

DISSERTATION

THE ENVIRONMENTAL PROTECTION AGENCY AND THE STATES:
WORKING RELATIONSHIPS IN ENVIRONMENTAL PROTECTION

Submitted by

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In partial fulfillment of the requirements

For the Degree of Doctor of Philosophy

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Fort Collins, Colorado

Spring 2003

UMI Number: 3092662

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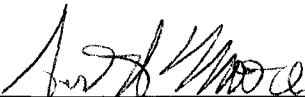
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ABSTRACT

The Environmental Protection Agency and the States: Working Relationships in Environmental Protection

The Environmental Protection Agency (EPA) and the States are jointly charged with protecting the nation's environment. The nature of the working relationship (formal/informal contact between federal and state participants implementing intergovernmental programs) between federal and state officials have an important impact on how effectively environmental policy is implemented. A Model of Cooperative Working Relationships is developed to analyze the level of cooperation that exists between EPA regional and State agency officials implementing the Superfund cleanup program. The model is composed of two sets of factors. Strategic factors are more dynamic in nature and include the following: Trust and Involvement. Structural factors provide the larger political and institutional context for these working relationships. These factors include: Relations with EPA Headquarters, Program Capacity (State, Regional), Political Context (State, National), and the Nature of the Problem. A questionnaire is used to collect data concerning the perceptions Superfund officials have about their working relationships and programmatic issues. State officials who are Highly Cooperative with their regional counterparts are more likely to perceive higher levels of Trust, Involvement, and State Program Capacity. However, state officials are less likely to be Highly Cooperative when they perceive higher levels of political support at both the state and national levels (Political Context). Regional

officials are more likely to be Highly Cooperative with their state counterparts if they perceive higher levels of Trust and State Political Context. They are less likely to be Highly Cooperative if they believe states have strong cleanup programs (State Program Capacity). A comparison of regional-state perceptions finds that regional officials perceive higher levels of Cooperation, Trust, Involvement, and Regional Program Capacity than their state counterparts. However, regional officials are less likely to view State Program Capacity in a positive manner. These differing views on Program Capacity provide the main source of conflict in the Superfund program. The findings of this study suggest that it is important to focus relationship-building reforms on both strategic (Trust and Involvement) and structural (Program Capacity) factors. Increasing the level and quality of communication, as well as the wider dissemination of capacity-building efforts could result in more cooperative working relationships.

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ACKNOWLEDGEMENTS

This project was the product of many hands. First, I would like to thank both Environmental Protection Agency regional office and state agency officials involved in the federal Superfund program for the participation in this study. Without their time, effort, and patience, this work would not exist. Thanks also goes to my committee members: Dr. Charles Davis, my advisor, Dr. Sandra Davis, Dr. Scott Moore, and Dr. Paul Mallette. This research benefited from your guidance and support. I would also like to thank two of my colleagues at the United States Geological Survey, Phadrea Ponds and Lee Lamb. They gave me the opportunity to see how the policy we write about actually impacts things in the ‘real world.’ I was fortunate to go through this process with a couple of colleagues in the Political Science Department. They made all of this much easier to bear. David Birch always had new and interesting ideas concerning my work and Donna Lybecker for her support and optimism that I would finish. Thank you both. Last, but not least, I would like to thank my family. They did not know what they were getting into all of those years ago, but they always stuck with me. Thanks to my sister Kimberly, my older brother Kevin, my younger brother Kendall, and my father, Richard Cline. My mother, Judith, gets her own special thanks. She has always been my biggest supporter and motivator throughout my studies...and beyond. All of you have my sincerest gratitude.

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Chapter 1: Working Relationships and Intergovernmental Relations in Environmental Policy

INTRODUCTION

EPA and the states are jointly charged with protecting the nation's environment. To meet this challenge, EPA and the states are striving to build the kind of open, productive relationship that will facilitate effective, joint management of the nation's environmental agenda.

Office of State and Local Relations, Joint Policy Statement on State/EPA Relations, July 14, 1994

Most federal environmental statutes are designed so that they can be administered at the state and local levels.¹ This places the “federal-state working relationships in environmental programs.... at the heart of policy implementation” (Scheberle 1997, 1). More positive relationships between federal and state officials are seen to facilitate successful implementation of environmental programs. Relationships that “pull together” are characterized as having higher levels of cooperation, as well as mutual trust and respect (Scheberle 1997, 1). Working relationships that are seen to be “coming apart” are more contentious and can contain hidden agendas (Scheberle 1997, 1). While positive working relationships do not ensure successful implementation, poor working relationships “almost certainly guarantee implementation problems” (Gormley 1987, 286). Thus, it is important to understand what factors shape the nature of federal-state working relationship in order to better analyze the implementation process.

Although it has received more attention recently, the “partnership” between Environmental Protection Agency (hereafter, EPA) and the states has been an important issue since the inception of the EPA in the mid-1970s.² The idea of federal-state working relationships or partnerships has been the focus of both government and academic research for a number of years. Both the EPA and General Accounting Office (hereafter, GAO) have focused on nature of the working relationship among federal and state implementors of environmental policy. In particular, they have analyzed the perceptions of these implementors about factors that promote/inhibit a federal-state partnership (GAO 1980; 1988; 1995; 1997a; and EPA 1982; 1990). Academic research has focused on such issues as the link between attitudes of state implementors and their behaviors (Hedge et al. 1988); state perceptions of EPA officials (Tobin 1992; Bowman and Lester 1993); and the perceptions of both federal and state implementors (Gormley 1987; 1992; and Scheberle 1991; 1993; and 1997). One finding that almost all of these studies have in common is “The first 20 years of implementation efforts have generally led to contentious rather than cooperative working relationships between federal and state authorities” (Scheberle 1998, 17).

While many of these studies provide us with a list of factors that influence the nature of the working relationship, they exhibit several shortcomings.³ First, there is no in-depth examination of factors intrinsic to the working relationship. These studies focus on the perceptions implementors have of the relationship as a whole. Their overall evaluations of the nature of the working relationship are reported. However, there is no real discussion of how implementors attempt to shape or influence their strategic context

(Stoker 1991). Scheberle (1997) provides a starting point to the systematic examination of the interior of working relationships, but does not provide any analysis on this count. Relatedly, there is no systematic attempt to link the nature of working relationships with institutional or structural factors that might shape it. While such factors as state capacity, the nature of the policy problem, and the political context are discussed, there is no attempt to integrate these structural factors into a larger model of working relationships. Thus, there is a need to develop a framework to systematically examine both the inner-workings of the federal-state relationship, as well as its larger institutional setting.

Another shortcoming that arises from the failure to examine the larger intergovernmental context of working relationships is a proper treatment of the concept of cooperation. While the goal of these studies is to indicate how to attain cooperative working relationships, there is no discussion of what exactly is meant by this. Scheberle (1998) notes the natural tensions that arise when one organization (federal agencies) oversees another (state agencies). She suggests that federal and state agencies are performing different tasks, as well as responding to different sets of stakeholders. This competition between centralized and diffused authority leads to the expectation of uneasy working relationships (Scheberle 1998, 20). Given this, one might think a cooperative relationship could never exist. However, cooperation should not be seen as the absence of conflict, but is “more properly seen as a response to conflict...” (Stoker 1991, 50). Furthermore, it should be noted that the federal government cannot “force” cooperation on the states. An examination of the larger context reveals that the true nature of intergovernmental relations is one of bargaining and negotiation (Stoker 1991; Ellison 1998; Ingram 1977; Pressman 1975). All of this means that a cooperative working

relationship does not just happen, but must be constructed by the participants within their institutional context.

