

I. INTRODUCTION

A. Government Investigation and Cleanup of Contaminated Communities, and Community Responses

Much has been written about government's role in investigating health problems and cleaning up environmental pollution in contaminated communities [see, for example, the discussion of Love Canal and Woburn in Ashford et al., 1991; English, 1991]. Federal agencies most frequently involved include the Environmental Protection Agency (EPA), the Agency for Toxic Substances and Disease Registry (ATSDR) -- a sister agency of the Centers for Disease Control and Prevention in Atlanta -- the Department of Energy (DOE), and the Department of Defense (DOD). State departments of health and environmental protection, as well as local health departments and city/county governments, are also involved. In many contaminated communities, Superfund legislation gives ATSDR the role of conducting "health assessments," while the EPA conducts "risk assessments" and formulates remediation plans.

Contamination in a community may have its origin in industrial operations or in governmental activities, such as DOE/DOD weapons production or operation of nuclear facilities (OTA, 1991). Abandoned or uncontrolled sites may be placed on the National Priorities List (NPL) under Superfund; facilities that handle hazardous wastes may be regulated as a RCRA site.¹ In some cases, the site may not be designated under either program. The EPA Brownfields Initiative, which involves many federal agencies, was designed to reverse the deteriorating economic state of non-NPL contaminated sites by encouraging redevelopment/revitalization (see Section VII-D of this report.) The responsibility for cleanup varies. Sometimes, industry is considered the Potentially Responsible Party (PRP) for the contamination and the cleanup. In other cases, the government may be legally responsible for cleaning up the pollution it caused. At NPL sites, the government facilitates the cleanup, no matter who is held responsible for creating it -- often through the hiring of an independent contractor.

¹ The Resource Conservation and Recovery Act (RCRA) regulates hazardous wastes from generation to permanent disposal through its "cradle-to-grave" management system.

Many communities affected by contamination have experienced significant economic, social, and health risk impacts. Some of these communities were socially disadvantaged prior to the discovery of contamination, and have suffered disproportionate environmental burdens. They have voiced considerable objection to the "environmental injustice" and disparate impacts they have suffered in connection with the contamination in their communities. This injustice is seen to result from the (1) prejudicial location of hazardous and polluting facilities in low-income or minority communities and/or (2) the absence of or inadequate attention to remediation or cleanup in these communities. In the latter case, communities decry government attention as "too little, too late" (Foreman, 1998; Bryant, 1995; GAO 1983,1995; Hofrichter, 1993; United Church of Christ, 1987).²

Further, where government has responded, it has been accused of operating more or less in a vacuum, and the communities have reacted negatively, expressing dissatisfaction with both the outcomes and the process of cleanup activities. It is fair to say that the different governmental agencies operating at the federal, state, and local level have not always had a clear vision of their respective roles; nor have they always spoken consistently or "with one voice" to the community. When independent contractors also are active at the site -- especially when they change over time -- there is often community dissatisfaction with "the whole lot." Government involvement in contaminated communities continues to be a challenge and an ongoing learning experience for both the agencies and the community.

B. The Importance of Public Participation in Contaminated Communities

Involvement of the public in governmental decisions concerning the environment has its origins in the National Environmental Policy Act (NEPA) process of the 1970's. However, dissatisfaction with government decisions concerning the characterization of risks and plans for cleanup/remediation at contaminated sites has increased demands for public participation in decision-making processes. Lack of public and stakeholder involvement at contaminated sites often resulted in what are now acknowledged as failures on the part of government, for example at Love Canal, Woburn, and the PBB contamination in Michigan (Ashford et al., 1991).

