VII. CONCLUSIONS AND IMPLICATIONS FOR POLICY

A. A Word of Caution About Stakeholder Processes

As in other studies (e.g., English et al., 1993), this report has distinguished "community" from "stakeholder" involvement processes (see Sections IIA-4 and IIIB). We have defined *community* to include individuals, groups, or small business owners affected more or less *personally* by the contamination, either directly or indirectly. Defined in this way, the community may constitute one or more groups of stakeholders in any stakeholder process. However, stakeholder involvement processes are not limited to members of the affected community. They may include other stakeholders, such as government regulators, agency officials, cleanup contractors, developers, investors, PRPs, corporate officials, others involved in remediating and revitalizing a contaminated area, and members of the public with a more generalized concern in protecting the natural environment, other species, and the interests of future generations.

Some may disagree with the community/stakeholder distinction or wonder why we have given it such importance in this report. Although we are not wedded to particular terms, we find such a distinction both relevant and critical to public participation processes. As currently defined and operationalized by government agencies, stakeholder involvement processes seek to assemble representatives of different interests or "stakes" in the contamination problem, which may vary significantly. One of our concerns is that the level of power and influence such stakeholders bring to the table also varies significantly. Clearly, government and agency officials, developers and investors, many PRPs, and the corporate business community have many more resources at their disposal -- including that vital resource of >access to other powerful interests '. While national environmental groups may also have some resources and a degree of influence, the grassroots groups in the contaminated community generally do not. Nor do members of these community groups usually have the time or experience to participate as equal partners in a stakeholder process. Small business owners in the community may have similar constraints. Although these individuals and groups are the ones most likely to be directly (adversely) affected by the contamination, the imbalance of power among the stakeholders may severely limit their ability to protect their interests through influence on the decision-making process.

We have a strong interest in furthering fairness and justice for the most affected members of contaminated communities. In many, but not all cases, the most affected are also the least powerful and most socially disadvantaged members of the community. For this reason, we view the current popularity of stakeholder involvement processes with some concern. As noted earlier, we recognize the value of these processes and are not opposed to them *per se*. Indeed, many of the stakeholder processes operating in our study communities had performed quite well. We do, however, urge caution. An over-reliance on stakeholder processes may limit efforts to

initiate or utilize other more *community*-focused processes. This, in turn, could further disempower the most affected segments of the community and contribute to the entrenchment of the existing power structure in the community.

In this regards, we suggest that public meetings continue to provide important opportunities for the community to voice its concerns, suggest options, and express its views and preferences for addressing health risks, remediating the contaminated area, and planning for revitalization and redevelopment. Although they have their own set of problems, public meetings have important advantages not duplicated by other community and stakeholder involvement mechanisms. Indeed, many of the stakeholder processes found in our cases utilized public meetings to reach the larger community.

B. Who Speaks for the Community?

This issue is closely related to the discussion above. Identifying the affected community is not necessarily an easy task. Pollution plumes may not have distinct boundaries, and persons living clearly outside the contaminated areas may also be affected indirectly. Therefore, site contamination boundaries may not be dispositive of the definition of the affected community. Local government is, of course, a major player in most of the sites -- and properly represents broader community interests. The broadness of this interest encompasses not only *who* is affected, but also the wide *variety of effects* on the larger community. This is because local government has a concern, even if not a responsibility, for health, environment, and economic welfare in its communities. At the same time, the residents within the contaminated areas are especially important. Not only is their health the most likely to be at risk, but they are the most likely to experience the disruption and the economic impacts often associated with contamination and cleanup. In our study communities, we find the interplay between local government and community residents as representing the "voice of the community."

Moreover, it is not clear who really represents the silent, uninvolved, but affected members of the community -- sometimes constituting the majority of residents in contaminated communities. Local government may claim that it speaks for everyone, but low participation of residents in elections, or the presence of a heterogeneous community, brings this assertion into question. Whether the most vocal and activist members of the community speak for the others has been called into question. Clearly, it depends on both the extent to which their interests are consonant with the interests of the silent majority, and the extent to which community activists think about the broader community when they argue for a particular point of view and specific solutions.

Thus, the answer to this question is not clear. Creative and proactive approaches for reaching and involving the unrepresented, inactive, and silent members of contaminated communities are sorely needed. Even when developed, there is unlikely to be one best method. Until that time, agencies involved in public participation must look beyond the

standard set of stakeholders and be informed by the context of each specific circumstance.