One of the purposes of this study is to develop a framework to examine the level of cooperation in the federal-state working relationships of environmental programs. This model systematically examines the impact of both strategic and structural elements on the nature of the working relationship. By examining both the strategic interaction of implementors and their larger institutional context, a fuller picture of what shapes the nature of the working relationship is produced. This study uses data from the Superfund program to test the utility of the cooperative working relationship framework. The Superfund program was chosen because it presents many unique characteristics, which make it ideal for this study.⁴

THE LARGER CONTEXT OF INTERGOVERNMENTAL RELATIONS

It has long been recognized by those who study intergovernmental relations that there is a “need for collaborative approaches between federal and state officials in solving public problems” (Scheberle 1997, 12). Scholars such as Grodzins, Elazar, and Sanford have focused on the interdependent nature of power and programmatic responsibility among the different levels of government. Grodzins’ (1966) model of cooperative federalism suggests that public responsibility cannot be divided among governments, but instead are shared. Peterson et al. (1986) argue that the complexity of the administrative system makes cooperation among the levels of government a necessity. Elazar (1962) claims that the sharing of power and cooperation among the levels of government has been more prevalent than conflict in intergovernmental relations. According to Nice (1987, 7), “Cooperative federalism emphasizes the value of cooperation among levels of

government because joint efforts may produce better results than any one level acting alone.”

While it is certainly true that the theory of cooperative federalism “accurately reflects the enormous amount of interaction among different levels of government in the United States,” it should be noted that cooperation is certainly not automatic nor always achieved (Nice 1987, 7). Theories focusing on the interdependent nature of intergovernmental relations tend to miss the complexity inherent in the federal system. O’Toole (1985, 12) sees complexity as meaning “that the intergovernmental network is large and differentiated; no one participant can possibly possess enough information about its components and dynamics to operate in a consistently rational fashion.”

According to Deil Wright (1982, 8 cited in O’Toole 1985, 21):

[the] hallmarks of the more complex and interdependent system [of intergovernmental relations are]: the number and growth of governmental units; the number and variety of public officials involved in intergovernmental relations; the intensity and regularity of contacts among those officials; the importance of officials’ actions and attitudes; and the preoccupation with financial policy issues.

One can trace the increasing complexity in the modern system to the development of intergovernmental fiscal roles and relations over the past four decades. While it is true that intergovernmental relationships were starting to grow more dense and complex during the New Deal period, it was the tremendous expansion of “intergovernmental activities and initiatives” during Lyndon Johnson’s creative federalism (O’Toole 1985; Nathan and Lago 1990) that began a rapid increase in the complexity of intergovernmental relations. This period (1959 - 1968) is characterized by growing federal involvement in terms of programs and dollars spent. It expanded the focus of the government partnership to include many types of local governments. Creative federalism

relied heavily on conditional grants-in-aid. The importance of states increased as well. G. Ross Stephens (cited in Nathan and Lago 1990, 39 - 40) noted a strong trend toward state centralization during this period. By the end of this period, state own-source spending exceeded local own-source expenditures.

Top-sided federalism (1968 - 78) saw federal aid increasing faster than either state or local aid. There was also a dramatic increase in the level of direct national-local aid. Nixon's New Federalism played a large role in this. This approach focused on block grants and General Revenue Sharing (GRS). These tools had the effect of devolving authority and funds to the state and local levels. However, Walker (1981, 112) notes that Congress somewhat blunted these effects by supporting categorical grants with nationally imposed conditions. The amount of federal aid to state and local governments peaked in 1978. State revenue structures became more diversified by including income and general sales taxes. State aid also became more prominent for local governments.

Wright notes that by the end of the 1970s, the tension and conflict in the grant economy contributed to the "overload" of the intergovernmental system.⁵ This tension and conflict arose from such things as the perceived ineffectiveness of grants in solving problems, too much autonomy for policy specialists, and increasing conditionalism (Wright 1990, 65). All of this led toward a condition which Nathan and Lago (1990) call "fend-for-yourself federalism." This period has witnessed a decline in federal aid in real money terms. This federal budgetary retrenchment along with changes in federalism policies "resulted in an increase in the role of states in the intergovernmental system" (GAO 1990, 2). For example, in the 1980s states increased financial aid to localities with school districts being the main recipient. According to Walker (1995, ch. 8) states

became the dominant providers of aid to localities as the federal government decreased their role.

Fend-for-yourself federalism has continued into the 1990s. The federal budget deficit has had the effect of further diminishing the fiscal links between the federal government and state and local governments. Walker (1995, ch. 8) notes that the growth in grant programs are at a static level. There has also been an enhanced propensity to enact unfunded mandates and use other regulatory tools. The federal government has also encroached on traditional state and local revenue raising terrain. Through court rulings, the federal government has limited the immunity of bonds issued by states and localities (Hickok 1990, 77). States and localities have been forced to rely on improved management techniques, diversified revenue systems, and transferred functions to the private sector in order to provide goods and services (MacManus 1990, 22). States have also begun to download responsibilities to local governments, which further strains local government financing (Haider 1996, 16).

As fiscal relations started to sour in the late 1970s and through the 1980s, the relationship between the federal and state governments became more conflictual and coercive. Traditionally, the grant economy had been the principal means of tying the intergovernmental system together. Its stagnation led to a search for different ways to deliver public goods and services. Federal regulation arose as the “new” glue of intergovernmental system.⁶ Kincaid (1996; 1991) and Zimmerman (1993; 1992; 1991a; 1991b; and 1990) document the increasingly coercive nature of the tools employed in the regulatory relationship. Zimmerman (1991b) and Conlan (1991) provide a discussion of the typology of these mechanisms. One of these mechanisms is the crosscutting

requirement, which is generally applicable to across-the-board grants. A second mechanism is crossover sanctions. This is a grant condition that imposes federal sanctions in one area for failure to comply with federal requirements in another area. Zimmerman (1991b) categorizes both of these as informal preemption due to the fact neither is exercised based on Congress' power to preempt. A third mechanism is total preemption or direct orders. These are direct legal requirements imposed on state and local governments. The fourth mechanism is partial preemption. These are "federal laws establishing minimum national regulatory standards under which administrative responsibilities may be delegated to states or localities provided they meet certain federal standards" (ACIR 1984 cited in Conlan 1991, 51).

Zimmerman (1991b) notes the increasing use of these mechanisms in the mid 1960s through the 1970s. Despite Reagan's rhetoric and some administrative efforts, the enactment of regulatory statutes has increased through the decade of the 1980s (GAO 1990; Conlan 1990, 51). As a matter of fact, Zimmerman (1991a) shows that Reagan supported crossover and tax sanctions. The decade of the 1980s saw the increase of the two most coercive mechanisms. Both direct orders and crossover sanctions have become the most commonly used devices in federal regulation.

The decidedly coercive nature of the intergovernmental system has led to an increase in tensions among the levels of government. While federal regulation has decreased the level of state discretion, it has not lessened state responsibility (GAO 1990). In terms of implementing domestic federal policy, the federal government has become more dependent on the fiscal health and administrative capacities of states. The GAO notes that "the success of federal domestic programs depends on an effective

partnership among these [federal, state, and local] governments” (GAO 1990, 44). Federal budgetary retrenchment has pushed the federal government to increasingly rely on states, while regulatory trends have lessened state authority without reducing responsibility. This has led to increasing tensions in the intergovernmental system. However, the federal government shows no signs of letting up. Congress has increasingly used their power of preemption (formal and informal) to mandate or forbid state and local governments to undertake certain activities.⁷ This has led to problems in the area of cost reimbursement, as well as accountability and responsibility (Zimmerman 1993, 9 - 10). Even in light of national legislation attempting to impose limits on unfunded mandates, Congress has enacted new mandates and preemptions in such areas as welfare and safe drinking water (Weissert and Schram 1996, 23 - 25).

