high pressures so they will penetrate deep into the earth. According to the Envi-

ronmental Protection Agency (EPA), there are about 360 such deep injection wells in the United States. We cannot forget the groundwater aquifers that are closer to the surface. These must also be contaminated. This is easily done by shallow-well injection, which operates on the same principle as deep-well injection, only closer to the surface. The groundwater that has been injected with toxins will spread contamination beneath the earth. The EPA estimates that there are approximately 500,000 shallow injection wells in the United States.

Burying the toxins in the earth is the next best method. The toxins from 3
landfills, dumps, and lagoons slowly seep into the earth, guaranteeing that
contamination will last a long time. Because the EPA estimates there are only
about 50,000 of these dumps in the United States, they should be located in
areas where they will leak to the surrounding ground and surface water.

Applying pesticides and other poisons on the earth is another part of the 4
poisoning process. This is good for coating the earth's surface so that the poi-
sons will be absorbed by plants, will seep into the ground, and will run off into
surface water.

Surface water is very important to contaminate because it will transport 5
the poisons to places that cannot be contaminated directly. Lakes are good for
long-term storage of pollutants while they release some of their contamina-
tion to rivers. The only trouble with rivers is that they act as a natural cleans-
ing system for the earth. No matter how much poison is dumped into them,
they will try to transport it away to reach the ocean eventually.

The ocean is very hard to contaminate because it has such a large volume 6
and a natural buffering capacity that tends to neutralize some of the contami-
nation. So in addition to the pollution from rivers, we must use the ocean as
a dumping place for as many toxins as possible. The ocean currents will help
transport the pollution to places that cannot otherwise be reached.

Now make sure that the air around the earth is very polluted. Combustion 7
and evaporation are major mechanisms for doing this. We must continuously
pollute because the wind will disperse the toxins while rain washes them from
the air. But this is good because a few lakes are stripped of all living animals
each year from acid rain. Because the lower atmosphere can cleanse itself
fairly easily, we must explode nuclear tests bombs that shoot radioactive par-
ticles high into the upper atmosphere where they will circle the earth for
years. Gravity must pull some of the particles to earth, so we must continue
exploding these bombs.

So it is that easy. Just be sure to generate as many poisonous substances as 8
possible and be sure they are distributed in, on, and around the entire earth at
a greater rate than it can cleanse itself. By following these easy steps we can
guarantee the poisoning of the earth.