CHAPTER ONE

CITIZENS, INSTITUTIONS, AND THE CONSTRUCTION OF ENVIRONMENTAL POLICY

When Congress began passing environmental regulations that mandated public involvement in approving environmental policies, citizens legally became an important component in the decisions of environmental management. The National Environmental Policy Act (NEPA) passed in 1969, and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) passed in 1980, for example, mandate that the public be notified and allowed to respond to any remediation plan before it is adopted. Risk communication evolved out of the legislated need of risk assessors to gain public acceptance for policies grounded in risk assessment methodologies and generally came to be defined as "any purposeful exchange of scientific information between interested parties regarding health or environmental risks" (Covello, Sandman, & Slovic, 1988). Conflicts began to arise between the quantitative approach to risk assessment and the public's perceptions of risk. Risk assessment, according to Plough and Krimsky (1988), is the characterization of potential adverse health effects based on an evaluation of results of epidemiologic, toxicologic, and environmental research. As a result of the conflicts, experts in risk assessment and management worked to design models for explaining risk to the public. A problem with these models is that too many have been arhetorical—typically decontextualizing risks, failing to consider the knowledge local citizens can contribute, and striving to influence/ educate citizens in order to bring their perceptions into conformity with scientific rationale. (For examples of these models see Russell, 1986; Sandman, 1990; Slovic, 1986.) This failure to see risk (and environmental policy) as socially constructed leads to unethical and oppressive risk communication practices because the public² is denied democratic participation in the decision-making process.

For example, in August 1999, the United States Army held a public meeting to inform local residents of Newport, Indiana, about the technology chosen to destroy 1, 269 tons of VX nerve agent—the deadliest substance known—onsite at the Newport Chemical Depot. Using a technology called "supercritical water oxidation," the VX nerve agent would be neutralized, and the remaining effluent from the neutralized agent would be dumped into the nearby Wabash River. Representatives from the Army and the subcontractor hired to dispose of the VX agent stood by posters describing the disposal process. A number of local residents and other concerned citizens walked around tables littered with information maintaining the safety of the disposal process. At this meeting I met a representative from the Army who asked if I had any questions about the disposal process. When I asked if this process had been implemented elsewhere, she replied, "You aren't from here are you? None of the other citizens around here have asked that question." When I commented that I was not from Newport but was interested in the ways in which the public participated in policy decisions, she told me that public participation in technical decisions such as this "goes against [her] way of thinking." Acknowledging that such response was required, she wanted to tell me of an idea the Army was implementing in which local residents were invited to a roundtable with two Army representatives familiar with the events at the Newport Chemical Depot. At this roundtable discussion, the residents were given free pizza and allowed to vent their concerns. "So that the residents don't feel intimidated," she reported, "their responses aren't written down; they are completely off the record." Her intention for public participation may have been sincere, but to her it made little difference whether public comments were factored into a decision as long as the public was allowed to comment. When I asked how the decision makers learned of the citizens' concerns and feedback, she told me that was not the purpose of the meeting.

Such an approach to public participation is not uncommon in environmental policy debates. This book examines both historical and firsthand accounts of risk communication and public participation practices as a way to examine how public participation is currently defined and practiced by institutions and subsequently, how citizens are positioned in the decision-making process. These accounts show that the citizens' status is most often marked by low interaction with the technical experts as well as little power in influencing the final policy. These examples illustrate that public participation practices focused on either (1) bombarding the public with a one-way flow of information in an effort to bring their perceptions about an issue into conformity with the technical experts or (2) holding public meetings and allowing public comments that attempt to placate publics, but that do not influence the final policy. According to the cases examined, publics often react, not to the technology chosen but to not being involved in the deci-

sion-making process. These cases suggest that current models of risk communication and public participation are ineffective for involving the public in the decision-making process in ethical and significant ways.

THE COMPLEXITIES OF CIVIC DISCOURSE IN POLICY DECISIONS

Most risk researchers acknowledge the need to involve the public more significantly in the decisions of risk policies; however, the complex issues involved in risk assessment, governmental law, and governmental agencies present challenging obstacles to negotiating a policy that all involved parties consider just. By *just*, I mean that all affected by the decision had the ability to actively participate in the decision-making process. I draw this notion from Iris Marion Young (1990) who argues that justice is

The institutional conditions that make it possible for all to learn and use satisfying skills in socially recognized settings, to participate in decision-making, and to express their feelings, experience, and perspective on social life in contexts where others can listen... Justice... requires, however, participation in public discussion and processes of democratic decision-making. (p. 91)

Yet little work has been done to examine the institutional conditions that promote or prevent citizen participation in the decision-making process of environmental policy as a way to develop a more just approach to risk communication practices.³

This book examines the ways in which citizens are allowed to participate in decisions of environmental policy and constructs a theory of democratic and ethical public involvement for environmental policy and, subsequently, an alternative model of public participation that grants citizens more power in the decision-making process. Despite requirements that mandate public participation, citizens have very little say and almost no power to influence environmental decisions, even when it affects their own neighborhoods. Citizens have valuable knowledge to contribute to policy decisions and are capable of participating in significant ways, yet this study illustrates how institutional practices and current models of public participation exclude citizens from actively participating. This denied participation not only is unethical, but it can result in inappropriate policies—policies that do not sufficiently address community needs. When citizens believe that policies are not reflective of their local situation, environmental debates often become hostile, resulting in long-term and costly issues for the government and other involved organizations. Yet, if policies are to become more just and public participation is to become more significant in policy decisions, the process for decision making must change.

All policies are made through discourse (Rude, 2000, p. 5). Yet all policies involve technical information. Technically complex public issues complicate the traditional notion of discourse because technical experts claim ownership of the technical issues and close off public debate even though these issues affect the public in very concrete ways. As a result, a rhetoric for civic discourse in policy debates is needed.