As one can see, the current intergovernmental system is characterized by complexity and interdependence. Both of these characteristics suggest that the successful implementation of federal regulatory objectives must have the cooperation of states and localities. Wright (1982) posits a model of this increasingly complex and interdependent pattern of intergovernmental relations. Among the important characteristics of the “overlapping-authority” model are cooperation and competition and bargaining-exchange relationships (O’Toole 1985, 65).⁸ Relationships among participants are not assumed to be exclusively cooperative or competitive. Instead Wright suggests that such factors as “the policy issue or problem, the status of the officials, the partisan leanings of participants, and constituency being represented” can be determining factors of the nature of the relationship (O’Toole 1985, 65). The model also recognizes policy is not made by one governmental unit, but must be bargained and negotiated among multiple

governmental units. What is important about Wright's insights is the assertion that the level of cooperation or conflict is not predetermined, but depends on situational factors. Thus, the matter is left open for empirical analysis and investigation.

The debate over the devolution of federal policy to the states exemplifies the complexity and interdependence inherent in the current state of intergovernmental relations. Even though many have recognized the importance of collaboration, there are those who suggest that the policy of devolution should be approached cautiously (Scheberle 1997). One can see the use of more coercive regulatory measures as an attempt by the federal government to maintain some form of control over their programs. Those who favor the maintenance of a strong federal presence express concerns about issues of equity and the possibly detrimental effects of interstate competition. Kettl (1996) and Donahue (1997) raise doubts about the capacity of states to handle larger policy responsibilities. Kettl's analysis focuses on proposals devolving medicaid, welfare, job training, and social services to states in the form of block grants. He argues that states face difficult challenges in developing the capacity necessary to successfully integrate, deliver, and manage their new responsibilities. Limitations on state capacity are evident by the fact that no level of government has successfully dealt with these problems. The time constraints in the proposals also stretch the probability of success very thin. Problems of state variation could raise issues of inequity and possibly result in the removal of responsibility from state governments.

Donahue's main focus is on the detrimental effects of interstate competition in area of industrial policy. In good economic times, states have developed industrial policies that built the institutional reform and emphasis on market institutions. In

essence, competition was driving the development of better state institutions. However, as economic times take a turn for the worse, Donahue (1997, ch. 5) argues that states' singular focus on economic development will return them to the 'cut throat' stage of development. The result will be declining quality in other policy areas such as environment, welfare, health, and safety. In light of national commons problems, state competition also poses questions about the capability of state institutions to deal with extra-jurisdictional questions on a single state basis (Donahue 1997, ch. 4).

Those supporting the increased devolution of implementation authority to states take a more positive view of the development of state capacity. It is argued that the ability of states to undertake domestic governance responsibilities has been on the increase (see Walker 1995; Donahue 1997; Nathan 1996; Reeves 1990; Bowman and Kearney 1986). Reeves (1990) and Walker (1995) document the improvement in state constitutions, legislatures, executive and administrative apparatus, judiciaries, and state finances. Donahue (1997) notes the ascendancy of states in such areas as authority, resources and legitimacy. States are gaining authority in such policy areas as welfare, industrial and environmental policy (Donahue 1997, 8 -9). States have expanded their organizational capacity to implement partially preemptive national legislation (Wright 1990). Their monetary and personnel resources are also increasing with respect to the national government. They also receive more popular support than the national government. Thus, in the minds of many, there is little doubt states have increased their ability to undertake the responsibilities of domestic governance.

There are also those that support a policy of sorting out the functions among the different levels of government (see Peterson 1995; Rivlin 1992; and Peterson, et al.

1986). This approach suggests a limitation of state capacity in certain areas and, thus, the need for a continued federal role. Peterson argues each level of government has distinctive area(s) of competence. It should expand in this area, but diminish its efforts in less competent areas. He finds the federal government's area of competence to be redistributive policy, while states and localities are most competent in developmental policy.⁹ The federal government is better able to undertake redistributive policy because it is better equipped to deal with the mobility of labor and capital in an economically and politically integrated nation-state than the other levels. States and localities are better positioned to handle the development policies because they are more sensitive to market conditions, as well as more responsive to the demands of constituents. Both Peterson and Rivlin see the expansion of state capacity as able to deal effectively with development policy, but limited in undertaking redistributive policy.

ENVIRONMENTAL FEDERALISM AND WORKING RELATIONSHIPS

Environmental policy embodies the larger themes of intergovernmental relations. Those seeking to implement federal environmental policy face the same levels of complexity and interdependence present in the larger context. There is a need for cooperation at the same time coercive mechanisms are being used to hold relationships together. Tensions between centralized leadership and diffuse authority pervade the administrative aspects of environmental policy. Federal agencies, such as the Environmental Protection Agency (EPA), are charged with carrying out federal environmental programs, but need the help of state environmental agencies to do so effectively. This is what makes the federal-state working relationship so important in

environmental federalism. It is here that one can examine the important issues of intergovernmental relations and their impact on the implementation of policy.

According to Scheberle (1997, 4), “Since 1970, which marks the beginning of the first significant involvement of the national government in environmental protection, Congress has designed most federal environmental programs so that they could be administered at the state and local levels.” These environmental laws form a legal context for the federal-state working relationship. According to Scheberle (1997; 1998), the formal legal arrangement can take three basic forms. The first is known as partial preemption. Under these laws a federal agency, usually the EPA, is authorized “to set national environmental standards but to delegate much of the authority for implementing programs and enforcing compliance with them to the states” (Scheberle 1998, 16). States are able to receive primary enforcement authority (primacy) for parts of a program when they apply environmental standards that are at least as stringent as those set forth by the federal government. States can opt to take as much or as little authority as is offered under federal law. Furthermore, the federal agency can revoke its grant of primacy if the state fails to meet the minimum standards set in the law. This is the predominant design for existing federal environmental law.¹⁰

Other statutory forms of the federal-state relationship include voluntary programs and direct orders. Voluntary programs rely on federal monies as an incentive for states to undertake certain activities. There is no authority for federal agencies to operate these programs within state borders. So if states do not choose to operate these programs, the federal government cannot step in.¹¹ Direct statutory orders “oblige the states to perform certain tasks” (Scheberle 1997, 14). While states can choose not to comply, they face

several stark consequences for this decision. There is no federal assumption of responsibility. So, if states fail to comply, they could be compelled by court order to perform their assigned tasks. States could also face sanctions in other programs (Scheberle 1997).¹² These statutory relationships form the larger structure for the ongoing working relationships between federal and state officials. It is here that we see the need for cooperation between federal and state implementors of environmental policy.

Given the division of responsibility inherent in federal environmental law, “it is incumbent upon the EPA to consider the states’ needs, abilities, and resources when developing policies” (Tobin 1992, 97). Those at EPA have recognized this for a long time. According to Tobin (1992, 97), early administrators of EPA have stressed the improvement of EPA-State relationships. In particular, these administrators have sought to change them from the “previous pattern of EPA dictating to states, treating them at best as junior partners” to fostering “a viable and mutually beneficial partnership with the states” (EPA 1982, 6; GAO 1988, 158). These earlier efforts have continued under the Clinton administration’s drive to reinvent government. According to Scheberle (1998, 20), “A key element of the administration’s strategy is for EPA to ‘partner’ with state, local, and tribal governments.” It is this effort that gave rise to a federal-state dialogue that produced the National Environmental Performance Partnership System (NEPPS) in 1995 (Scheberle 1997, 2).