Vocal and critical community activists concerned with health and environmental issues have demanded more involvement than simply listening to agency officials at large public meetings, which have been perceived as venues for agencies to "present, explain and defend" their decisions already made, rather than as opportunities to enter into meaningful dialogue and shared decision making with the community. Other

² The commentary on these assertions goes both ways and has now surfaced as contentious debate. In order to fully appreciate the social and political dynamics of contaminated communities, it is important to realize that impacted communities of color or low-economic status believe both to be true.

stakeholders, notably business owners, PRPs, developers and real estate interests, and citizens worried about their property values also demanded involvement. Government responded to these pressures by reaching out more broadly to the affected publics. Stakeholder involvement in a contaminated community seeks to include those parties with a legitimate interest (or stake) in the issues or impending decisions about contamination and redevelopment/revitalization. These parties may include site owners and users, government regulators, affected persons (i.e., those living near the site whose health and/or economic well-being may be affected by the site), industry and business, government at different levels, and others (English, et al., 1993).

In the literature, public participation is increasingly distinguished from stakeholder involvement [see for example English et al., 1993; NRC, 1996; P/C Commission, 1997; and Yosie and Herbst, 1998].³ Public participation traditionally has not differentiated among different members of the public. Stakeholder involvement processes are argued to be both more inclusive and targeted (English et al., 1993). However, the goals of inclusiveness and representativeness may not always be met in practice. Stakeholder processes can sometimes serve to eliminate the "fringe elements" or to dilute the influence of the most severely impacted members of the community, who are often the least powerful as well. Perhaps it is for this reason that it is argued that stakeholder involvement "should augment public participation, with the latter remaining to ... keep stakeholder involvement processes 'honest'" (English et al., 1993, p.11).

Public participation and stakeholder involvement continues to attract the attention of researchers, policy makers and analysts, and a variety of stakeholder groups (see the review of selected literature in Section III). Reasons include (1) increased emphasis on alternative dispute resolution (ADR) or conflict reduction as a way of solving social problems in general, (2) a desire on the part of government to bring about cost-effective solutions, (3) the furtherance of democratic processes through citizen empowerment and environmental justice, (4) a desire for communitarian outcomes (see later discussion), and (5) a desire to achieve a proper balance between science-driven (rational choice) processes and values driven or self-interest driven processes, hopefully premised on rationally-informed agreement among the stakeholders.

The goals of public participation and stakeholder involvement may be viewed very differently, depending on the perspectives taken by both government and by citizens on their respective roles in the deliberation process. Government may act either as (1) a *mediator, arbitrator, or facilitator of conflict resolution* or alternatively as (2) a *trustee* for the furtherance of (environmental) justice and fairness (especially in situations where there are disparate distributions of power among the disputants or where wrongs have been committed in the past).⁴ Participants may play representational or communitarian

³ The reader is referred to Section IIIB of this report which addresses the question "what is public participation?"

⁴ It could be argued that, in its role as mediator/resolver of disputes, government acts a

roles.⁵ The public participation and environmental justice literature is sometimes confused or silent on these distinctions.

trustee for all the people. However, in this report, we use the term trustee to mean government acting in the second sense, i.e., trustee for the interests of the least advantaged.

⁵ A communitarian approach to conflict resolution is a process wherein the various stakeholders strive to achieve "the greater social good" rather than maximize their own benefit, thereby transcending individual interests (English, 1993, pp 19-21).

Public participation and stakeholder involvement are generally seen as means to further democratic decision making. However, there are differing conceptualizations of what the goals of democracy are.⁶ While technically democratic, participatory decision making based on majority rule may result in a "tyranny of the majority" over minority interests. To the extent that government encourages consensus by the majority, we would describe the government as a mediator or resolver of disputes, seeking a utilitarian outcome -- or at least "the greatest good for the greatest number." John Rawls, in his concern for distributive justice, rejects majoritarian consensus as a fulfillment of the social contract between government and the governed. He argues that justice requires the government to make the most disadvantaged, relatively better off (Rawls, 1971). We would describe government acting in this way as serving as the *trustee for the most disadvantaged*.