Closely related to the question of who speaks for the community is the operational question of who chooses the participants for public participation activities. English et al. (1993) discuss four different types of representation: (1) by election (formal political representation); (2) by appointment (ascriptive representation); (3) by choosing participants with shared characteristics (descriptive representation); or (4) by choosing participants based on particular perspectives and views (substantive representation). The first method is used predominantly by local governments, but it may also be used by separate constituencies to select spokespersons for participation in activities intended to represent a variety of views (substantive representation).

In our study communities, we find other combinations of choice options as well, e.g., the appointment of initial participants and election or appointment by them of others. Already mentioned is the dilemma of having too small or large a group, the former possibly leaving out important voices and latter possibly overwhelming minority voices by the sheer numbers of others. Even if participants are chosen according to a substantive representational model, there is no guarantee that they will continue to be accountable to their constituencies. They may begin to function in the broader shared interests of the community. No prescriptive formula emerges here; what is "best" is context (site) specific. Agencies and communities need to be conscious of the issues surrounding the questions of who speaks and who chooses.

C. Reflections on Community Satisfaction and the Role of Government at Contaminated Sites

Government must be cognizant of the deep frustration and anger in some of these contaminated communities -- and of their desire to be treated in an equitable and just manner, and to have their social and economic disadvantages addressed. At the same time, agencies may have legal, political, and economic constraints that impede their ability to give the community what it wants -- even if the agencies would like to do so. To the extent that the community gets very little of what it wants, it is unlikely to be satisfied with the outcome of a public participation process. In some, or perhaps many, cases, community satisfaction with the outcome can never really be achieved. This is not to say that governmental agencies should not strive to give the communities what they can. If they have faithfully acted in a trusteeship role for the community, the agencies can feel satisfied -- even in the face of articulated dissatisfaction and apparent lack of appreciation -- knowing they have done more than resolve a dispute or follow an easy pathway most in line with their narrow mission.

Discontent in contaminated communities often spreads beyond concern for health and environmental contamination when government -- especially the federal government -- has a new and visible presence in the community. This is evidenced by the quick

addition or shifting of demands within the community to include economic and social development. The federal agency may be confronted with a list of demands, priorities, and requests that tax its mandated function, training, capability, and understanding. In its public participation activities, the agency can choose to operate in one of four different modes:

- (1) It can simply focus on its own narrow mission (e.g., health, environmental cleanup) and try to give the community what it can in these areas, without much discussion of other issues. This will necessarily be inadequate from the community's perspective.
- (2) It can acknowledge and/or discuss the broader issues with the community, but try to persuade the community that it should focus on addressing the health and/or contamination issues in the best possible way.
- (3) It can serve as a forum for community dialogue on broader social and economic concerns, perhaps providing suggestions on where or how the community might get help with these issues.
- (4) It can operate more in a trustee capacity and actually facilitate or broker the broader concerns of the community as much as possible.¹

In some of our study cases, the community stepped outside the agency participatory process and used the political structures of local, state, and federal government to bring more widely defined governmental attention and authority into the picture. If the use of participatory processes by public health/environmental agencies in the community facilitates a greater use of political institutions, in one sense, the process could be viewed as a success.

The agency cannot be committed to promoting shared decision making if it is not prepared to depart (at least in discussion) from its narrowly focused mission and entrenched bureaucratic structures and processes. Shared decision making means that the community is free to set or change the agenda and to prioritize its needs and interventions to address those needs. While trying to be responsive to shifting or broadening community needs and priorities may be frustrating and not in line with the agencies 'specific objectives, narrowing the scope of activity to issues articulated in legal or bureaucratic mandates will not generally give the community a sense of meaningful participation or shared decision making. Thus, putting into place a process to democratize community concerns may not completely satisfy either the agency or the

¹ See Section VII-D below on the Brownfields Initiative whose purpose is to meld health, safety, and redevelopment/revitalization concerns.

community. Nonetheless, it could be deemed a success if its sets into motion other initiatives that begin to address the communities' priorities. For example, cleanup and remediation efforts may never create enough jobs to spur the development needed by the community. However, new community or local government efforts to achieve these goals may advance the democratization of the political process. This, in turn, may create the pathway to addressing justice, fairness, and equal educational and economic opportunity more in line with how the communities define environmental justice. (See the discussion below on the Brownfields Initiative, which was inspired by a need to do more for distressed communities than cleanup the pollution and waste.)

Discourse is one component of public participation. The other is power sharing. Ideally, both empowerment of the community and increased responsiveness of government could be facilitated by a realization of the complexities of government-community interactions, especially in contaminated communities with an overlay of environmental justice concerns.