Although NEPPS has arisen from the continued emphasis on partnerships among EPA, state, local and tribal governments, it “represent[s] a potentially dramatic shift in the way federal and state officials interact” (Scheberle 1998, 28). Two elements of NEPPS are worth highlighting. First, states may work with EPA to form performance

partnership agreements. These agreements give states more flexibility and input with respect to the federal program. In addition, there is a shift to use outcome measures, instead of output measures, to evaluate state efforts.¹³ The second feature has to do with funding. States no longer have to apply for grants on a program-by-program basis.¹⁴ Instead, states can combine several separate categorical grants into one performance partnership grant. This gives states much more flexibility in the application of federal monies to environmental problems within their borders. Importantly, the emphasis on partnership enunciated in NEPPS extends beyond eligible grant programs to include all federal environmental programs.¹⁵

The Complexity of Interaction

The nature of working relationships has been the focus of scholars over the past twenty years. Martha Derthick (1972) was among the first to note the bargaining nature of the intergovernmental implementation process. Pressman and Wildavsky (1973) also noted “the complexity of joint action” in this context. Their work identified the complex and interdependent nature of intergovernmental implementation as an obstacle to policy success. Still others (see Ingram 1977; Pressman 1975) have also stressed the bargaining nature of the relationship among intergovernmental actors. Effective policy implementation of national policy objectives is tied directly to the ability of federal implementors to gain the cooperation of state and local officials. Thus, while cooperative working relationships do not ensure successful implementation, poor working relationships almost certainly guarantee implementation problems (Gormley 1987).

While it is true that intergovernmental implementation efforts are dependent upon the efforts and capabilities of states and localities, these “reluctant partners” should not be

viewed solely as obstacles to effective policy (Stoker 1991). Many scholars view states as having increased their capacity to address a myriad of problems including those embodied in environmental policy (Lester 1990). States have accomplished this by “enlarging staff, increasing the expertise and technical understanding of state-level implementors, and, for many states, adding state sources of funding” (Scheberle 1997, 5). Others document the innovative nature of states’ efforts in the environmental policy arena (see Lowry 1992; Rabe 1997; Lester 1995; and John 1994). Lowry (1992) documents the innovative efforts of states in different areas of pollution control policy.¹⁶ Both Rabe (1997) and John (1994) also note the innovative efforts of states in the area of environmental policy. Rabe (1997) suggests that states’ commitment to sound environmental policy is increasing as a response to the broader increase in state capacity, as well as developments particular to the policy area. These include such things as broad public support, the proliferation of environmental policy professionals at the state and local levels, and direct democracy (Rabe 1997, 33-34). John (1994, 80) notes that “states are willing to spend their own dollars and enact their own policies, without being forced by the federal government to do so. Virtually all states have taken some steps to go beyond federally imposed requirements, and some have taken the lead in several areas.” Hence, states have much to offer in the way of implementing environmental policy.

While states have certainly increased their capacity to take on more responsibility in the implementation of environmental policy, many scholars of comparative state environmental policy suggest there is a continued need for a strong federal presence (Scheberle 1997). Lowry’s (1992) study of state leadership suggests that efforts to coordinate and communicate the efforts of state policy innovators are enhanced by the

presence of the federal government. Conversely, the predominance of interstate competition in a policy area “serves to dampen state enthusiasm for strong regulatory enforcement” (Scheberle 1997, 15). Ringquist’s (1993) research on state air regulatory programs finds strong federal regulatory requirements on states, combine with adequate resource levels and enforcement by states, help produce improved air quality. Lester et al. (1983) suggest the importance of federal funding in building and maintaining capable state environmental programs. Other studies find important variations in implementation patterns based on state-level characteristics.¹⁷ According to Rabe (1997, 41), “A number of states, ...prohibit their environmental agencies from exceeding any federal standards, whereas some others tend to view federal standards as minimum levels that they frequently elect to exceed.”

All of these studies indicate there is indeed an important role for the federal government to play in the implementation of environmental policy. Many note the variations in state environmental performance. This not only applies to variations in standards, but reporting information as well (Rabe 1997). Both Lester et al. (1983) and Rabe (1997) note the importance of continued grant assistance from the federal government. Rabe (1997, 42) notes “a good deal of the most innovative state-level activity has been at least partially stimulated -and underwritten- through federal grants.” States are also limited in their ability to handle environmental problems of a cross-boundary nature. Their problems have become evident in terms of mobile air pollution policy and the transportation of hazardous wastes across state boundaries (Lowry 1992; Rabe 1997). It is in these trans-boundary policy areas that states are heavily dependent on the federal government to step in and regulate. When states are either unable or

unwilling to address a particular environmental problem, it is the job of the federal government to become “the gorilla in the closet” (John 1994, 5).

Reaching a more functional environmental federalism means that the arguments of increased state capacity must be balanced with the need for a continued strong federal presence. It is obvious that environmental policy defies easy designation “as warranting extreme centralization or decentralization” (Rabe 1997, 49). Many scholars have called for a process of selective decentralization, “one leading to an appropriately balanced set of responsibilities across governmental levels” (Rabe 1997, 49). This means that the working relationships between federal and state officials implementing environmental policy will become increasingly important. For it will be within these working relationships where important decisions about appropriate roles and duties will be made.

Working Relationships

The statutory arrangements created by federal environmental law define one level of the federal-state relationship.¹⁸ Scheberle (1997, 14) argues, “Equally important, however, are the ongoing working relationships that occur between federal and state officials. These working relationships include formal and informal contact that occurs between state and federal personnel in the operation of any intergovernmental program.” Working relationships are best viewed as a process that consists of strategic interactions between actors and ideas (Kickert et al. 1997, 169). This interactive process must then be placed in its proper institutional context in order to capture the important “role of contextual factors and institutional influences” (Kickert et al. 1997, 185). It is these factors that set the stage for strategy formulation and interactions of regional and state actors in the EPA-State working relationship. Thus, a complete conception of working

relationships must incorporate both interactive (strategic) and institutional (structural) factors.

Previous research on federal-state working relationships has focused on several common themes and approaches. The first is a focus on the perceptions/attitudes of actual participants in the working relationship. Bowman and Lester (1993, 171) suggest this focus on “individual-level variables provides a more reliable explanation of implementation behavior” than traditional sources of aggregate data. Second is a focus on the relationship between federal regional officials and those in state agencies. According to Scheberle (1997, 7) this focus is important because, “federal regional officials are the most frequent contacts of state officials in environmental programs....[and] these regional officers have unique perspectives for improving working relationships and policy implementation that is too often neglected.” Third, many of these studies have found that federal and state implementors view the nature of federal-state relations as the most crucial variable affecting implementation (see Bowman and Lester 1993; Scheberle 1993; 1997; GAO 1997a). Last is the finding that these working relationships tend to be of a contentious, rather than cooperative, nature. Cooperation does not just happen, it must be nurtured by those participating in the working relationship (see Scheberle 1993; 1997; 1998).

The literature on working relationships can be divided into three distinct groups. The first presents only the perceptions of state actors. The GAO (1980) and Tobin (1992) focus solely on the perceptions state officials have of their federal counterparts. Tobin’s study focuses on the impact Reagan’s New Federalism had on the EPA-State working relationships in air and water quality policy. He uses longitudinal data ranging from

1979 to 1990.¹⁹ Specifically, Tobin focuses on four major aspects of the EPA-State relationship. He found no change in the attitudes state administrators held of state participation in EPA decisionmaking, EPA's trust and confidence in states, and the overall relationship. State officials felt they "were effectively excluded from effective consultation with EPA, regardless of when they were asked" (Tobin 1992, 98). As for EPA trusting the states, the state officials felt EPA "exerted the most influence on the assignment of state priorities" (Tobin 1992, 101). The 1980 GAO survey found the state of the working relationship to be poor. And according to Tobin, while there were some improvements from 1979 to 1985, in 1990 state officials still felt those in EPA headquarters possessed little understanding of state problems.²⁰ The only positive evaluation state officials gave to the EPA was the desirability of their presence. States found the EPA to be a useful regulatory backstop (e.g., the gorilla in the closet) for their regulatory efforts.