In order to develop such a rhetoric of civic discourse for policy debates, this book uses historical accounts and a firsthand case of public participation in environmental policy to examine institutional assumptions and views of public participation in order to show the public's marginalized status in policy debates. It then investigates the level of power and degree of interaction citizens have in the decision-making process to argue that a more critical rhetoric of debates is needed to dissolve the separation of risk assessment from risk communication (or technical decisions from public discourse) and locate epistemology within the process that involves the public. Drawing in part from a range of critical theorists, I use critical in this context as a perspective that aims toward both identifying oppressive power relations and seeking to redesign or change the practices that cause the oppression (Feenberg, 1991; Foucault, 1984; Porter & Sullivan, 1997). This critical rhetoric for just policy debates must address ways to (1) identify and bring to the forefront the unequal power relations that currently work to marginalize public involvement, (2) see the public as capable of contributing useful knowledge to the decision-making process, and (3) offer ways to include the public earlier and more significantly in the decision-making process. Such a framework can offer policy makers, community groups, and rhetoricians strategies for evaluating policy debates and encouraging more active public participation. Such a participatory framework can also inform classroom pedagogy, service learning, and community-based projects.

Good policy decisions require both scientific knowledge and social justice, and an ethical framework, or approach, for decision making is needed to ensure that both are reflected in a policy (Rowan, "What Risk," p. 304). However, most current approaches to studying risk communication have not pursued such a framework. Indeed, most risk communication research concerning public participation has focused on either providing theoretical models to *predict* citizen perception/participation or describing public participation in a particular risk situation via qualitative studies. Neither of these two approaches fully addresses (1) how institutions warrant certain notions of risk communication or (2) what institutional conditions make possible certain subject positions within the social space of the risk communication process. And neither works toward developing a framework for encouraging significant participation by all involved parties.⁴

Researchers in rhetoric and composition, as well as professional writing, know little about the range of writing and communication practices in community contexts such as those required for participating in public policy

decisions. While rhetoric and professional communication courses have often included public policy writing as part of their curricula (indeed, a historical purpose of rhetoric included helping citizens participate in public discussions necessary for democratic government), there has been little inquiry into how citizens use their professional knowledge in arguing positions in the public sphere. By crossing traditional boundaries in rhetoric and composition and professional writing to include studies of civic discourse, both fields can glean a richer understanding of the everyday literacy practices necessary for collaborative decision making in the community (Sullivan, 1990). Such research could further work toward designing a curriculum that encourages our students to see the strategies they learn in composition and professional writing courses as useful for affecting social change in the work-place and the community.

This book is a first step both in addressing these gaps and in answering the call of governmental agencies for ways to better involve the public in the risk communication process. While most agencies acknowledge the need to involve citizens, they claim that they do not know how to do so. Further, working toward a more ethical approach that encourages significant public participation could ease the hostility currently present in risk communication situations and bring about more just policies.

A DIFFERENT WAY OF LOOKING AT PUBLIC PARTICIPATION IN ENVIRONMENTAL POLICY

A number of scholars have drawn on Jürgen Habermas' theory of communicative action/rationality to consider whether policy debates constitute democratic discourse (See Blyler; Dayton; Karis; Killingsworth & Palmer; Hynds and Martin; and Wells). Certainly, Habermas has contributed much to our understanding of deliberation in the public sphere. Habermas' notion of discourse ethics and his distinctions among types of communications are valuable for identifying common approaches to public involvement in policy decisions. For example, his concept of strategic action as a manipulative attempt to coerce others (Moral Consciousness, p. 58) and his concept of instrumental rationality as an attempt by those in power to maintain the current system (Theory of Communicative Action, vol.2) can serve as markers for oppressive discourse—markers to which I will return later. And while I agree wholeheartedly with his belief that participation must occur early in the decision-making process in order to avoid coercion, I see his system of rational discourse for enabling citizens to affect policy decisions as limited in two ways. First, his belief that rules for discourse are universal seem to me to discount the influence of the social context of a particular situation that often result in unequal power relations and opportunities for participation. (See also Hauser, 1999; Porter, 1998; Grabill and Simmons, 1998 for critiques of Habermas' universal norms.) The idea that everyone capable of speech has an equal opportunity to participate in deliberations seems optimistic. In environmental public debates, the local citizen is rarely discussing her concerns on an equal playing field with the "technical expert." Habermas himself acknowledges that a "technocratic consciousness" (*Toward*, 105–115) may preclude public and democratic deliberation on scientific issues. Some scholars have questioned then whether the public can influence debates on technical and scientific issues (Blyler; Parks). Drawing from Habermas, Parks (1993) maintains: "[t]hose who command expert knowledge also dominate any debate concerning issues of public interest because the noninitiated are unable to enter the scientized universe of discourse, as they lack the technical terminology and specialized language of argumentation" (7). Yet, a framework for evaluating public debates that questions the very possibility seems limited.

Second, his criteria for communicative action—for evaluating norms of validity (e.g., truth, sincerity, comprehensibility, and appropriateness) (Communication, 118) seem inadequate for going beyond mutual understanding to seek places where change is possible and to understand what strategies might encourage more access to and influence in the decision-making process. It is identifying these spaces where change is possible that is likely to enable real public influence on policy issues. Perhaps, then, we need to expand the framework for evaluating public deliberation in policy debates to include a closer look at the local situation and the unequal power relations in debates of technical and scientific policy issues.

Rather than a strictly Habermasian approach that assumes the ideal speech communication ("the communication of equals who attempt to understand each other") as normative (qtd in Blyler, 1994, p. 127; see also Wells), an approach that incorporates institutional critique to focus on the unequal power relations in local settings and has as its goal finding ways to dismantle that inequality seems useful for policy debates where control and power are often points of contention among stakeholders.