D. What Contributes to Success?

1. Effective Public Participation Processes

As discussed earlier, public participation mechanisms can be used to:

- ! exchange information between and among the agency and the community and stakeholder participants
- ! influence agency decision-making by providing community and other stakeholder input, advice or recommendations
- ! provide a forum for community and stakeholder dialogue leading to shared decision-making and consensus-building
- ! build community and other stakeholder support for decisions
- ! empower communities (especially disenfranchised communities) affected by the contamination

In Section V, we discussed specific findings from the case histories concerning initiatives that (1) enhance communication, outreach, and learning in the community; (2) build skills and capacity; and (3) foster better participation in, and access to, government decisions. Here we build upon those specific findings. Although necessary elements, information and skills alone may be insufficient for effective meaningful public participation. Historically disenfranchised and economically disadvantaged communities may already have, or be able to acquire, information and skills -- perhaps with the help

of government TAG and TOSC programs. What they may lack are the resources and power to influence government decisions for any number of reasons.

We began our study with the benefit of prior research and, in the course of our field work, we expanded the list of elements we considered important and/or essential to successful public participation. In each of the case studies, we evaluated the strengths and limitations of specific public participation mechanisms in terms of such elements as: access to information, financial and intellectual resources, openness, trust and trustworthiness, accountability, respect, and acceptable balance of power (sufficient autonomy). Our cases support the importance of these factors. Some of them can be controlled or influenced by the agencies directly. Others are embedded in the social, economic, and historical fabric of the contaminated community. Prior government action or inaction, attention or inattention to the socioeconomic needs of the community may be one of many contextual factors that impact public participation efforts. The roles that federal, state, and local governments have taken in the past to protect and/or enhance the community's well-being be may especially important. At the same time, the unique social, cultural, political, and organizational mores of each community also affect public participation processes.

Here we highlight some of the factors that seemed especially important to the relative successes of the participatory processes in our study communities.

Factors That Can be Controlled or Influenced by the Agencies

- ! Agency clarity, commitment, and accountability are linked and integral to the success of public participation processes. Participants deserve to know if and how the agencies plan to incorporate their input into decisions. The credibility of the process is undermined when agencies do not respond to the public is input, suggestions, or recommendations. For this to happen, agencies themselves need to be clear about the purposes and objectives of their public participation efforts and transmit these goals early and clearly to would-be participants. Participants must understand and share in this sense of purpose or work with the agencies to redefine it. In addition, participants need an opportunity to: 1) hear why the agencies disagree with or reject their position, preferences, or recommendations; 2) clarify or re-argue their positions; and 3) debate and challenge the agency's decision.
- ! *Interaction.* From the above, it follows that public participation is an interactive exercise. It must involve communication, dialogue, and interaction -- between

² Even in cases where government has made it clear that it will make the final decision, the more it creates and utilizes channels of communication, the more likely it is to create *expectations* that the community will get what it wants in the end. This irony can not be avoided easily.

the agency and the community and among the various participants/stakeholders.

- ! Deployment of responsibility. Agencies'commitment and accountability to public participation processes can be revealed and demonstrated by the level of personnel involved in the process. Community members want access to agency decision-makers; they want to interact with agency personnel who have the authority and power to make or significantly influence agency decisions. It is a mistake for the agencies to devolve responsibility to their community involvement or public relations staff. Top-level commitment has to be reiterated, especially when there is a turnover of agency staff or spokespersons who interface with the community and stakeholders.
- ! Diversity of mechanisms. Our cases clearly demonstrate the importance of viewing public participation as a process. In our study communities, public participation involved the complementary use of different mechanisms -- some that enhanced communication, dialogue, and education; some that built skills and capacity; some that provided opportunity for continuous learning and the development of shared values; and some that involved the communities and/or stakeholders in decision making. A diversity of mechanisms can also help address the differential interests within the community -- creating opportunities for those with an interest in technical and scientific issues, as well those whose interests are more policy-focused or general in nature. In our communities, the overall process was often iterative and intensive. Designing a process of mechanisms that complement and build upon each other is probably more of an art form than a science. Understanding the complexity of interactions among the public, the community, and the stakeholders is a first step.
- ! Broad representation and diversity of views. Both agencies and communities generally emphasized the importance of creating mechanisms that were both inclusive and diverse. Community members and participant stakeholders were often critical of mechanisms that left out or effectively muted the voices of certain segments of the affected community. Resource constraints, ease of implementation, and efficiency concerns often limit participation in any one mechanism. However, it is important that the full range of community views, interests, and values find their way into the process as a whole. Without careful attention to inclusiveness and diversity, community involvement and stakeholder processes can easily reproduce and reinforce the existing power imbalances in a community.
- ! Trust-building and Mutual Respect. When communities have lost trust in public institutions because of past failures to address or even acknowledge their problems, the agencies involved in environmental contamination and related public participation activities face formidable hurdles in the community. Constructive dialogue is difficult when parties mistrust each other. In these