Another group of studies have focused on both regional and state implementors (see Scheberle 1993; Bowman and Lester 1993; Gormley 1992; 1987; Hedge et al. 1988). Some of these studies have examined the working relationship in relation to other variables affecting the quality of implementation. Scheberle (1993, 204) finds, "The contentious relationship is the implementation obstacle most frequently cited by state inspectors." Bowman and Lester (1993) also find that state implementors of the Resource Conservation and Recovery Act (RCRA) find the quality of the working relationship to be the main obstacle towards successful implementation. These particular studies place the working relationship at the very core of policy implementation.

There are other factors that influence the nature of the interaction between federal and state implementors. Scheberle (1993) argues that along with the nature of the working relationship, the lack of vertical alignment between OSM and state agencies can also be explained by a lack of agreement on quality of program performance and disagreement on the nature of the target group and the problem to be regulated. Gormley (1992) indicates the influence of the region's approach to regulating the state agency can also have important impacts. In particular, Gormley finds that coercive controls are a risky strategy and can backfire on the region. He also finds that the "success" of a region's regulatory approach is dependent on a state's policy, bureaucratic, and political contexts (Gormley 1992, 277). If the differences between states and regions are strictly attitudinal, the region is better off pursuing a more cooperative strategy (Gormley 1987). Hedge et al. (1988, 333) find that "agencies can *indirectly* influence subordinate behavior by shaping the attitudes of their personnel." Both Scheberle (1993) and Gormley (1992) also note the cleavages that exist between federal regional offices and their headquarters. Disagreement about goals or lack of support can cause problems between these two federal level actors, and in turn can have important consequences for the interaction of federal regional and state officials (see Scheberle 1993; Gormley 1992).

Another important finding of these studies is the level of conflict or tension between federal and state actors. Scheberle (1993) notes that the relationship between state agencies and the federal agency field offices of the Office of Surface Mining (OSM) implementing the Surface Mining and Control Act (SMCRA) display remarkably different attitudes with respect to agency performance, nature of target group and problem, and the federal-state working relationship. Bowman and Lester (1993) note that

state implementors view the working relationship as the main problem, while regional actors see the main problem as one of insufficient state capacity. Gormley (1987) notes important differences over goals and priorities of regulatory programs between the regional office and the state. Hedge et al. (1988, 336) find, “Despite a common statutory base and roughly identical mine site conditions, federal and state regulatory officials exhibited attitudes and enforcement behaviors consistent with their agencies’ respective, and markedly divergent, political settings.” Thus, one finds support for the idea of distinct federal and state roles, as well as perceptions, in the federal system.

While all of these studies find the working relationship to be more contentious than cooperative, it is important to note that one should keep this fact in perspective. According to Scheberle (1998, 19), “To assume that state and federal officials will work in harmony because of their shared interest in a program is to ignore...[the] tensions and the distinct roles that federal and state authorities play in policy implementation.” In his study of the implementation of the Clean Air Act, Wood (1992) found that the EPA responded to national elected institutions and its own institutional incentives. State agencies, on the other hand, responded to the top-down forces of EPA, as well as subnational conditions (e.g., economic conditions, local constituencies). Not only do the different levels have different stakeholders, there is also the different roles each plays in the system. Scheberle (1998, 19-20) points out that, “While federal agencies issue regulations, write grant guidance documents and state performance agreements, and oversee the actions of state agencies, state agencies run the inspection and enforcement programs, respond to public concerns and complaints, and issue their own regulations and program requirements.” Gormley (1987) notes this conflict is not necessarily

detrimental. It only becomes a problem when the conflict or disagreement is over basic goals, values, and priorities in environmental law. And while contention may pervade the working relationship, cooperation can be achieved. It just has to be worked at (Scheberle 1997; 1998).

The third group of studies have shifted their focus to the issue of achieving more cooperative working relationships. In particular, these studies closely examine the “inner workings” of federal-state relationships. These internal factors characterize the strategic nature of the interaction between federal and state officials. These studies also seek to more fully develop the analytic concept of the working relationship.

The status of the federal-state relationship has been a concern for the EPA since at least 1975 (GAO 1995a). Since this time, EPA has launched several efforts, including a State Capacity Task force that is still at work, in order to improve the status of its partnership with state environmental agencies.²¹ In a 1990 implementation study of its RCRA program, the EPA explicitly outlined what factors they find important in the EPA-State partnership. Here, the EPA enunciated what it viewed as elements important in determining the nature of a relationship (EPA 1990b, 13). Their main finding was that the federal-state relationship should not be classified as a partnership, but only as a working relationship. The elements they had identified as important tended to indicate the presence of a client/contractor relationship as opposed to a partnership.

Specifically, they found a lack of agreement on the goals and priorities of the program. The states felt that the EPA held unrealistic expectations of what a successful program was. States felt a lack of trust on the part of EPA because of this. The respective roles that states and regions were supposed to play were not clearly spelled

out. Poor communication led to a lack of shared understanding about the program's rules. The authorization process for state programs was found to be overly complex and contentious. As a result of the problematic authorization process, there became a question as to who actually "owned" or controlled the program (EPA 1990b, 23).

Another government agency, the GAO has contributed to the development of the working relationship concept. In 1995, the GAO conducted a study entitled, *EPA and the States: Environmental Challenges Require a Better Working Relationship*. In this study, they identify several factors that have impaired states' performance and the EPA-State relationship. The first is a resource gap between federal funding and new environmental requirements. This shortage is exacerbated "because EPA has sometimes required states to apply scarce resources to national priorities at the expense of some of their own environmental concerns" (GAO 1995A). Second, the EPA has been inconsistent in its oversight across regions. This leads to concerns of equity of treatment between states. It also raises issues of the balance between the need for national consistency and state flexibility. Third, there is the perception that at times the EPA micromanages state programs. Fourth, EPA fails to provide adequate technical support for increasingly complex state program requirements. And last, the GAO found that states are concerned about not being adequately consulted before making key decisions affecting them. This raises concerns about communication problems between EPA and the states (GAO 1995A). This study focused more on the types of roles or forms of involvement between EPA and the states. States place EPA in the role of resource provider (money, technical support), while at the same time wanting less micromanagement and more flexibility.

While the preceding studies shed light on factors important to the nature of the working relationship, they fail to place these factors within a coherent framework. Denise Scheberle's (1997; 1998) work provides the initial effort to move the analysis of working relationships in this direction. Specifically, she develops a typology of working relationships based on the concepts of trust and involvement. Her purpose is to examine "the patterns of behavior that exist between federal and state officials...[and] offer predictions about the factors that facilitate working relationships that 'pull together'" (Scheberle 1997, 16-17).

For Scheberle (1997; 1998), mutual trust and involvement by federal personnel in state programs are critical to forging cooperative relationships between state and federal officials. Mutual trust is not easily established within context of regulatory environmental programs. According to Scheberle (1998, 20):

Trust cannot mean that federal agencies entirely abdicate their oversight responsibilities, but it clearly must preclude unjustified suspicions of state activities. By the same token, state officials must not jump to conclusions that federal officials are 'out to get them' because of a negative review of a state program.

There must exist a belief among the participants in the working relationship that the other participants are dedicated to effectively implementing the policy. High levels of mutual trust are evident in a working relationship when actors share goals, respect the actions of others, allow flexibility in program activities, and show support for others within the program (Scheberle 1997).