All participation is not equal—encouraging citizens to contribute knowledge about how a policy will affect their community at the onset of a decision-making process is quite different from allowing citizens to respond to policies already determined. While the former represents an approach that sees policies as socially constructed by groups that value the contributions that each can make to the decision-making process, the latter represents a more common approach that sees the public as an entity to be managed and educated by the experts, not capable of contributing significantly to the development of the policy. Democratic participation—the kind of participation required for just policies—occurs only when all affected parties have both the access and the ability to *actively* participate in the decision-making process (Young, 1990, p. 91). Democratic participation cannot occur, Young maintains, if there is an unequal distribution of power or privilege granted to particular groups. This unequal distribution of power is often visible in risk communi-

cation practices when health experts or government agencies determine the risk policy and involve citizens only to the point of allowing them to respond to their decision as illustrated in the opening example. According to Young, a policy or decision can only be considered just when "it has been arrived at by a public which has truly promoted the free expression of all needs and points of view. Tyrannized publics, publics manipulated by officials, and media publics with little access to information and communication do not satisfy this requirement" (1990, p. 92). Young describes these tyrannized and manipulated publics as oppressed in that they are inhibited by institutional conditions from participating in decisions that affect their lives.

Oppression, she argues, has five faces, but one face, powerlessness, seems especially appropriate for discussions of public participation in environmental policy decisions. According to Young, the powerless lack the "technical expertise, authority . . . and status" needed to participate directly in decisions that affect their lives (pp. 56–57). Further, she notes,

direct participation in public policy is rare, and policy implementation is for the most part hierarchical, imposing rules on bureaucrats and citizens. Thus most people in these societies do not regularly participate in making decisions that affect the conditions of their lives and actions, and in this sense, most people lack significant power. (1990, p. 56)

It is only when oppressed groups are able to "express their interests and experience in the public on an equal basis with other groups" that decision-making processes can be considered ethical (p. 95). It is important to begin a discussion of ethical decision making with an explanation of power if our goals are to identify oppressive situations within institutions and to frame less oppressive processes as a response. I argue, then, that if we hope to change the unequal distribution of power in risk communication practices, we must examine the ways in which power is exercised in environmental public policy decisions. But how, then, can the exercise of power be examined?

John Gaventa (1980), in his study of why Appalachian coal miners often chose not to rebel or challenge their domination by coal companies, asserts that participation or nonparticipation in the decision-making process is determined almost exclusively by the exercise of power. Drawing from theorists Freire, Bachrach, and Baratz, Gaventa asserts that "power is exercised not just upon participants within the decision-making process but also towards the exclusion of certain participants and issues altogether" (p. 9). Like Young, Gaventa categorizes the powerless as those who are excluded from participating, or from discussing issues of interest to them, in the decision-making process. He argues that studies of policy must include studies of power, specifically in terms of "who gets what, when, and how and who gets left out, and how the two are interrelated" (p. 9). And power, he maintains,

"may be studied by examining who participates, who gains and loses, and who prevails in decision making" (p. 5). Gaventa's emphasis on who is left out is an important issue here. By examining who was "invited" to the discussions, that is, who was alerted to the meeting times and places of the policy discussions, we can see who was excluded from the beginning by the institutions arranging the decision making. Drawing on Gaventa's assertion that power is exercised by the exclusion of certain participants and issues, we can see ways in which certain publics are marginalized, if we focus on who is left out.

How and when members of the public are included in the decision-making process—essentially, their status as decision makers—are important factors in the decision-making process. I am especially interested in the ways in which the public's comments are reflected in the final policy. Even if citizens are allowed to comment on an environmental decision before it is implemented, if their comments, concerns, and interests are not considered in the final policy, they are still rendered powerless. By looking at cases of risk communication and public participation practices—from recent literature and from my observations—and examining who participates, who prevails, and how, in a number of situations, we can begin to discuss the relationship of power in the decisions of environmental public policy and work toward a more ethical approach to the decision-making process. Additionally, we can begin to understand the literacy practices necessary to gain agency to participate in technical yet civic issues.

As researchers in rhetoric and composition and professional writing, we are increasingly involved with projects that take us outside the academy to conduct studies and to affect positive change in the communities in which we live and work. Just as increasingly, however, we are finding that traditional approaches to empirical studies may not adequately accommodate the particular situations that exist in these communities. For example, rather than the traditional goal of producing new knowledge for the field, the primary goal of the project may be to bring about change in the community as well as in the lives of the research participants. Or the project may be one that has traditionally concerned those outside academia. As a result, we must employ research methodologies that can function in the spaces between the institution and the community and still yield positive and credible results. As Sullivan and Porter (1997) note, "research methodology should not be something we apply or select so much as something we construct out of particular situations and then argue for in the write up of our studies" (p. 46). As a way to consider how the public might contribute more significantly to public policy debates, I draw on Foucault (1982) to argue that we must first recognize the power structures in place that work to prevent participation. We must also understand the discourse practices that enable resistance to those power structures by analyzing the institutions that govern the policymaking processes.

This study is historical in its examination of existing cases of public participation, empirical in its firsthand observations of how the public is allowed to participate in risk decisions at particular sites including an environmental policy decision to dispose of VX nerve agent at an Army depot, and theoretical in using these examinations and observations to suggest a framework for ethical decision making that is applicable beyond individual cases. I use multiple empirical, theoretical, and analytical approaches to critique public meetings, environmental impact statements, public records, and interviews with citizen group leaders and agency officials to examine how arguments, notions of risk, and policies were constructed in the decision to dispose of VX nerve agent at the depot. Drawing from methodological approaches including cases and institutional critique (Porter et al., 2000; Sullivan and Porter, 1997; Foucault, 1982; Fine, 1992), the design of the study is an institutional case. I see an institutional case as a way to focus on a concrete, particular environment, such as a policy decision, and I use institutional critique as a way to closely examine the practices and power of institutions within that environment. In an attempt to avoid generating totalizing, decontextualized theory, the research is situated in localized sites, including the events surrounding the decision to destroy VX nerve agent at an Army depot in Newport, Indiana.