cases, the agencies will need to make special and focused efforts to rebuild trust and to demonstrate to the community that they intend to operate in a trustworthy manner. Agency responsiveness to community concerns and accountability to its participatory mechanisms can help. *Respect* for different viewpoints and values is also crucial -- especially for participants representing groups who perceive they have been treated unjustly or unfairly in the past. Respect for anecdotal information and non-scientific contributions is also important.

! A Broad View. Economically disadvantaged communities and communities that have suffered disproportionate environmental impacts often define their contamination-related interests and needs broadly to include jobs, beautification, revitalization, and redevelopment. In these cases, agency public participation efforts will be more successful if the agency also is willing to take a broad view and step outside its traditional bureaucratic structure to help the community address its needs.

Community-based Factors that May Influence Success

As discussed above, agency public participation efforts occur within, and can be affected by, a host of historical, social, economic, cultural, and political factors that are context specific. The pre-existing infrastructure (e.g., existing grassroots groups) and dynamics of the community can be particularly important for public participation processes. The situation in a one-company town, for example, may be quite different from what occurs in a community with a broader industrial base. Sociocultural characteristics and economic exigencies can influence residents willingness and/or ability to participate in community/stakeholder involvement activities. Clearly, the level of community outrage, anger, and conflict can have an effect, as can the community slevel of civic involvement and prior experience with government and public participation activities. By being aware of these factors, agencies may be able to design activities that address community-specific issues, as well as tap into the community existing infrastructure to facilitate and enhance opportunities for successful public participation. Some illustrative examples from our cases follow.

! Respected community organizations and unique individuals can play important roles in public participation activities.⁵ They can help engender trust, create relationships, establish or extend networks, bridge differences, and find creative solutions to problems. Natural leaders may already exist in the community or may emerge from public involvement activities.

³ See, for example, the Saltville, TN case history.

⁴ See, for example, the South Valley case history.

⁵ See for example, the CUP program in Chattanooga and the San Jose Community Awareness Council in South Valley, Albuquerque, NM.

- ! Community cohesiveness or historical divisions (e.g, Bartlesville and Chattanooga) within a community can affect efforts to develop a shared vision for or consensus around cleanup decisions.
- ! Participatory styles matter, and participants have a differential tolerance for confrontation and conflict. This may affect the degree and diversity of public participation. ⁶
- ! Communities differ in their experience with, interest in, and ability to use broader political structures to promote their interest in dealing with contaminated sites. The communities in St. Louis, for example, were quite comfortable with using political tactics to press their case.

2. Government and Community/Stakeholder Role

⁶ See, for example, the discussion of the Health Advisory Panel and the Citizens' Sampling Committee in Rocky Flats case.

As a result of our field work and review of the literature on public participation, we came to a considered judgement that the actual and perceived role of government in public participation is crucial. Specifically, what is important is whether the government sees itself and is seen as (1) a trustee of community/stakeholder interests, or alternatively (2) as a mediator or arbitrator of conflicting interests in the community or stakeholder group. The roles adopted by the participants of community and stakeholder involvement processes are likewise important, specifically the participant dynamics that foster majoritarian or utilitarian outcomes, versus communitarian outcomes.⁷ Both sets of roles can affect the process and outcomes of public participation efforts. In other words, the role of government and the tenor of community or stakeholder participation are codeterminative of success -- which we define, in large measure, as enhancing fairness, justice, and empowerment for the most affected.

In order for the government to act in a trusteeship capacity, it must be committed to justice and fairness in the Rawlsian sense -- i.e., it must first and foremost encourage or allow those activities that provide relatively greater advantage to those individual members or groups who are relatively worse off to begin with (Rawls, 1971). Environmental justice activities in the federal agencies do operate under this rubric, but their overlap with agencies'public involvement efforts are sometimes not well integrated (but see NEJAC, 1996). In a political climate where stakeholder involvement is encouraged to legitimize conflict resolution or the parceling out of scarce agency resources, government can easily abdicate its trusteeship role in favor of a more utilitarian approach to problem solving. The result is often a continued polarization of various community groups and members.