The second element of a cooperative working relationship is involvement by federal personnel in state programs. Unlike mutual trust, which is "unambiguously good (the more of it the better)," the "right" level of involvement is very hard to determine

(Scheberle 1998; 20). Involvement that nurtures a cooperative relationship must become “a matter of support and inclusion” (Scheberle 1998; 20). Such involvement may include:

formal or informal communication between federal and state staff; the sharing of information and technical knowledge; keeping state officials “in the loop” on policy developments, program changes and the frequency and nature of oversight activities; providing funding; sharing resources; and personal contact among officials. (Scheberle 1998, 20)

Based on differing levels of trust (high, low) and involvement (high, low), Scheberle (1997) constructs a typology of working relationships. The first is pulling together and synergistic (high trust and high involvement). This relationship is characterized by federal agency officials having a genuine desire to see the state agency succeed. Involvement is “based on a shared commitment to the policy objectives and a common recognition of the nature of the public problem to be solved” (Scheberle 1997, 19). Second is the cooperative but autonomous (high trust with low involvement) relationship. Here, state officials ‘go it alone.’ Communication is aboveboard and open, but infrequent. Scheberle suggests this may hinder the success of implementation as it impedes organizational learning between the agencies. Third is the coming apart with avoidance (low trust and low involvement) relationship. The only reason this relationship exists is due to statutory obligations. Participants engage in just enough program activity to get by. The fourth type of working relationship is coming apart and contentious (low trust and high involvement). Little mutual trust exists, but there is a high level of federal involvement in the state program. Federal officials are attentive to the state program, but are not cultivating cooperation. Many state officials complain of

micromanagement on the part of their federal counterparts. In this context, there is likely to be hidden agendas and miscommunication between federal and state officials.

For Scheberle, relationships with high levels of trust and involvement are the most desirable. Relationships that pull together are much more likely to produce effective and efficient implementation of public policy. Relationships that are coming apart will tend to hinder implementation efforts. Given the larger context of intergovernmental relations and environmental federalism, Scheberle notes that (1997, 23), “it is easier to get federal-state working relationships that are coming apart than those pulling together...” Thus, positive working relationships must be sought and nurtured through the development of mutual trust and the “right” kind of involvement.

The factors presented by these studies can be categorized into two major groups. One can view these factors in terms of strategies and structures. Many scholars have dealt with the relationship between strategy and structure (see Stoker 1991; Scheberle 1997; Kickert et al. 1997; Klijn and Teisman 1997; Ostrom 1998; and Giddens 1984).²² Klijn and Teisman (1997, 101) define strategy “as the set of decisions taken by one actor which reflects the combination of resources and targets they bring into play.” By focusing on the strategic aspects of behavior, scholars emphasize the “cohesiveness between the actions of one actor and those of other actors in a particular game” (Klijn and Teisman 1997, 102). In other words, they focus on the extent to which the actions of different actors are interconnected.

However, scholars also recognize the important link between structure and strategy. According to Klijn and Teisman (1997, 104), “Structures are ...a precondition for [strategy]: without rules and resources no meaningful interlinked interaction would be

possible.”²³ Thus, structure provides the larger context for the strategic interaction of actors in the policy process.²⁴ Given this distinction, Figure 1.1 summarizes the strategic and structural factors that have been found to impact the federal-state working relationship:

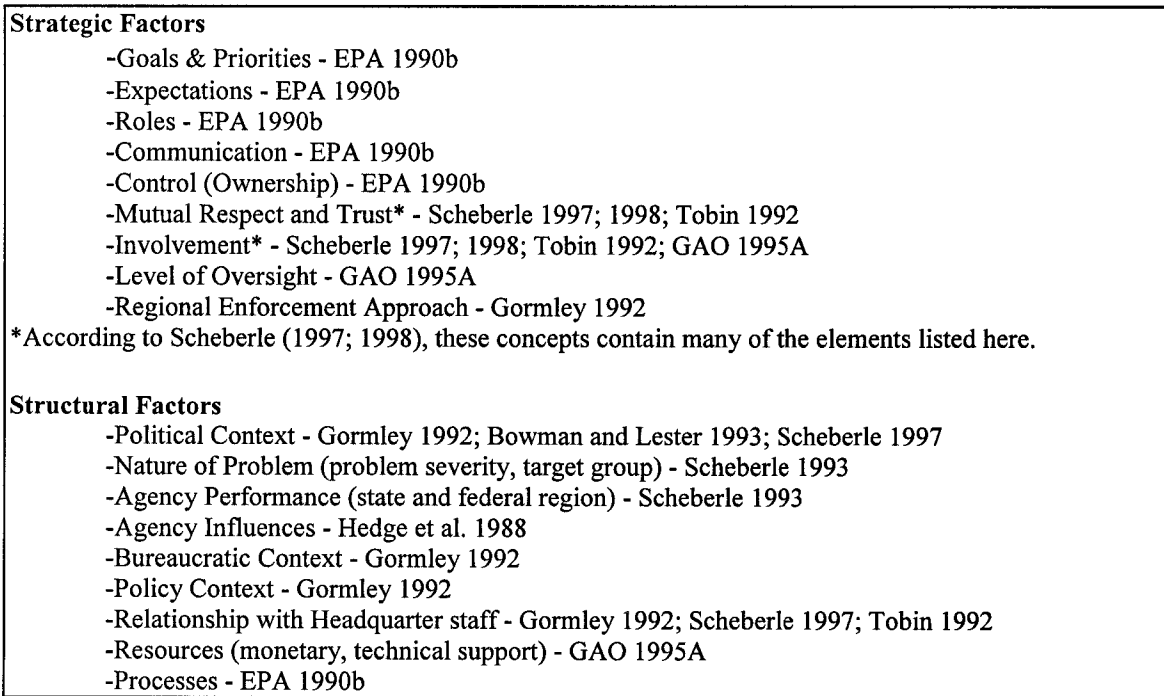


Figure 1.1. Summary of Structural and Strategic Factors Impacting Working Relationships

THE SUPERFUND PROGRAM

Scheberle (1997) notes the recent increase in concern about federal-state relationships in environmental policy. Nowhere is this concern greater than in the Superfund program.²⁵ The role of states is interwoven with all aspects of the program (Markell 1993, 17). A recent GAO report discusses the potential for state involvement in the federal Superfund program:

The states play a significant role in the implementation of the Superfund program. States may apply to EPA to carry out cleanup actions under Superfund, and if the EPA determines that the state is capable of carrying out such actions, it may enter into a contract or cooperative agreement with the state. The Superfund Amendments and Reauthorization Act of 1986 expanded the states' role by authorizing states to carry out related enforcement actions pursuant to the contract or cooperative agreement. EPA regulations provide that the "states may either assume the lead...for the response action or may be the support agency in EPA-lead remedial response." Even when EPA retains the lead, the regulations provide that EPA shall "ensure meaningful and substantial state involvement" in site cleanups. (1997a, 16).

Furthermore, both former EPA administrator Carol Browner and the GAO have stated the importance of the working relationship to improving the implementation of environmental policy. According to Browner, "it is these relationships that will make or break national environmental efforts" (cited in Markell 1993, 17). The GAO (1997a) identified the need for a constructive and efficient working relationship as one of the critical factors affecting states' abilities to successfully lead cleanups at NPL sites.

The federal-state relationship is central to the level of involvement each state has in the federal program. Currently, the EPA in conjunction with states is seeking to develop "readiness" criteria to guide delegation of increased program responsibility to states. Beyond being responsible for certain rules and funding arrangements, states are free to develop their programs as they see fit. Thus, a state's capability to handle increased responsibility becomes the central issue in determining what its exact role will be. The effort to build state capacity involves issues of trust and involvement (Scheberle 1997; 1998). The development of a more constructive and efficient working relationship would be characterized by a clear division of responsibility and a level of oversight that is commensurate with a state's cleanup capabilities. It is apparent this effort involves issues of increasing trust among participants, as well as adjusting the level of oversight

(involvement) to match the perceptions of the actors. Increasing the availability of technological and financial support could be seen as ‘right type of involvement’ and could lead to a more productive cooperative relationship between federal and state implementors. Thus, the important factors of building mutual trust and increasing beneficial involvement are very much present in the current debate of the states’ role in the implementation of the Superfund program.