EXAMINING POWER IN POLICY DECISIONS

An institutional case focuses on a particular environment, but with a particular focus on institutional power relations. I borrow this idea from Dorothy Smith's (1987) description of institutional ethnography as well as from Jeff Grabill's (1997) description of institutional case. Smith argues that in order to avoid the "ungrounded abstraction" of theory, inquiry must focus on the "every day life" of real individuals, activities, material conditions, and the relationship between activities and material conditions. Institutional ethnographies or cases identify "institution" as a "complex of relations forming part of the ruling apparatus, organized around a distinctive function" such as education or law (Smith, p. 160). Exploring, describing, and analyzing such a complex of relations by ethnographic methods forces us to focus on specific, real, and concrete examples of the individuals or activities that make up that institution, rather than falling prey to abstract generalizations about the function of that institution (p. 160). For example, when working with citizens involved in discussions of environmental policy, institutional ethnography may allow the researcher to discuss with these citizens why participation is not currently possible at certain points of the decisionmaking process and suggest approaches to the citizens themselves regarding ways to participate more significantly in the process. This approach seeks to avoid ungrounded abstractions and present situated examples that might serve as heuristics for risk communication and public involvement practices.

The "institutional" focus of this study involves investigating the power relations and resulting subject positions that inhibit or encourage significant citizen participation in the decisions of environmental policy. In order to change oppressive practices, change must occur at the institutional level. Michelle Fine, for example, argues that "efforts to fix people and not to change structures" often work to "reinforce the recipient's lower power position" (p. 71). Michel Foucault (1982) likewise asserts that in order to change oppressive practices, change must occur at the institutional level. If their thinking were extended to risk communication, we would expect that changing current risk communication practices requires change at the level of the institutions involved in risk communication. Institutions regulate and constrain knowledge making, production, distribution, and consumption through a system of rules and practices (Foucault, 1982; Leitch, 1992). It is the institutions, then, with their rules and practices that determine the ways in which citizens participate in the production of environmental decisions and policy. As a result, I examine the institutional forces that regulate public participation in existing cases as well as the VX nerve agent disposal decision. I focus on practices, micropolitics, and local arrangements, using discourse to examine historically and socially situated relationships in the production of knowledge, power, and ethics. This approach illuminates how these institutions work to make certain types of participation possible and others impossible (Porter et al., 2000). Foucault (1982) further argues that by critiquing institutions, we can discover ways in which power is exercised. By understanding the ways in which power is exercised, and looking for gaps in this system, we can work toward resisting, even revising, institutions. If, then, we hope to recognize and understand the conditions that make possible significant citizen participation as well as those conditions that inhibit participation, we must examine the institutions that regulate risk communication. According to Iris Marion Young (1990), the "unquestioned norms, habits, and symbols" embedded in "assumptions underlying institutional rules and the collective consequence of following those rules" often brings about injustice through domination and oppression (p. 41). These injustices, she argues, can be "rectified only by basic institutional changes" (p. 14). Institutions are dynamic, uncontained structures and as such offer the space/possibility for such change.

CRITIQUING INSTITUTIONAL RISK COMMUNICATION PRACTICES THROUGH MULTIDISCIPLINARY DISCOURSES

Applying institutional rhetorical critique involves focusing on practices, micropolitics, and local arrangements using discourse and self-reflexivity to examine historically and socially situated relationships among discursive practices in the production of systems of knowledge, power, and ethics (Foucault, Leitch, Porter et al., Young, 1990). If we hope to understand the ways in which

citizens can be granted more power in the decision-making process and inseparably, the ways in which the user knowledge that citizens have is valued, we must examine how institutions promote certain risk communication practices and how those practices come into play in the ways the public is allowed to participate in the decision-making process in a specific situation. I believe that examining the institutions involved with risk communication and environmental policy foregrounds the institutional production of knowledge about risk and reveals spaces within these systems for change. Institutions that regulate risk communication—including risk assessment, governmental law, and the Environmental Protection Agency (EPA)—all function in ways that make significant public participation difficult. The following sections illustrate ways in which each institution grants an unequal distribution of power in the decision-making process to experts, works to base policy on strictly technical issues, and decontextualizes the risk in individual communities.

Risk Assessment

Although risk assessment is a subject of research, I am interested in how risk assessment manifests itself in the regulatory agencies' required process for risk management. The very process involved in assessing a potential risk is difficult and time consuming. The uncertainties and probabilities that factor into the early stages of the risk assessment make knowing definite answers about the risk nearly impossible. In "The Nature of Risk Assessment," a National Academy of Science committee asserts that the first stage of risk assessment, hazard identification, rarely produces conclusive results about a risk:

[T]he process of determining whether exposure to an agent can cause an increase in the incidence of a health condition (cancer, birth defect, etc.) . . . involves characterizing the nature and strength of the evidence of causation. Although the question of whether a substance causes cancer or other adverse health effects is theoretically a yes-no question, there are few chemicals on which the human data are definitive. (p. 19)

Despite this level of uncertainty, risk assessors use largely quantitative models to determine the health risk posed. Often risk assessors view this number as the "true risk," and any other nontechnical issues are considered arbitrary to determining a policy. For example, Fischhoff, Watson, & Hope (1984) note that often all risk information is not valued equally: "[T]echnial experts often distinguish between 'objective' and 'subjective' risk. The former refers to the product of scientific research, primarily public health statistics, experimental studies, epidemiological surveys, and probabilistic risk analyses. The latter refers to non-expert perceptions of that research, embellished by whatever other considerations seized the public mind" (p. 131).