In the past, communities that have suffered environmental injustice have not perceived government as operating their best interest. Because of this history, contaminated communities may have few expectations that the government -- federal, state, or local -- will serve as a trustee of their interests in future clean-up or economic development. Communities will try to get better treatment, perhaps their "fair share", but their cynicism will be high and their expectations low. Being newly invited to the table, the community voices representing different neighborhoods or ethnic groups are likely to look after their own interests. To the extent that certain community voices are left out, these interests may be ignored completely. Especially for so-called "environmental justice @ communities, one must not be overly critical of the community participants who

⁷ The reader is reminded of the discussion in Section II-B where we noted that a communitarian approach to conflict resolution is a process wherein the various community members or stakeholders strive to achieve the greater social good rather than maximize their own benefit, thereby transcending individual interests. We emphasized the distinction between a consensus reached by majoritarian processes (where the political majority gets what it wants, thereby approximating maximum collective utility), and a communitarian approach using normative processes, in which citizens and others stakeholders are willing to sacrifice self-interest on behalf of longer-term and more far-reaching societal goals.

focus on their own interests or the interests of their group. While the processes of community or stakeholder involvement may eventually transform community players from stakeholders striking a bargain or playing a utilitarian game, to being concerned with broader interests in the community, this takes time to evolve (Laird, 1993) and is not likely to begin until significant injustices are addressed or acknowledged.

To the extent that government sees and presents itself as a convener or mediator of opposing interests, government itself may foster utilitarian, rather than communitarian values and outcomes. Conversely, where government presents itself as a guardian of the disadvantaged, community participation mechanisms that protect minority views and interests by addressing imbalances of power are encouraged. The community members themselves may step out of their roles as representatives of narrow community interests, and address issues of fairness on a broader scale. Thus, vehicles for public participation and stakeholder involvement must be seen within this broader perspective in order to gauge their accomplishments.

Federal agencies do not have a long history of working together on specific issues. When it comes to problems at a particular site, pre-existing relations among them are largely absent. Each agency has to worry about how it is perceived by the community, how to participate in the allocation of responsibilities across agencies, and how to interact with local and state entities. With these major preoccupations, engaging in Rawlsian democracy is probably not high on their list. With the officials of the involved agencies differing from site to site, consistency or a uniform approach can hardly be expected.

As discussed above, the outcomes of interactions of governmental agencies and the public depend on the roles adopted by each. These interactions are represented by the numbered cells in Tables 7-1 and 7-2. For the government, we distinguish two roles: (1) the government acting as a *trustee* who makes the decisions after substantial and meaningful community or stakeholder input, and (2) the government acting as a *facilitator* of consensus/dispute resolution within the community or among the stakeholders. For the community, we distinguish the *participating community*, i.e., those actively involved in public participation efforts, from the *larger affected community*, which includes the non-participants, as well. A similar distinction is made for participating stakeholders and the larger body politic.

Table 7-1 (cells \neg to \Leftrightarrow) deals with *community involvement*, while Table 7-2 (cells \Leftarrow to \Downarrow) describes *stakeholder involvement*. Mechanisms for both operated in our study sites.

Community Involvement Processes (Table 7-1)

The first row of Table 7-1 shows the government adopting the role of a trustee/decision maker for the affected community. Two situations can arise: (1) where the affected

community (the intended beneficiaries of government action) is taken to mean the interests represented by the participating members of the community only (cell \neg) and (2) where the affected community is taken to mean the community at large, even if they are not present and participating (cell \land). The former promotes utilitarian solutions among those community members who participate, the latter communitarian ones.

In the second row, the government acts as a facilitator of compromise or consensus. It operates by either implementing the compromise/consensus reached by the participating community members voting their self-interests (cell \lor) or it can implement a normative consensus reached by the community participants on behalf of the larger affected community (cell \Leftrightarrow). Again, the former promotes utilitarian solutions, the latter communitarian ones.

The above discussion suggests the following. If what is desired are decisions that benefit the larger community (both participating and non-participating), this can be achieved either by government assuming the role of the trustee/decision-maker for the larger affected community (cell \land) or by government facilitating an idealized community participation process (cell \Leftrightarrow). This is especially appropriate in environmental justice communities.

In contrast, if the participating community members are not able or in a position to think beyond their narrow self-interests, community participation mechanisms will leave them most satisfied if either the government facilitates giving them what they want through meaningful participation (cell \vee) or if the government uses its authority to bring this about (cell \neg). If the community members that actively participate do not adequately represent the interests of the most adversely affected and/or least advantaged residents, these latter two outcomes should not be considered an unqualified success, even if the process is non-contentious and the participating community is satisfied -- because the interests of the unrepresented members of the community may not be served.