While Scheberle (1997) analyzes the working relationships in different environmental programs, it is useful to analyze the variation of the working relationship within a particular program. This makes the relationship between a particular state and region an important focus for research. There is some evidence of variation in the relationship between EPA regional offices and states in the Superfund program. The GAO (1997a) found that the states of Minnesota, Washington, and Wisconsin had more favorable (and autonomous) relationships with their regional offices. New Hampshire and Texas were seeking increased program responsibility, but were constrained by their regional offices. The perceptions of the regional officials suggested that the relationship was not nearly as cooperative as those of the previously mentioned states.

The Superfund program also provides an adequate time frame for study. The program originated in 1980 with the passage of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Initially, many states simply copied the national program. Since then, however, states have had adequate time to develop their own cleanup programs, which are distinctive from the national effort (GAO 1998c). With the passage of the Superfund Amendments and Reauthorization Act

(SARA) of 1986, Congress sought to increase the participation of states in the program. So even though the regional offices are responsible for a majority of the emergency and removal activity, states have sought and gained an ever-increasing role in the implementation of this program. Given this time frame and changes in the state role, one could follow the evolution of this relationship through time to its current status. This longer time frame would allow for the examination of the development in the norms/rules that govern a particular working relationship.

CONCLUSION

This study seeks to explore the nature of the working relationship between EPA regional office and State Agency officials implementing the Superfund program. Specifically, it looks at the perceptions these actors have of the quality of the working relationship, levels of trust and involvement, as well as the impact of structural forces on this relationship.

Several research questions guide this study. The first set of questions deal with how federal and state officials perceive the nature of the interaction in their working relationship. These questions include: (1) What is the level of cooperation that exists in the working relationship between federal and state officials? (2) Do regional and state officials have different perceptions of the nature of the working relationship? (3) Do Highly Cooperative federal and state officials perceive strategic and structural factors differently than their Low-Moderately Cooperative counterparts? A second set of questions focus on which factors can differentiate federal and state officials that perceive a highly cooperative relationship from those who report a lower degree of cooperation.

Important questions here are the following: (1) What factors are important in explaining the level of cooperation present in these relationships? (2) How important are strategic factors relative to structural factors in providing this explanation? (3) With respect to structural factors, how important are state-level impacts compared to those at the national-level? (4) Are the same factors important for both regional and state officials or are there different explanations? A third set of questions focus on the impact of agency influence on federal and state perceptions. These include the following: (1) Do regional and state officials have different perceptions of the strategic and structural factors shaping this relationship? (2) If federal and state officials have different perceptions, what are the implications of this for the Superfund program, as well as the larger context of environmental policy and intergovernmental relations?

In order to answer these questions, the rest of the study is structured as follows. Chapter Two focuses on developing a model of cooperative working relationships. There is a discussion of the data and methods used to approach the above research questions. Chapter Three discusses the current structure of the Superfund program. Topics examined here include the current national program, important developments in state cleanup programs, as well as a discussion of critical issues facing the program. Chapters Four and Five examine the state and regional perceptions of the level of cooperation in their working relationships, as well as important strategic and structural factors. Chapter Six compares the perceptions of State Agency and EPA regional office officials. Chapter Seven discusses the implications of the findings of the preceding analyses. This includes a discussion of the utility of the model of cooperative working relationships, as well as

possible regional/state differences. There is also a discussion of the future research issues raised by this study.

ENDNOTES FOR CHAPTER 1

1. Local governments are not the focus of this research due to the fact “federal environmental laws create federal-state, not federal-local, relationships” (Scheberle 1998, 16).
2. Scheberle (1997, 4-6) notes the recent crescendo of concern about federal-state relationships in environmental policy. This most recent effort has culminated in the creation of the National Environmental Performance Partnership System (NEPPS) in 1995. The central tenet of NEPPS is to create more cooperative relations between EPA and the states. However, the idea of a partnership between EPA and the states has been around a while. The partnership concept was first examined by the General Accounting Office [hereafter, GAO] in the late 1970s (GAO 1980). For subsequent studies by both GAO and EPA also see EPA 1982; GAO 1988; EPA 1990b; GAO 1995a.
3. Some of the more useful studies conducted include GAO 1995A; 1997a; EPA 1990b; Scheberle 1993; 1997.
4. It should be noted that even though the model is developed and tested using the Superfund program, it is meant to be generalizable to other environmental policy programs. These characteristics will be discussed later in the chapter.
5. Wright (1990, 67) defines overload as a “term [used] to describe the complexity of intergovernmental administration” in the mid- to late-1970s.
6. According to Kincaid (1996, 1991), the collapse of the grant system and the rise of federal regulation signals the advent of “coercive federalism.” Characteristics of coercive federalism include: aid reduction, increasing aid to persons (not governments), aid conditions, mandates, preemptions, reduction of intergovernmental tax immunities, uncooperative programming, judicial indifference, and a weakened intergovernmental infrastructure.
7. This added responsibility for states and localities has come mainly in the areas of consumer protection, public health, occupational safety, and the environment.
8. Other important characteristics of Wright’s overlapping authority model include: limited, dispersed power; interdependence; and limited areas of autonomy.
9. Peterson (1995) defines developmental policy as providing for the physical and social infrastructure necessary to facilitate a country’s economic growth. Redistributive policy reallocates societal resources from the ‘haves’ to the ‘have-nots.’

10. Examples of legislation that includes the partial preemption (or primacy) approach: Clean Air Act of 1970; Clean Water Act of 1972; Safe Drinking Water Act of 1976; and the Federal Insecticide, Fungicide, and Rodenticide Act of 1978 (Crotty 1987, 54).
11. The Indoor Radon Abatement Act is an example of this approach. States are encouraged to establish radon programs and conduct certain activities. However, if states choose not to do so, the EPA cannot step in (Scheberle 1997, 14).
12. According to Scheberle (1997, 14), "Congress mandated that states implement wellhead protection programs under the Safe Drinking Water Act Amendments of 1986." Furthermore, it should be noted that there are often instances in which one law can contain multiple approaches. The Safe Drinking Water Act contains both direct order and partial preemption provisions (Scheberle 1997, 14).
13. Examples of outcome measures include actual indicators of environmental improvement, industry compliance rates. Examples of output measures include the number of inspections performed by state personnel.
14. This applies only to environmental programs eligible under NEPPS. As of July 1996, this included a total of 16 different grants (EPA 1996).
15. The emphasis on enhancing the quality of working relationships or partnerships include the Superfund program (GAO 1997a) and implementation of the Surface Mining Control Act by the Office of Surface Mining (Scheberle 1993; 1997; 1998). Thus, NEPPS can be seen as a product of the increased attention to partnerships between federal and state implementors of environmental policy.
16. These areas include stationary source air pollution control (Wisconsin-state leader); point source water pollution control (North Carolina-state leader); mobile source air pollution control (California-state leader); and nonpoint source water pollution control (Iowa-state leader).
17. Hedge et al. (1988) find implementation patterns and working relationships are influenced by the state political and economic milieu. Lester (1995) finds variations in implementation style based on variations in state organizational capacity and environmental commitment. Rabe (1997) also notes the variation in state performance in the environmental area as a limitation on states' abilities to absorb more environmental responsibility.
18. Even though local governments are becoming more important in the implementation of environmental policy, they are not the focus of this analysis (John 1994; Scheberle 1998). The reason for this is the focus the working relationships between those implementing federal environmental law. Federal environmental laws create federal-state, not federal-local, relationships.