Governmental Law

It is important to consider how federal laws influence risk assessment procedures and consequently citizen participation. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was created in 1980 in response to citizens who wanted input into the decisions being made about environmental hazards. Ironically, because the law was intended to ensure public participation, it is this very document that justifies not bringing citizens into the process until the policy is determined. CERCLA states:

Before adoption of any plan for remedial action to be undertaken, the state shall take both of the following actions: (1) publish a notice and brief analysis of the proposed plan and make such plan available to the public. (2) Provide a reasonable opportunity for submission of written and oral comments and an opportunity for a public meeting at or near the facility at issue regarding the proposed plan. The notice and analysis published under paragraph (1) shall include sufficient information as may be necessary to provide a reasonable explanation of the proposed plan and alternative proposals considered. (42 U.S.C. section 9617 CERCLA section 117)

CERCLA mandates that after a policy has been decided, the public must be given a set time to respond before the policy is implemented. CERCLA also states that an explanation of why this policy was chosen must be provided; however, CERCLA only allows that the public be made aware of the policy *after* the decisions have been made. As a result of CERCLA, health assessors are required to address citizens' responses but are not required to integrate them into the policy.

There has been little attempt to change this in ways that would more significantly involve citizens in policy decisions, because government officials, who often view citizens as both hostile and devoid of knowledge that could inform a scientifically sound policy, argue that more significant involvement with "lay" citizens would only delay the already long and tedious policy process. This is evident not only in the CERCLA ruling but also in other government regulations mandating citizen involvement in environmental policy decisions such as the National Environmental Policy Act (NEPA) originally passed in 1969. NEPA requires that an Environmental Impact Statement (EIS) evaluating the significance of an environmental hazard and assessing the potential impacts of alternative cleanup actions be prepared and made available for public comment at least forty-five days before any action is implemented (40 C. F. R. 1500-08). Susan Mallon Ross (1996) argues that efforts to seemingly involve members of the public by making them more fully aware of an impending policy, such as distributing copies of EISs to citizens before the policy is implemented, are little more than placating measures. The "EIS process historically has dealt with public concerns in a pro forma fashion: recording and appending them, but not seriously considering them" (p. 186). Drawing from Killingsworth and Steffans (1989), Ross further argues that EISs are seen by government agencies as an attempt to defend decisions already made and to ward off lawsuits rather than an attempt to solicit citizen response (p. 179). While these governmental laws originally may have been put in place to invite citizen participation, the wording of the mandates often works to preclude anything other than the most superficial public response.

Environmental Protection Agency (EPA)

While the rules and procedures of risk assessment and governmental law work to inhibit significant participation, the practices of the EPA also can pose obstacles for citizen involvement in the decisions of public policy. The EPA's process for conducting risk communication illustrates its assumptions that knowledge and power lie with the experts. The agency's model implies a one-way flow of technical information that positions members of the public as consumers and entities to be managed. Milton Russell, an EPA administrator for policy, planning, and evaluation, characterizes the risk communication process in terms of a metaconduit model:

Let's imagine risk reduction as a consumer-driven production and distribution process. Scientists, who assess the severity of the risks, are the manufacturers. Government regulators, who make risk management decisions, are the wholesalers. And professional communicators—network and newspaper journalists—are the retailers. We government regulatory wholesalers use risk characterizations from the scientists to explain the reasons for our decision. Then journalistic retailers pick up our product on the loading dock.... [and] they present the news of the day. Based on those presentations consumers of the news decide to buy the news or not, use it or misuse it, and change their behavior or demand that public officials change theirs.... If citizens misjudge risk, their orders will still come through, and the government machines still delivers, but the results don't necessarily leave citizens better off. (qtd in Stratman, Boykin, Holmes, Laufer, & Breen, p. 10)

This model resembles, in many ways, the Shannon and Weaver model of communication where knowledge is constructed prior to communication, and miscommunication is attributed to "noise" (or irrationality) along a one-way, linear channel. Knowledge is produced separately by experts, then communicated to citizens, who are seen as end users of the policy, devoid of any knowledge that might prove useful for producing the policy itself. (Further

implications of the still prominent Shannon and Weaver model of communication are discussed in later chapters).

According to Porter (1998), communication of this type that positions the audience members as "passive receivers" of a predetermined message, and that persuades the audience to accept a predetermined point of view, is a "rhetoric of domination" (p. 94). It is only when the audience is considered capable of participating in the dialogue, and of constructing knowledge that the communication become a "rhetoric of democratization" (p. 94).

To see the transfer of information in terms of problems of knowledge, and furthermore, to see knowledge as something produced separate from audiences by a select few experts, fails to adequately conceptualize the complexity of the *construction* of knowledge in complex situations. By failing to see knowledge about a policy as socially constructed, this view positions audiences as entities to be persuaded, not as participants in the construction of policy. Further, such a view does not account for the practices of power in risk assessment and communication. In order to participate in the development of risk policies, the public must be seen as capable of contributing knowledge to the process and brought in early enough in the design phase to actually affect the policy.

Because understanding how the public is excluded from significant participation through local manifestations of risk assessment, government law and agencies may reveal a space for productive change, this book examines in more depth these institutions as well others that restrict public participation.

This case approach is a way to develop heuristics for risk communication practices by challenging the long-held belief that citizens cannot be significantly involved in the decision-making process of risk policies. The cases I investigate involve the decision-making process of a risk policy by regulatory agencies, local government, citizen activist groups, and other members of the public. I examine these cases in an attempt to understand how public participation occurred in this particular situation by questioning who participates, who is left out, who is allowed to speak, who listens, and how these voices are integrated into the resulting policy.

EXAMINING CIVIC DISCOURSE IN TECHNICAL POLICY DEBATES

While much research has been done on providing government agencies with strategies for effective communication (Morgan, 1992; Hance, Chess, & Sandman, 1991; Sandman, 1990), much less has been done with helping citizens develop those same strategies (exceptions include Cantrill 1996). Wartella (1994) asserts that "by not serving the public at large with our research we leave ourselves vulnerable to the accusation that we are wittingly or unwittingly supporting the status quo and the society's dominant institutions" (p. 58). Rather, she claims we should direct our research to the "public at large and not just to policymakers or institutional elites" in

an effort to "empower the disempowered with knowledge and understanding" (p. 59).