Of course, community involvement mechanisms remain essential even where government acts as a trustee/decision maker. These processes provide the government with the *information* it needs about community problems, preferences, priorities, and values so that it can make informed decisions and begin to empower and build capacity in the community at the same time.

While we have constructed a somewhat clear delineation between (1) government acting as a facilitator and (2) government acting as an decision-maker [with adequate and meaningful public participation], the line is not always so well-defined or clear to either the government or to the participating community -- especially when the actors have not given thought to their respective purposes or roles for engaging in community participation. Even in cases where government has made it clear that it will make the final decision, the more it opens up lines of communication and listens attentively to the

community, the more likely it is that government will create the *expectation* on the part of the participating community members that they will get what they want in the end. When the government makes decisions that fail to live up to community expectations, the government may judge community participation to have been a success, while the community considers it to be less so — or perhaps even a failure.

Table 7-1. Types and Outcomes of Interactions Between the Government and the Community Participants

COMMUNITY POSTURE

GOVERNMENT 'S ROLE	UTILITARIAN (Competing interests)	COMMUNITARIAN (Promoting the 'greater good')	
AS A TRUSTEE FOR THE AFFECTED COMMUNITY	Decision made by government in a trusteeship role on behalf of the <i>participating</i> community only (mirroring <i>compromise</i> of different visible community interests)	∧ Decision made by government in a trusteeship role on behalf of the community (mirroring a normative consensus, possibly expanded to benefit the larger non-participating community as well)	
AS A FACILITATOR OF CONSENSUS WITHIN THE AFFECTED COMMUNITY	 Community participation processes reaching a consensus or compromise among the participating community members 	⇔ Idealized community participation processes reaching <i>normative</i> consensus, possibly expanded to benefit the larger non-participating community as well	

Stakeholder Involvement Processes (Table 7-2)

The first row of Table 7-2 shows the government adopting the role of an trustee/decision maker for the *stakeholders*. Two situations can arise: (1) where the intended beneficiaries of government action are the participating stakeholders only (cell ←) and (2) where the stakeholders of interest are taken to mean the stakeholders at large, even if they are not present and participating (cell ↑). The former promotes utilitarian solutions, the latter communitarian ones.

In the second row, the government acts as a facilitator of compromise or consensus. It operates by either implementing the compromise/consensus reached by the participating stakeholders voting their self-interests (cell \Rightarrow) or it can implement a normative consensus reached by the stakeholder participants on behalf of the larger stakeholder community (cell \Downarrow). Again, the former promotes utilitarian solutions, the latter communitarian ones.

The above discussion implies the following. If what is desired is reaching decisions that benefit the larger group of stakeholders (both participating and non-participating), this can be achieved either by government adopting a role as an trustee/decision-maker for the larger group of stakeholders (cell \Uparrow) or through an idealized stakeholder involvement process facilitated by government (cell \Downarrow). This is especially appropriate in environmental justice communities.

On the other hand, if the participating stakeholders are able or not in a position to think beyond their narrow self-interests, stakeholder involvement processes will leave them most satisfied if either the government facilitates giving them what they want through meaningful participation in reaching compromises or resolving disputes (cell \Rightarrow) or if the government serves as a trustee for their interests (cell \Leftarrow).

If the stakeholders that actively participate do not adequately address the interests and needs of the most adversely affected and/or least advantaged members of the *community*, none of the processes in Table 7-2 should be considered an unqualified success, even they are non-contentious and the participating stakeholders are satisfied.

A variant on the government acting in a trusteeship role has been operating at some DOE sites (Pickett ,1997). Here the government (often through academic researchers without close community ties) surveys the stakeholders about their feelings (i.e., values) concerning contamination and cleanup, and then by itself designs the solutions, supposedly faithful to the revelation of stakeholder values. This follows a rational-science basis for decision making about a site, but not surprisingly often leaves the most affected citizens, and the contractor as well, dissatisfied with the result. In our view, this variant can not be called, or be a substitute for, meaningful participation and shared decision making.

