

A careful review of the progression of federal legislation, from the 1965 Solid Waste Act through the 1984 Hazardous and Solid Waste Amendments, shows increasingly direct and detailed involvement by Congress in hazardous waste management in the U.S. As will be shown later in this text, this same impatience with progress was not ameliorated by the direct involvement of federal agencies. In HSWA, Congress took the then unprecedented step of writing regulatory language, standards, and calendar deadlines into the statute.

By 1994, the extent, range, and detail of congressional and federal agency involvement in hazardous waste management, and environmental management in general, had burgeoned to the point that public and political sentiment had turned against these regulatory programs. Federally imposed "unfunded mandates" were a major issue of the 1994 election campaigns, and the new Congress promised to "review" many of these programs. Environmental equity issues arose in poorer urban neighborhoods wherever hazardous waste management activity was proposed. Individual members of Congress were frequently involved in efforts to prevent construction or enlargement of such facilities. Nevertheless, with the exception of the 1990 CAA Amendments, Congress did little to strengthen, weaken, or in any way change environmental statutes during the 1990s. Superfund reauthorization was allowed to languish through most of the 1990s, and the "Brownfields"<sup>17</sup> concept was left to the Administration to develop.

### Administrative

As the "Environmental Decade" (1970s) progressed, federal, state, and local agencies and officials learned that large numbers of constituents have lively interests in environmental matters. Public hearings, and similar forums, became procedurally ingrained in most legislation, regulation, and policy. It is now taken as routine that no significant environmental decision is made at any level of government, without full public participation, usually through a hearing process. In countless instances, these hearings have sharply affected the course of resolution of major issues.

In recent years, several federal agencies have been shown to be among the worst offenders of hazardous waste management statutes, regulations, and policies. In 1978, President Carter ordered federal agencies to comply with the nation's environmental laws, but his executive decree had little effect. In 1980, Congress passed CERCLA, but exempted federal government facilities. Not until 1986 were federal agencies brought under Superfund rules. During this same period, the Departments of Energy and Defense hid their hazardous waste practices behind the national security curtain, and the true picture of these practices is now emerging. As noted earlier, these practices have so severely contaminated some sites that officials of the Departments of Energy and Defense have been quoted to the effect that there may

be no way to clean them up (Satchell 1989). In these matters, public meetings, hearings, and forums were ineffective, and administrative approaches to hazardous waste management actually served to conceal the extent of the problems.

"Administrative" actions and policies brought about serious delays in the implementation of the newly enacted RCRA and CERCLA, under the direction of EPA Administrator Anne Gorsuch (Burford), during the early 1980s. Gorsuch and her hazardous waste program manager Rita Lavelle held strongly negative views toward environmental regulation in general and toward hazardous waste regulation in particular. These ideologies were further strengthened by political activism that put party advantage far above environmental urgency. In sworn testimony before a congressional committee, Lavelle offered a "frankly political motive for shutting off Superfund help to western mining states. She was afraid that the mining states would resent the federal intrusion and that the 1984 election campaigns of western Republican senators might suffer." Gorsuch testified that "she had held up a \$6 million grant to clean up the huge String-fellow acid pits in Riverside, California because Jerry Brown, then governor of California and Democratic candidate for the Senate, might get the credit" (Lash et al. 1984, pp. 82-83). The serious student of the politics of the environment should read the referenced book in its entirety (*see also*: Davis 1993).

### Technical

Approaches to definition of hazardous wastes, their identification, impacts, and remedies have progressed along similar lines to the developments cited previously. The initial environmental and public health concerns with hazardous waste sites had a "fires and explosions" focus. The early history is replete with cases and episodes wherein sites burned and/or exploded, releasing huge amounts of heat energy, toxic vapors, and particulates. Many were confirmed as arson cases and many more were suspect. Other sites emitted toxic vapors without fire or explosion.

Such events were often spectacular, frequently hazardous to human health and/or safety, and always frightening to the public. However, the exposures they created tended to be short-lived (i.e., a few hours or days), with a relatively small number of acute health effects, fewer fatalities, and even fewer cases of chronic health effects.

In 1975, a senior engineer, assigned to an EPA field office, was detailed to the Office of the Assistant Administrator for Water and Hazardous Materials and given the task of evaluating the Agency's groundwater management efforts. When he had completed his report, he made the rounds briefing the program managers on his findings. As he attempted to explain to a Deputy Assistant Administrator (DAA) the threat to groundwater quality posed by toxic metals and organics

<sup>17</sup> "Brownfields" is a site, or portion thereof, that has actual or perceived contamination and an active