Different world views/philosophies about democratic processes necessarily affect how one evaluates various public participation mechanisms. Laird (1993) speaks of pluralistic "participatory analysis" that emphasizes the importance of learning among those involved in public participation for achieving more democratic outcomes. He argues that through dialogue and deliberation involving *representatives* of different interest groups, learning occurs and more understanding for the views of others emerges. Fiorino (1990) comments on the importance of *direct participation* in which *individuals* can deliberate free of institutional constraints. Direct participation processes are distinguished from pluralistic [representative] participatory mechanisms. However, both commentators implicitly favor communitarian outcomes to "horse trading." In describing and evaluating the participation mechanisms in our case histories, it is instructive to see to what extent the government or communitarian-minded participants ensure justice and fairness for the disadvantaged minority.

Public participation and stakeholder involvement processes often arise to avoid or resolve conflicts. In our earlier work (Ashford et al., 1991), we identified three kinds of conflicts present in contaminated communities: (1) conflicts arising out of different self interests of the stakeholders, (2) conflicts in duties or obligations felt by individual stakeholders, and (3) conflicts in what different persons consider just or fair, right or wrong. Both stakeholder involvement and public participation processes involve the resolution (or the transcending) of these conflicts, but "[normative] consensus-building and alternative dispute resolution are somewhat different. The former seeks agreement; the latter reasoned compromise" (English et al., 1993, p.25). Compromise mirrors a market-like bargaining solution and thus can be said to foster utilitarian outcomes in which the net welfare of those involved is maximized. Decision analysis to

⁶ See especially Michael Sandel, Democracy's Discontent: America in Search of a Public Philosophy, Harvard University Press 1996.

foster utilitarian outcomes often uses cost-benefit analysis to identify the "best" solutions.

In both public participation and stakeholder involvement processes, the role of government may vary from one of *facilitating others* to reach a consensus⁷ (for example about what to monitor, the extent of cleanup, the methods used for cleanup, how to redevelop the site, etc.), to *acting as one of the several parties* attempting to reach a consensus. Alternatively, government may retain decision-making authority, which may or may not mean acting in a trusteeship or stewardship role for public health and environment. As a trustee or steward, government either may seek to foster distributive justice and fairness for the disadvantaged, or instead may see itself as a fiduciary agent for the society as a whole, searching for "reasonable" or cost-efficient or cost-effective solutions. This may occur in both health and environmental agencies.

Unfortunately, neither the government nor the participating public is often clear about the purposes of the public or stakeholder participation activities in which they are, or are about to become, involved. While sometimes required in law, agency guidelines for public participation are often vague⁸ [but see CDC/ATSDR, 1997; NACCHO, undated; NEJAC, 1996; and DOE, 1993]. Ironically, the idea that people ought to control their destiny directly may get government off the hook as trustee, or even as the enforcer of environmental laws. An important question is whether increased demands for public participation reflect the failure (and mistrust) of government (and its politicized experts) and of representative democracy to implement/enforce environmental regulation, or just a mature reflection of the inherent limitations of these institutions. A final policy question is whether guidelines for public participation in law should become more particularized, regarding the roles, responsibilities, and expectations of the different players. We return these issues in Section VII, where we discuss conclusions and policy implications.

C. Multi-level Interagency Interactions and Problems of Coordination

⁷ The consensus can be reached by majoritarian processes (where the political majority gets what it wants, thereby approximating maximum collective utility) or by normative processes. The latter is distinguished by situations in which "citizens are willing to sacrifice self-interest on behalf of a longer-term [and more far-reaching] societal goal" under strict conditions: (1) other players must agree to do so as well, (2) the decision to do so must be free and uncoerced, and (3) the decision must benefit the long-term interests of all citizens (English et al., 1993, p 20). Also see Fiorino, 1989 and 1990.

⁸ See Fiorino (1989, 1990) for a taxonomy of reasons to encourage public participation defined as substantive, normative, and instrumental.