Table 7-2. Types And Outcomes of Interactions Between The Government and Stakeholders

STAKEHOLDER POSTURE

GOVERNMENT 'S ROLE	UTILITARIAN (Competing interests)	COMMUNITARIAN (Promoting the 'greater good')	
AS A TRUSTEE FOR THE AFFECTED STAKEHOLDERS	□ Decision made by government in a trusteeship role on behalf of all the participating stakeholders	↑ Decision made by government in a Trusteeship role on behalf of the stakeholders (mirroring a normative consensus, possibly expanded to benefit the larger non-participating public as well)	
AS A FACILITATOR OF UTILITARIAN or MAJORITARIAN CONSENSUS, OR ALTERNATIVE DISPUTE RESOLUTION AMONG THE STAKEHOLDERS	⇒ Stakeholder involvement processes reaching a consensus or compromise among the participating stakeholders	↓ Idealized stakeholder involvement processes reaching normative consensus, possibly expanded to benefit the larger non-participating public as well	

In Tables 7-3 and 7-4, we provide illustrative examples of mechanisms operating in our study communities and categorize them according to their nature as government-community or government-stakeholder involvement processes, respectively. As can been seen from those tables, and from Table 5-3 in Section V, most *structured* public participation mechanisms in our study cases are stakeholder involvement processes. However, both community involvement and stakeholder processes were present, if only in the form of unstructured meetings (including the "Summits"). These meetings turned out to be important mechanisms for community participation in many of the communities.

As already discussed, community involvement mechanisms and stakeholder involvement mechanisms serve different purposes and are appropriate in different instances. One is not a clear substitute for the other. Theoretically, both can be used to empower and educate, but with different effectiveness depending on the community and the context. What is important is the public participation mechanisms be utilized with deliberation and forethought, paying special attention to the best way to achieve procedural fairness, procedural competence, and optimal outcome as discussed earlier.

This will necessarily involve a variety of complementary mechanisms, utilizing both community and stakeholder involvement processes.

TABLE 7-3: Examples of Community Involvement Mechanisms

Nature of government-community involvement	Examples from the cases
Decision made by government in a trusteeship role on behalf of the participating community only (mirroring compromise of different visible community interests)	
 Community participation processes reaching a consensus or compromise among 	Select Oversight Com (Bartlesville)
the participating community	Citizens ¹ Sampling Com (Rocky Flats)
	Summit II (Rocky Flats)
∧ Decision made by government in a trusteeship role on behalf of the community (mirroring a normative consensus, possibly expanded to benefit the larger non- participating community as well)	A variety of public meetings
⇔ Idealized community participation processes reaching <i>normative</i> consensus, possibly expanded to benefit the larger non- participating community as well	

TABLE 7-4: Examples of Stakeholder Involvement Mechanisms

Nature of Government-Stakeholder Involvement	Examples from the Cases
□ Decision made by government in a trusteeship role on behalf of all the participating stakeholders	CAB (Sandia, Albuquerque) CAB (Rocky Flats)
⇒ Idealized stakeholder involvement processes reaching <i>a consensus or compromise</i> among the <i>participating</i> stakeholders	Design Review Com (So. Valley, Albuquerque) Summit (So. Valley, Albuquerque) Task Force (St. Louis)
↑ Decision made by government in a trusteeship role on behalf of the stakeholders (mirroring a normative consensus, possibly expanded to benefit the larger non-participating public as well)	FSWUG (Rocky Flats) Saltville Team
↓ Idealized stakeholder involvement processes reaching a <i>normative</i> consensus, possibly expanded to benefit the larger non-participating public as well	RFLII (Rocky Flats) Bartlesville Coalition

E. Possible Relevance of the Research to the Brownfields Initiatives

In several of our cases, some forces in the community felt very strongly about not having their site listed as an NPL site. The stigma of a community being labeled a Superfund site and the prospect of liability for future cleanup are commonly regarded as major factors discouraging businesses from locating in the community. As we have seen, many of these communities find themselves in a distressed economic state to begin with. Because of the sometimes desperate nature of these impoverished communities, the case histories often illustrate that there is a shift from concern about health and environment *per se*, to interest in and demand for economic (re)development and revitalization, including opportunities for employment. Indeed the term environmental justice is construed broadly to include the need for the enhancement of welfare in its most expansive sense. It must also be noted that the community often seems to have made a strategic choice between demanding cleanup and demanding

economic development. Interestingly, dangling the carrot of providing the community with jobs involving the handling and removal of hazardous chemicals or waste as a result of cleanup activities, is not the kind of placating gesture the community is likely to be ultimately satisfied with. In communities that perceive themselves victims of environmental injustice, it will not be sufficient to offer only cleanup jobs, which may be seen as "adding insult to injury."

