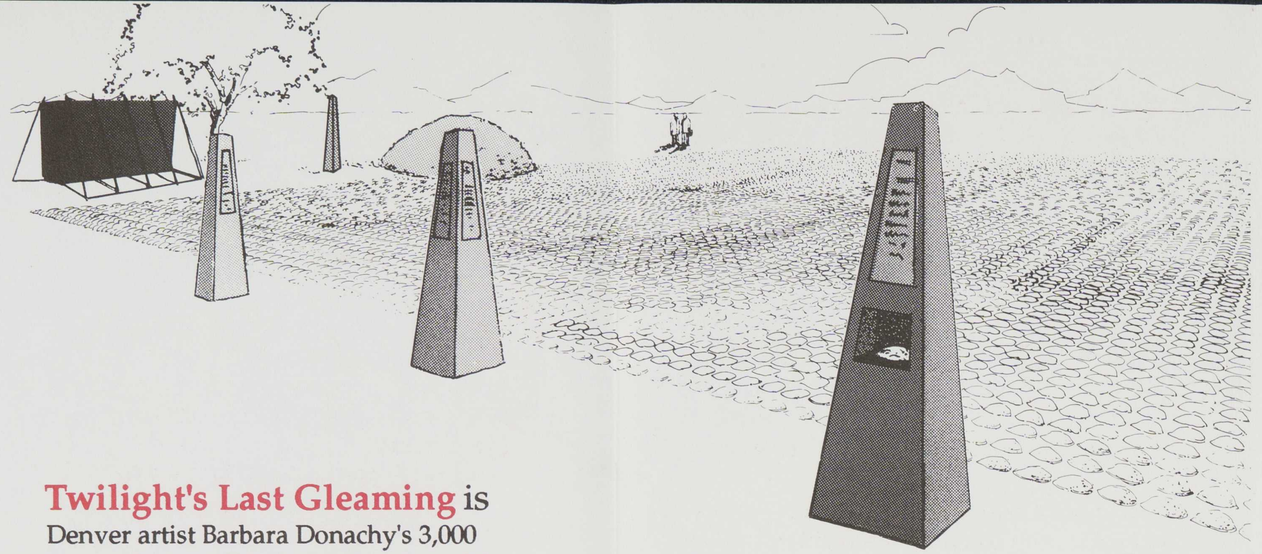

Twilight's Last Gleaming is

Denver artist Barbara Donachy's 3,000 square-foot ceramic representation of the existing volumes of plutonium-239, uranium-235, and radioactive waste that have been generated by the U.S. nuclear weapons industry. Even if the 48,000 nuclear weapons in the world are someday dismantled, these materials will remain lethal for thousands of years. This exhibit invites us to consider two key questions:

- **Why does the nuclear weapons industry continue to operate?**
- **How will we as a nation deal responsibly with these radioactive materials for thousands of years?**

Physicians for Social Responsibility New England (NEPSR) brings **Twilight's Last Gleaming** to Boston to educate the public about the problem of nuclear waste and to stimulate dialogue that leads to solutions.

Barbara Donachy's previous exhibit, **Amber Waves of Grain,** presented at Boston's Museum of Science in 1986, depicted the 34,000 nuclear weapons in the U.S. arsenal. *The Boston Globe* called it a "visual tour de force, a shocking, almost numbing representation of a reality we tend to think of in abstractions." **Twilight's Last Gleaming** is equally as powerful.

About Twilight's Last Gleaming

Plutonium-239 — This display consists of 19,000 ceramic discs modeled after the plutonium "buttons" processed at the Rocky Flats nuclear weapons plant near Denver, Colorado. These discs represent the actual volume of plutonium — 100 metric tons — available for nuclear warheads.

Plutonium-239 is used as a trigger in nuclear weapons. It is one of the most toxic substances known. A microscopic particle (.6 microgram) will cause cancer with virtual certainty when inhaled or ingested. A speck no larger than the dot of an *i*, vaporized and in a contained area, could be lethal to a city the size of Boston. With a half-life of over 24,000 years, plutonium will continue to be extremely hazardous to the Earth and its inhabitants for millennia. It must be safely contained for 240,000 years.

Uranium-235 — Imagine an exhibit five times the size of this one. That is how much U-235 (weapons-grade uranium) — 500 metric tons — there is today in the U.S. nuclear arsenal. Since the dawn of the Atomic Age, we have processed about 1 million pounds of uranium-235, which has a half-life of 700 million years.

Twilight's Last Gleaming is based on the idea that seeing is believing. For most people, this is as close as you come to the real thing. Unlike smog and sludge, radioactivity cannot be seen or felt, and its effects are slow to manifest themselves. The project is intended to turn this unseen danger into a seeable reality. Barbara Donachy

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Radioactive Waste — High-level waste is a by-product of the manufacture of plutonium-239. It is hot enough to boil an egg, which makes it difficult to process and store safely.

Transuranic Waste — It is composed of items that have been contaminated with low levels of long-lived radioactive materials such as plutonium during the manufacturing process: filters, gloves, rags, gravel, tools, and so on. Before 1970, transuranic waste was dumped into pits and buried. Now, however, it is stored above ground in drums.

If each disc in this exhibit were 16 feet wide, the display would then represent the volume of high-level and transuranic radioactive waste this country has generated in the production of its nuclear warheads.

What Can We Do?

Twilight's Last Gleaming can shock us out of denial and leave us better prepared to make responsible choices about this issue that is so critical to future generations. We must take action to bring about safe containment of these toxic materials. We must

1. Recognize the magnitude of the problem.
2. Review all proposed solutions and select the best method of containment.
3. Institute a global ban on production of weapons-grade plutonium and uranium.
4. Safely dismantle and dispose of all nuclear weapons.

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Organizers — Sponsored by NE Physicians for Social Responsibility. Co-sponsors are

- American Friends Service Committee (AFSC)
- Boston Earth Day
- Boston Mobilization for Survival
- Clean Water Action
- Greenpeace
- International Arts for Peace
- International Physicians for the Prevention of Nuclear War (IPPNW)*
- Lawyers Alliance for World Security (MA)*
- MA Campaign to Clean Up Hazardous Waste*
- Peace Action*
- Women's Action for New Directions (WAND)*
- Women's International League for Peace and Freedom (WILPF)*

and others!

* indicates members of organizing committee.

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We Need Your Help — The installation and oversight of **Twilight's Last Gleaming** requires hundreds of volunteer hours. Community efforts by schools, religious and business organizations, and individuals are as important as the exhibit itself.

❑ I can work on the exhibit. Please call me.

❑ I can contribute

__$100 __$50 __$25 __other

Checks payable to NEPSR (Contributions are tax deductible.)

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Please mail to NEPSR, 11 Garden St., Cambridge, MA 02138 • Phone: 617-497-7440