While much attention has been focused on government-community interactions, problems of interagency coordination overlay an additional complexity that has been largely ignored in other studies. In criticizing the deficiencies of government efforts to participate optimally with the community, in all fairness, it should also be pointed out that government participants sometimes devote considerable effort and time attempting to develop common agendas or coordinate activities amongst themselves, both at the federal, state, and local levels. These multi-agency activities may have visible and beneficial effects in the community, or may inadvertently short-change community participation activities.

D. Origins, Purposes, and Scope of the Study

Many prior studies have examined public participation and stakeholder involvement in contaminated communities. They have focused on a variety of problems, including monitoring the environmental contamination and health of the community (Ashford et al., 1991; Cole, 1996), clean-up activities (CCEM, 1993; DOE, 1993; FFER, 1993), future land and facility use (English et al., 1993), and economic redevelopment in Brownfields (see Section VII-D). Some have focused on specific mechanisms of participation between industry and the public (Lynn, 1995a, 1995b); others have explored the dynamics of participation with local or state government (Lynn, 1995a, 1995b; NACCHO, undated).⁹

A prior MIT study of community monitoring funded by NIOSH and ATSDR investigated *historical* examples of failed processes in public involvement in contaminated communities (Ashford et al., 1991). The cases investigated in this earlier study focused on mostly white, middle-class communities. Based on these and other historical failures, policy initiatives were identified to improve the outcomes of public participation in the future. These initiatives addressed seven areas:

1. Developing new legislation
2. Building skills and capability in the community
3. Building skills and capability in the agencies
4. Increasing specific authority for (and obligations of) government
5. Providing for increased community participation in, and access to, government decisions
6. Providing adequate incentives and motivation to agency personnel
7. Providing for more, or more predictable, and better communication

The present study examines seven *current, ongoing* cases of public participation across a broader spectrum of communities. In contrast to earlier notorious failures, such as those at Love Canal, Woburn, and Times Beach, the cases in this study explore experiences considered *relatively successful* by both the agencies and the

⁹ The reader is referred to Section III for a selective review of the literature.

communities. The study sought to better understand the determinants of successful public involvement in contaminated communities where: (1) site characterization, cleanup options, and economic redevelopment were issues of concern and, in some cases, of conflict; (2) more than one federal agency was involved; (3) state and local agencies were also involved; and (4) environmental justice was often an issue.

The purposes of the current study were to: (1) identify those factors most important to, and essential for, successful community involvement, (2) evaluate or suggest initiatives to further enhance successful public participation, and (3) identify options for more successful interaction and coordination of federal, state, and local agencies in their efforts to promote environmental and public health goals in contaminated communities. The study extends the previous MIT work by focusing on three of the seven initiatives noted above:

- ! Building skills and capability in the community
- ! Providing for increased community participation in, and access to, government decisions, and
- ! Providing for more, or more predictable, and better communication

In addition to problems of communication, participation, and capacity building in low-income and minority communities with disproportionate environmental burdens (i.e., "environmental justice" communities), special attention was paid to mechanisms for improving interagency coordination (relevant in part to categories 3, 4, and 6 above) at all levels of government. The audience for the report includes: (1) the stakeholders (e.g., government, community residents, industry and business) involved with site investigation, cleanup, restoration, future use, and redevelopment/revitalization in contaminated communities, and (2) academic or independent researchers from whom we have learned so much.

The report is organized in four parts.

Part One describes the background of the study and includes an Introduction (Section I), the Conceptual Framework and Methodology of the Study (Section II), and a Review of Scholarly Work/Literature on Public Participation (Section III).

Part Two is a brief digest of the case histories, with analyses of the communication, public participation, capacity building, and interagency coordination initiatives found in each case (Section IV).

Part Three, Lessons Learned, includes an Evaluation of the Different Mechanisms or Vehicles (Section V), as well as a commentary on the Interagency Coordination activities in the communities (Section VI).

Part Four (Section VII) contains Conclusions and Implications for Policy.
The case histories are provided in their entirety in a separate volume.