

ELI Research in Action

Protecting the Public from Toxic Waste Sites

Photo by Jay Pendergrass



Hazardous waste landfill:
How to restrict its use?

John (Jay) Pendergrass is well known in environmental circles as the Director of ELI's State Center and as a regular columnist in our Environmental Forum. But he is equally well known for spearheading the implementation of "long-term stewardship" and "institutional controls" on toxic waste sites.

Since the 1950s and even into the early 1990s, when a toxic dump site was closing down, the owner of the land might insert a provision in the deed saying that the site contained toxic substances. The provision might have added that the site should not be used for residential or other specific purposes, or that groundwater should not be used. These conditions of site closure were characterized by the government as "institutional controls." Yet nothing guaranteed "long-term stewardship," so that the control or the protection of the public would be perpetual.

Indeed, the government allowed this to happen by deeming these controls to be sufficient. The deed provision often did not even carry over to the succeeding purchaser. A purchaser would not even find the provision in the course of a title search, would not learn of the toxic wastes on the site, and certainly would not know that any constructed barriers or clean cover were to remain in place as long as they were needed to protect the public. Even when the purchaser did learn of those provisions, there was no requirement to comply with those shut-down conditions, and no requirement to prevent the public from drinking

the water or to keep people away from the site. The requirements were not binding on the successor – they did not have the effect of law.

Zoning was used as another early "control." The toxic site would be zoned for industrial use, with the hope and expectation that that designation would prevent a residence or day care center from being built on the site. This approach, too, failed. In many states, an area zoned industrial did not prevent residential or commercial uses – it merely had the effect of including that industrial use rather than excluding other uses. And in virtually all instances, there was nothing to prevent a subsequent zoning decision from reversing that decision. In fact, the reversal would often be effected without any understanding by the community of the purpose of the original zoning decision. Absent knowledge of the toxics that lay beneath the soil cover, a school or day care center or home could be built on the site.

Jay Pendergrass is nationally recognized as the lawyer who educated the government and the public on why these "controls" will not and did not, in fact, work. He is the first to identify these problems and to do the work that led to reform of the policies designed to protect the public when hazardous substances are left on site. He is indeed the key expert who brought about the major changes not only in the use of these controls, but in the changes necessary to assure long-term protection of public health at closed sites.

Jay's analyses and policy recommendations have led to the reform of federal policy and state law on what is now referred to as "institutional controls." ELI began this work in the mid-80s, initiating the study of whether and how institutional controls could protect public health at contaminated sites. When Jay arrived at ELI in 1988, he brought with him expertise in science and law – particularly in issues related to groundwater – having taught scientific analysis of environmental problems and practiced law both in the government and the private sector. In the late 80s and early 90s, he began serving as part of the ELI research teams that intensively studied the Superfund and state Superfund programs.

Engaged by the Department of Defense to determine how to facilitate redevelopment of closing bases that had contaminated sites, Jay assisted a Congressionally chartered group to develop recommendations that would allow the safe

The Environmental Law Institute makes the law work for the environment. Through innovative research, practical analysis and forward-looking publications, the Institute informs and empowers policy-makers, business leaders, and environmental advocates worldwide. ELI is well-known for solving problems and designing fair, creative, and sustainable approaches to implementation.



Jay Pendergrass

Jay's analyses and policy recommendations have led to the reform of federal policy and state law on what is now referred to as "institutional controls."

Plastic chain and sign on road side (above). Contamination warning (below).



Photo by Jay Pendergrass

and healthy reuse of land while cleanup continued. Many of these recommendations, issued by the Defense Environmental Response Task Force, were eventually enacted by Congress as part of the bill that made DOD subject to EPA enforcement under the federal hazardous waste law.

At the same time, Jay began to study State voluntary cleanup programs. Convinced that institutional controls were a necessary component of those programs, Jay began working with EPA to strengthen institutional controls in Superfund Program and state cleanups. Institutional Controls in Use, a major ELI report authored by Jay in 1995, launched a serious development of and reform of EPA's policies in this area.

Jay then secured Agency support for the investigation of institutional controls that had already been in place at Superfund sites. ELI's initial research, conducted by Jay and ELI Senior Attorney Linda Breggin, revealed that, although dozens of records of decision required institutional controls, the controls had never been implemented. ELI's report, *Protecting Public Health at Superfund Sites: Can Institutional Controls Meet the Challenge?*, released in 2000, focused on the few sites where institutional controls had actually been implemented and analyzed their effectiveness in protecting the public. The study revealed significant problems.

In 1996 and 1999, Jay published articles in ELI's *Environmental Law Reporter*[®], recommending significant changes in site closure. Insisting that regulators recognize and accept the fact that institutional controls fail at some time or in some situations, he called for redundancy or layering of controls, so that different controls would provide protection at different times or to different populations and would backup one another. He called for making public participation a linchpin of any institutional control and of the process of identifying, selecting, and implementing the control, as well as requiring funding to secure the long-term integrity and maintenance of institutional controls so long as they are needed. With the Energy Communities Alliance, he wrote *The Role of Local Governments in Long Term Stewardship at DOE Facilities*, recommending that the U.S. Department of Energy work directly with local governments and that DOE analyze the opportunity costs to the community of remediation of a site that would not allow unrestricted access, comparing the costs of restricted use to the unrestricted use.

In response to Jay's analyses and advocacy, EPA and many states began developing strong policies on how to design and use institutional controls. An EPA Fact Sheet released in 2000 adopted virtually



Photo by Jay Pendergrass

all of Jay's recommendations; the agency directed that the 90% of Superfund sites that had adopted institutional controls after completion of construction be revisited and new and real institutional controls be implemented on the sites, all consistent with the recommendations Jay had outlined in his reports and articles.

Jay's recommendations were eventually recognized by the National Conference of Commissioners on Uniform State Laws (NCCUSL). In 2003, the NCCUSL adopted the Uniform Environmental Covenants Act (UECA), which, when adopted by a state, changes property law to assure that institutional controls can and will remain in place as long as they are needed. Having served as an Advisor to the Committee drafting the Act, and testified before the D.C. Council and groups around the country, Jay has succeeded in encouraging states to adopt the UECA.

At the same time, it became apparent that the cleanups did not include realistic plans for implementing and monitoring institutional controls – and for making sure they stay in place as long as they are needed. In 2005, Jay, together with Resources for the Future's Kate Probst, released a paper that identified a process for analyzing all the steps involved in implementing institutional controls. The recommendations advanced in "Estimating the Costs of Institutional Controls," are already being used and implemented by EPA and state project managers.

So, thanks to Jay's scholarship and dogged advocacy over the years, all of the EPA policies that have been issued since the early 90s on long-term stewardship and institutional controls rely at least in part on Jay's work. Jay continues to serve as a legal and policy resource on these issues to the public, the States, and the national government. When considering reauthorization of Superfund and the 2002 Brownfields bill, Congressional staff interviewed Jay; numerous state legislators and staff continue to call him for advice on state laws; and he speaks around the country regularly. ELI is proud that through his efforts, toxic sites now must be closed and cleaned up in a way that requires long-term protection of the public.