The EPA Brownfields Initiative began in FY 1993 as the Brownfield Economic Redevelopment Initiative. It is intended "to empower States, communities, and other stakeholders in economic redevelopment to work together in a timely fashion to prevent, assess, safely clean up and sustainably reuse Brownfields" (EPA, 1997a). Brownfields "are an abandoned, idled, or under-used industrial and commercial properties where real or perceived [chemical] contamination complicates expansion or redevelopment" and a site which has *not* been listed on the NPL list (EPA 1997b). Businesses formerly at or near the site may have chosen to locate in uncontaminated areas, often outside of urban areas, known as greenfields. The Brownfields Initiatives have been established to reverse that trend. The Preamble to the Brownfields National Partnership Action Agenda states:

Environmental cleanup should be a building block to economic development, not a stumbling block. Restoring contaminated property must go hand-in-hand with bringing vitality back to a community (EPA, 1997b).

The four key activities for returning Brownfields to productive reuse in EPA 's 1995 Action Agenda were:

- ! awarding Brownfields Assessment Demonstration Pilots
- ! clarifying liability and cleanup issues
- ! building partnerships with all Brownfields stakeholders
- ! fostering local workforce development and job training initiatives

By 1997, EPA saw four broad phases in the Brownfields process: community planning, assessment and cleanup, redevelopment support, and sustainable reuse. EPA will partner with the Departments of Defense, Agriculture, Commerce, Transportation, Housing and Urban Development, Education, and Health and Human Services, as well as with ATSDR and NACCHO. Under the Administration-proposed, but unapproved, budgets for FY 97 and FY 98, twenty Brownfield pilots in urban and rural Empowerment Zones (EZs) and eighty Enterprise Communities (ECs) were to be funded at levels of up

⁸ For a good discussion of the future uses of contaminated sites written before the establishment of the Brownfields Initiative, see English et al.1993.

to \$75 million and \$3 million each, respectively, for each of three years from all partnering agencies.

In March 1998, the GAO issued a report on progress from FY 1993 onwards, focusing specifically on two categories of activity funded by EPA: (1) outreach, technical assistance, and research and (2) job retraining. EPA is spending most of the \$126 million it allotted for Brownfield activities (\$37.5 in FY 1997 and \$88.5 in FY 1998) to help state, local, and tribal governments build their capacities to revitalize Brownfields (GAO, 1998). Most of the money goes to site assessment, state voluntary cleanup, and related activities. In FY 97 and 98, 1% and 7% of the money was allocated to job training. It seems, then, that setting the stage for businesses to re-enter Brownfield communities characterizes most of the EPA-funded initiative. Whether economic redevelopment and job creation in Brownfield communities will really occur remains to be seen.

However, if and when sufficient resources are put into contaminated communities, the dynamics within these communities may depart from those investigated in our study. When community residents no longer have to make a Hobson's choice between reducing environmental/health risks and furthering community development, things may be different.

F. Final Reflections and Commentary

Our purpose in undertaking this research was not to foster less-acerbic conflict resolution *per se*, but rather to promote distributive justice through identifying ways to improve mechanisms for community involvement and for better performance of government as a trustee of the environment, public health, and basic rights. In this context, we gave particular attention to furthering: (1) government 's role as trustee vs. arbitrator/mediator, (2) communitarian rather than utilitarian outcomes within the community, (3) mechanisms for continuing empowerment, learning, and change through community participation, and (4) environmental justice/protection of minority interests. We grappled with constructing measures of success that reflected these concerns.

Both our earlier work (Ashford et al., 1991) and the work of others (e.g., National Research Council, 1996) have suggested the importance of early public/stakeholder involvement in contaminated communities, as well as continued involvement throughout. Despite the general success of the public participation processes in our study communities, most became involved fairly late in the overall process. They did not usually participate in the early characterization of the site when decisions were made about what to monitor, what study design to use, and who should carry out the studies. They also had little influence on the choice of cleanup/remediation contractor. Nonetheless, the agencies were often able to reverse a "rocky start"and sometimes turn the process around. In many cases, the communities were able to exert some influence on the decision-making process.

It deserves emphasizing that some avenues for empowerment were not utilized to the extent they might have been. For example, communities did not attempt to influence the choice of the site cleanup/remediation contractor, or who occupied crucial leadership positions in their communities, such as the site manager, other on-site agency personnel, or independent experts/designated coordinators. This is additional evidence that public participation is a learning process for the communities and the agencies, both of which have essentially been feeling their way along without recognizing the all options open to them and the opportunities available for better cooperation. This research was undertaken to assist the government, the community, and other stakeholders in the improvement of participatory processes.