If we hope to respond to this call, we need to observe the decision-making process through the lens of citizens in an effort to theorize how citizens can be more significantly involved. By examining when and how citizens are allowed to become involved, when, why, and how an activist institution decides to become involved; and how governmental agencies respond to this involvement, we can locate new spaces for significant participation from all involved parties.

Power relations are more readily apparent from the perspective of the less powerful because they are the first to be denied access to decision making. Drawing from Haraway, Dautermann (1996) asserts that studying less powerful groups—those who do not necessarily occupy positions that enable them to participate in the development of policy matters—"may open our work to the counterdiscourses that also inform an institution's climate and affect the work of those more commonly studied" (p. 244). Such a perspective, she argues, may reveal class, gender, institutional power, and social interaction issues that would otherwise not be apparent (p. 243). Cantrill (1996) further asserts that the best place to observe the "discourses that oppose the dominant social paradigm" of environmental controversies is in the rhetoric of activist groups, because "small grassroots alliances may exhibit the greatest rhetorical alienation exactly because they often are marginalized by more dominant cultural groupings" (p. 168). It is impossible to know who was not allowed to participate, if you do not know who wanted to participate. While no perspective could illuminate all those who wanted to participate, a citizens' group offers a useful perspective in that regard. Focusing on the power relations that constitute specific risk communication practices and the resulting degree of participation that those practices make possible reveals much about the current decision-making processes. While I focus on the procedures and practices of the institutions regulating the decision and public participation in the decision, I look to the citizen groups to provide multiple perspectives on the process. I also consider how each citizen group's own procedures and practices played a part in the decision. I am particularly interested in how the different groups intersect and conflict in the chemical weapons disposal decision at the Newport Chemical Depot. The groups on which I focus include the state and federal agencies involved with the Newport Chemical Depot, a state-wide citizen organization, and a local citizen group in Newport.

The Newport Chemical Depot, located thirty-two miles north of Terre Haute, currently houses 1,269 tons of the nerve agent VX (*Journal and Courier*). A multinational Chemical Weapons Convention treaty requires all VX agent be destroyed by April 2007. But the U.S. Congress ban on the transportation of the nerve agent required a plan for disposing of it on site. In 1997 the Army proposed to build an onsite facility to neutralize the stored nerve agent

then discharge it into the Wabash River—but the Army's battle with area citizens over the VX disposal process began nearly ten years before. In 1988 the Army held a public meeting near the Newport Chemical Depot to inform the community that it intended to destroy the VX stockpile at Newport by incineration. Because this plan met with strong opposition from the state government, state and local citizen groups, and individuals in the Newport community, the Army eventually investigated disposal methods other than incineration. The Army proposed an alternative method of VX disposal with plans to investigate this method in an EIS and in July 1998 distributed an EIS examining the possibility of neutralization/supercritical water oxidation. It was at this point that I began attending the public meetings and gathering information regarding the environmental decision at the depot. Agencies involved with the chemical weapons disposal decision at the Newport Chemical Depot announced public meetings in local papers with statements asserting that public participation was a goal of the meetings (see appendix A). I would soon find, however, that the definition of public participation could vary widely.

The Midwest Environmental Group⁶ (MEG) is a nonprofit, statewide environmental organization that works toward alerting and educating Indiana citizens to environmental and human health concerns within the state. Based in Indianapolis, MEG brings together Indiana citizens to initiate court action against potential threats to environmental and human health. For example, MEG brought suit against an incinerator owner resulting in the owner being required to reduce the amount of toxins the incinerator releases into the air. The group solicits volunteers to participate in its activism primarily by writing letters to Congress and state legislators and attending public meetings and hearings (http://www.hec.org, 11.15.98). MEG was involved in the early stages of the chemical weapons disposal decisions at the Newport Chemical Depot but became less active after the decision to pursue disposal methods other than incineration was announced. Historically, the lack of publicity of public meetings has prohibited many citizens from even being made aware of environmental health issues and decisions. The Midwest Environmental Group, however, includes as part of its mission alerting and educating citizens about environmental health concerns in their area. A section of the MEG web site is devoted to listing information about upcoming public meetings.

It was through my discussions with MEG that I became aware of another citizen group involved in the chemical weapons disposal decision at the Newport Chemical Depot. During conversations I had with Tyler Mayes, a longtime and active member of MEG, about the Newport Chemical Depot, I learned about the Newport Citizens against Incineration. This grassroots Newport-based citizen group was comprised of between eight and ten individuals in the Newport community who took issue not only with incineration but also with not being allowed to participate in the chemical weapons

disposal decision at the Newport Chemical Depot. The Newport Citizens against Incineration also worked with, and often received support and advice from, the Chemical Weapons Working Group—a national citizen group opposing incineration of chemical weapons at U.S. Army installations.

The Newport Citizens against Incineration organized in 1988 when the Army announced to the Newport community its intentions to incinerate the VX agent stockpiled at the depot, and has remained active in the process, even now continuing to monitor the actions of the institutions overseeing the Newport Chemical Depot. The spokesperson for the group, Sybil Mowrer, provided invaluable examples of the obstacles the public faced in trying to participate in the decision-making process. Further, she was able to illuminate aspects of the decision-making process that were not documented. Mowrer's information often provides interesting points of conflict with information obtained from the federal agencies regarding the chemical weapons decision at the depot.

Theorizing a new framework for risk communication practices and environmental policy decision making requires that theory be grounded in the practices of actual communication processes. Observing the practices of multiple citizen groups and institutions within a risk communication situation provided different lenses on risk communication practices and established for me a point from where a new framework could begin. The institutions regulating the Newport Chemical Depot (the federal agencies, regulations, and programs) reveal the established procedures and practices of public participation in decisions of environmental risk. MEG focuses on the interests of an organized institution occupying the space of the public on multiple cases, while Newport Citizens against Incineration illustrate the interests and actions of a group organized for the sole purpose of opposing a particular environmental action.

While the results of this multiyear study of public participation at the Newport Chemical Depot cannot be generalized beyond that specific context, these in-depth firsthand cases, coupled with the historical cases, reveal patterns of institutional control and denied participation. Examining a range of examples through multiple methodologies can inform a framework for evaluating whether risk communication practices (and environmental policy decisions in general) actually do encourage the kind of active participation by all affected that results in just and appropriate environmental policies. While I use risk communication cases as examples of environmental decision making, I believe this project has broader relevance beyond risk communication. The examples help me to develop a theory for democratic and ethical public involvement and offer a model of public participation that grants citizens more power in decision-making processes. Yet this theory and model are applicable to other environmental issues, such as natural resources and water and land use, which include many of the same concerns with public involvement (Blyler, 1994; Cantrill, 1996; Graham, 2004; Karis, 2000; Ross, 1996). In fact, I believe the critical rhetoric approach I develop is applicable to most environmental policy decisions.

TOWARD A RHETORIC OF ETHICAL PARTICIPATION AND JUST POLICIES

A rhetoric of ethical participation and just policy debates must address ways to (1) identify and bring to the forefront the unequal power relations that currently work to marginalize public involvement, (2) see the public as capable of contributing useful knowledge to the decision-making process, and (3) offer ways to include the public earlier and more significantly in the decision-making process. Yet developing such a framework requires that we better understand the multiple ways that the multiple individuals affected by a decision engage in discourse with one another about that decision.

For some time now researchers in rhetoric and professional writing have studied communities outside the classroom. Often that research has focused on writing by one community within one institution. Yet this approach to research runs the risk of essentializing the institution with a single vision of the way writing functions in the culture. Envisioning an institution through a single lens does not leave space for locating conflicts among groups who have competing views of what writing should and could accomplish.

I want to rethink this approach to nonacademic writing research by examining how different communities perceived the ways in which public discourse affects how policy is written on chemical weapons disposal. Because the discourse each group used focused on its own expectations but did not meet the expectations of other communities, the public discourse often failed. Examining the actions, experiences, and perspectives of these different groups may allow us to better understand the conflicts that derail significant public involvement.

Charles Arthur Willard (1996) and public policy scholar Frank Fischer (2000) assert the need for studies of actual policy debates that focus on "the specific relationships of different types of information to decision making, the different ways arguments move across different disciplines and discourses, the translation of knowledge from one community to another, and the interrelationships between discourses and institutions" (Fischer, p. 256). Yet, according to Fischer, "despite the contemporary emphasis on citizenship, democratic theorists largely remain distant from the level of citizen ... such theorists mainly labor at the abstract level of nation-state and, in doing so, neglect the everyday aspects of deliberative politics, especially as they relate to ordinary people" (p. xi). By focusing on specific discourse practices of institutions and citizens in environmental debates, we can illuminate complex problems with current decision-making processes that discussions at the level of the final policy often overlook. To investigate how citizens are allowed

to participate in environmental public policy decisions, we must consider not just whether spaces for public participation exist but also how the institutions involved navigate those spaces and how significantly they value the public's participation. As a result, this book addresses the following questions:

- What risk communication practices discourage democratic citizen participation?
- In what ways does the discourse of existing federal regulations inhibit significant public participation in environmental public policy?
 And what are the ethical, political, and economic ramifications of limited public participation?
- How do different publics and institutions affected by a decision construct their knowledge and arguments about a policy? How do the different discourses intersect and conflict in the decision-making process?
- What literacy/discourse practices are necessary to actively participate
 in collaborative, complex, and technical decision making? What practices might help integrate both "expert" and public knowledge in an
 attempt to develop more appropriate policy?
- In what ways does the public's knowledge and ability to contribute to a policy challenge existing regulations and notions of public participation?
- What strategies might policy makers employ to ensure just decisionmaking and policies?
- How might rhetoricians and technical communicators intervene in decision-making processes to encourage a more democratic environment?

Within each historical and firsthand case, this book examines the following:

- Who is included in the decision-making process? (And who is left out?)
- Who is considered the public (who is alerted to town meetings and sent draft environmental impact statements)?
- How and when is the public involved in the decision-making process?
- What is the status of members of the public as decision makers?
- What changes are made in the drafts and final versions of the policy?
- How are the public's contributions reflected in the resulting policy?

Examining these issues of participation and power required multiple and varied examples of writing and discourse used to shape the decision making including the following:

- interviews with members of citizens' groups and Army Public Relations,
- observations of public meetings,
- transcripts of official town meetings, and
- government documents such as
 - legislation concerning the issue in question,
 - EPA/Federal regulations,
 - meeting handouts,
 - institutional definitions of public participation from policy documents,
 - Environmental Impact Statement (draft and final version).

DATA ANALYSIS

I am most interested in points where institutional texts intersect and conflict with citizen texts and responses. Specifically, I am interested in the institutional texts that represent and determine the risk and risk communication practices (e.g., definitions of risk, definitions of risk communication, governmental regulations, minutes from town meetings, policy drafts and final versions, etc.) and compare those with the texts in which the activist groups react to and resist the subject positions and decisions placed on them by the risk communication practices and the policy (e.g., my notes from town and activist meetings, interviews with activist groups and/or individual citizens, letters written by the groups to local newspapers or legislators, concerns/ questions voiced by activist group members, etc.) in order to study points where public participation intersects/conflicts with institutional practices.

A number of other methodologies and theoretical lenses informed my research, including mapping, ethics, and Scandinavian participatory design. Mapping (Soja, 1989; Sullivan & Porter, 1997) is an important methodology for making visible the assumptions, values, theories, and positions of those involved in risk communication practices. Sullivan and Porter assert that "mapping is one tactic for constructing positionings of research that are reflexive—a key to developing postmodern understanding of research [...] postmodern geographies recognize the significance of the construction of space. Space provides a frame of reference for the physical world" (pp. 78–79). Specifically, mapping is a strategy for illustrating theoretical positions of other researchers, for positioning myself in relation to these theoretical positions, for representing difference, and for locating spaces/gaps where research is needed.

For example, if we take the views or assumptions on risk decisions and risk communication as expressed in the quotes from representatives of institutions involved in risk communication (risk assessment, governmental law, and the EPA), we get one snapshot of what several institutions value in determining environmental risk decisions. Mapping those assumptions on two continua—one a continuum of the type of factors considered in the decision-making process (from technical to nontechnical), and one a continuum of how contextualized and nonhierarchical the approaches to determining a policy were (from decontextualized to contextualized)—would reveal the approaches most valued by institutions in determining a policy. For this map, positivistic represents a decontextualized view of risk that assumes risk decisions are best made by technical experts, while the critical represents a more situated or contextualized view of a risk situation that assumes decisions are best made through discourse by all affected. The technical end of the other continuum suggests that only technical aspects are factored into the environmental policy, while the cultural end suggests that more social, economic, and political aspects guide the decision. In this case, mapping reveals that risk communication practices currently value a positivistic approach to determining risk and further illustrates that institutional approaches to incorporate more critical and cultural aspects into risk communication are currently absent from risk communication practices (see figure 1.1). While considerations of both cultural and technical aspects are necessary for a just policy, more ethical risk communication approaches would be positioned nearer the middle of the continuum between the cultural and the technical on the critical side of the quadrant.

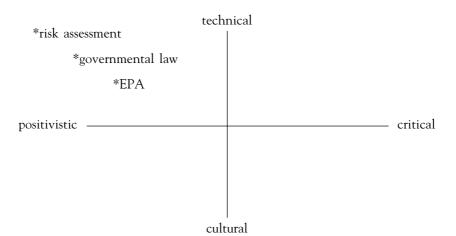


Figure 1.1: Institutional Assumptions That Perpetuate Risk Communication Practices

Multiple theoretical lenses are necessary to address the questions posed for this project. The proposed ethical framework for encouraging significant participation by all involved parties draws largely from Young (1990), Benhabib (1992), and Porter (1997). One of the assumptions of my project, informed by both feminist and participatory design theory, is that the decisionmaking process should be decentralized and that members of the public should be included in the decision-making process—not only because individuals have a right to be involved in the process of making decisions that affect them, but also because they are capable of contributing useful knowledge to the risk policy. Here I draw primarily from the work of Ehn (1988), Winograd & Flores (1986), Winograd (1995), Winner (1995), and Johnson (1997). Paying special attention to the ways institutions constrain or marginalize citizen participation, we can begin thinking about ways to resist and modify those constraints to actually encourage participation. A historical purpose of rhetoric has been to help citizens participate in public discussions necessary for democratic government. By expanding the boundaries of rhetoric and technical communication to include public policy, we help prepare our students and our community to be responsible, active citizens.

THE STRUCTURE AND ARGUMENTS OF THE BOOK

Chapter 2 examines a range of cases of public participation in environmental policy drawn from political science, technical communication, urban planning, sociology, and risk assessment texts. Examining citizen participation in historical cases of environmental public policy reveals the marginalized status of the public in environmental decisions. The citizens' status is marked by low interaction with the technical experts as well as little power in influencing the final policy. Public participation practices focused on either (1) bombarding the public with a one-way flow of information in an effort to bring its perceptions about an issue into conformity with the technical experts or (2) holding public meetings and allowing public comments that attempt to placate the public but that do not influence the final policy. According to the cases examined, publics often react, not to the technology chosen, but to not being involved in the decision-making process (Belsten, 1996, Katz and Miller, 1996). These cases suggest that current models of risk communication are ineffective for involving the public in the decisionmaking process.

Chapter 3 emphasizes the sites where risk communication practices take place and the power operations involved in and around those sites. For example, the chapter illustrates that the manner in which public comments are recorded at one public meeting reflects both the extent to which the public will offer comments and how significantly those comments can affect the policy. Based on interviews, firsthand observations, and public record documents, the stories emphasize the communication procedures and dis-

course practices of the institutions regulating the decision as well as two citizen groups protesting many of those decisions. Examining multiple group viewpoints on the same decision-making process revealed complex conflicts that were not apparent from the policy itself. Observing the actual practices illuminated additional insights into the ways in which institutions inhibit the public from contributing significantly to a policy and revealed spaces where current public participation practices could be modified to better encourage participation.

In Chapter 4, I analyze the institutional approaches to public participation in terms of risk communication models—looking at spaces where the public might be involved and how each institution navigates those spaces. I show that the discourse surrounding policy discussions is often more complex than models can suggest. Drawing from participatory design theories, I focus on two factors: how much power the public had in influencing the final policy and the level of interaction with decisions makers the public was granted. Based on this analysis, a new framework of public participation is needed to dissolve the separation of technical decisions from public discourse and to locate epistemology within the process that involves the public. Participatory design—a form of usability research used by rhetoricians and technical communicators—becomes a useful approach for this new heuristic/framework.

Based on the institutional critique of firsthand and existing cases of public participation in policy decisions, Chapter 5 presents a framework for a more appropriate and ethical approach to public participation that encourages significant democratic citizen participation in the decision-making process. This framework focuses on particular aspects of policy debates—participation, process, and power relations—as a way to consider whether a particular policy debate is ethical and appropriate and provides strategies for policy makers, community groups, and rhetoricians to encourage more active public participation.

Building from the framework developed in Chapter 5 for ethical debate, Chapter 6 examines firsthand a community-based project to illustrate how rhetoricians can identify oppressive power relations and intervene in the decision-making process to bring about a more democratic environment. This section also reveals how the participatory framework might inform community-based projects and classroom service-learning projects.

The epilogue revisits the environmental decision to destroy VX at the Newport Chemical Depot three years later, in 2003, and examines how the attacks of September 11 prompted the Army to declare the depot a terrorist target and reopen the decision. Finally, this chapter examines the continued need for a civic rhetoric for policy decision making now that public participation has been made even more complicated by issues of national security.