19. Tobin (1992) uses the 1980 GAO study conducted as a benchmark from which to analyze possible changes in the EPA-state relationship. Of course, his analysis extends beyond this to draw conclusions about the impact of Reagan's New Federalism.
20. The exception in this critical view of EPA was the states perception of their relationship with EPA's regional offices.
21. The EPA has launched several separate task forces with the intent of improving its relationship with the states. This includes task forces launched in 1975, 1983, 1984, and 1991.
22. While all of these scholars deal with the relationship between strategy and structure. They each conceive of it in a slightly different manner. Stoker (1991) views it in terms of a strategic and institutional context; Scheberle (1997) strategies and stories; Kickert et al. (1997) interactive and institutional perspectives; Klijn and Teisman (1997) games and networks; Ostrom (1998) individual-level actions and structure; and Giddens (1984) action and structure. However, all of these suggest strategy takes place at the individual level, while structure provides a context for this action at the individual-level.
23. Klijn and Teisman (1997, 104) see rules as "understood as generalizable procedures applied in the enactment and/or reproduction of games." These rules constitute meaning and provide sanctions for games (i.e., individual-level interactions). One could conceive of the statutory language of an act as forming a set of rules for federal-state relationships that would take place as the act was implemented.
24. Both Giddens (1984) and Klijn and Teisman (1997) note the actual relationship between strategy (action) and structure is more complex than is stated above. Giddens (1984) suggests a duality of structure in which it is both the process and outcome of social practices. Klijn and Teisman (1997) that the conduct of games can impact the network and vice versa. However, Scheberle (1997) and Kickert et al. (1997) suggest that the structural or institutional factors have a much stronger impact on the strategic interactions of actors than the other way around. Institutional factors are seen as much less manipulable and dynamic than are strategic factors. For the purposes of this study, the emphasis is placed on how structural factors impact the strategic interactions of those participating in the federal-state working relationship.
25. The Superfund Program, which is a product of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, the Superfund Amendments and Reauthorization Act of 1986, and a series of administrative reforms known as the Superfund Reforms made from 1993 to 1995 governs the cleanup of abandoned hazardous waste sites.

Chapter 2: Toward a Model of Cooperative Working Relationships

INTRODUCTION

The foundation for a model of cooperative working relationships from which to study the Superfund program was established through a review of the literature of intergovernmental relations in Chapter One. Examining the larger context of intergovernmental relations revealed the importance, if not the difficulty, of attaining cooperation in a complex and tension filled system. Cooperation does not simply emerge, but must be cultivated by actors within the intergovernmental system. This larger context shapes the intergovernmental relationships in environmental federalism. In the area of environmental policy, successful implementation is based on finding an appropriate balance between federal and state goals and capabilities. This balancing act takes place within the working relationships between federal and state implementors. A review of literature on working relationships suggested that both strategic (interactive) and structural (institutional) factors have an important impact on the nature of working relationships in environmental policy.

The purpose of this chapter is to incorporate both strategic and structural factors into a model that explains the level of Cooperation between federal and state implementors of the Superfund program. The first part of the chapter provides a more detailed look at the concept of cooperation and its link to working relationships in environmental policy. Next, a model of cooperative working relationships is developed

and discussed in detail. Finally, the methodologies used to gather and analyze the data are described.

A CLOSER LOOK AT COOPERATION AND WORKING RELATIONSHIPS

The complexity and interdependence of the intergovernmental system suggest the absolute necessity of cooperation among the levels of government in order to achieve successful implementation of federal policy (GAO 1990; Stoker 1991). Cooperation should not be conceived as the absence of conflict. Instead, Stoker (1989) suggests the extent of conflict and the likelihood of cooperation are conceptually separate. He argues, “Cooperation is more properly seen as a response to conflict, not the absence of it” (Stoker 1989, 50). The relationship between conflict and cooperation are clear only in rare situations of total consensus or total conflict.¹ Stoker (1991, 50) suggests that in mixed motive situations, “the likelihood of cooperation can be altered even when the amount of conflict is held constant.”² It is necessary for those involved in the implementation of policy in a setting of diffuse authority (e.g., the intergovernmental system) to cooperate. By doing so, power is created in the implementation process so that there is a “capacity to act” (Stone 1989). Thus, one should not look to the federal government to “force” cooperation from the top-down. Instead, intergovernmental relations should be looked at as a bargaining process in which actors must negotiate the terms of cooperation or joint action (Pressman 1975; Ingram 1977). Government is not necessarily disabled by diffuse authority and can achieve instrumentally rational policy, but must induce cooperation to do so.

The need for collaborative efforts to implement policy exist alongside the more coercive and conflictual elements of the intergovernmental relationship. With respect to

the federal system, the imperatives or tensions that must be reconciled are the desires for central leadership and diffuse implementation authority. In the federal context, national policies must contend with the forces of federalism and liberalism, which diffuse authority (Stoker 1991, 10 -13). It is this diffusion that requires the participation of implementors who may represent interests or perspectives that are divergent from the national policy. The use of “reluctant partners” in the implementation process requires national policy formulators to seek cooperation and coordination. This allows for strategic behavior on the part of the subnational intermediaries (Stoker 1991, 53).

The federal-state relationship in environmental federalism exemplifies these tensions between centralized federal leadership and diffuse state authority. According to Scheberle (1997, 1), “federal-state working relationships in environmental programs are at the heart of policy implementation.” More positive relationships between federal and state officials are seen to facilitate successful implementation of environmental programs.

Relationships that “pull together” are characterized as having higher levels of Cooperation, as well as mutual trust and respect (Scheberle 1997, 1). Working relationships that are seen to be “coming apart” are more contentious and can contain hidden agendas (Scheberle 1997, 1). By making a systematic examination of the nature of working relationship between federal and state officials implementing environmental policy, the study sheds light on many important issues in the larger context of intergovernmental relations. Specifically, it shows what factors are important in determining the level of Cooperation between federal and state implementors.

A good deal of research on federal-state relationships has been “designed to focus on working relationships between federal and state implementers” (Scheberle 1997, 180).

In particular, this research has focused on the relationships between federal regional and state officials.³ The rationale for this focus builds on the differences between regional and headquarters staff, as well as the closer link between regional and state officials. Scheberle (1997) suggests that regional officials tend to be in the position of policy receivers as opposed to initiators. This means that many times regional officials must act within the policy and budgetary parameters set by headquarter staff. Regional staff forms the primary federal contacts for state officials. They are in the position of direct oversight of state program activities. There are many cases where they become directly involved in state-level activities (Scheberle 1997, 164). In the case of the newly instituted Performance Partnership System (PPS), regional officials are given the responsibility of negotiating agreements with states, as well as participating with states in program workgroups (EPA 1996b). With respect to Superfund, it is the regional officials that make the decisions about whether states can take lead responsibility at NPL sites. It is the regional and state officials that form the working relationships that actually implement Superfund policy.⁴

A MODEL OF COOPERATIVE WORKING RELATIONSHIPS

The concept of working relationships provides an excellent way to analyze the factors that promote or inhibit cooperation in the federal-state relationship. The purpose of this study is to examine the level of Cooperation in the federal-state working relationship among those participating in the Superfund program. The study identifies factors that influence the level of Cooperation in this environmental program. The model employs both structural and strategic factors to explain the level of Cooperation. Strategic factors arise directly from the interaction between those participating in the

working relationship. They can be used to directly manipulate the level of cooperation and conflict in the working relationship. Structural variables provide a view of the larger political and institutional context for the working relationships among implementors. Structural variables can include such things as the nature of the problem, as well as statutory and regulatory language (Scheberle 1997, 31). These structural factors set the parameters (or context) in which strategic interaction takes place. Both the federal and state officials in the working relationship bring their perceptions of these larger structural factors to their interaction. A schematic representation of the model is displayed in Figure 2.1:

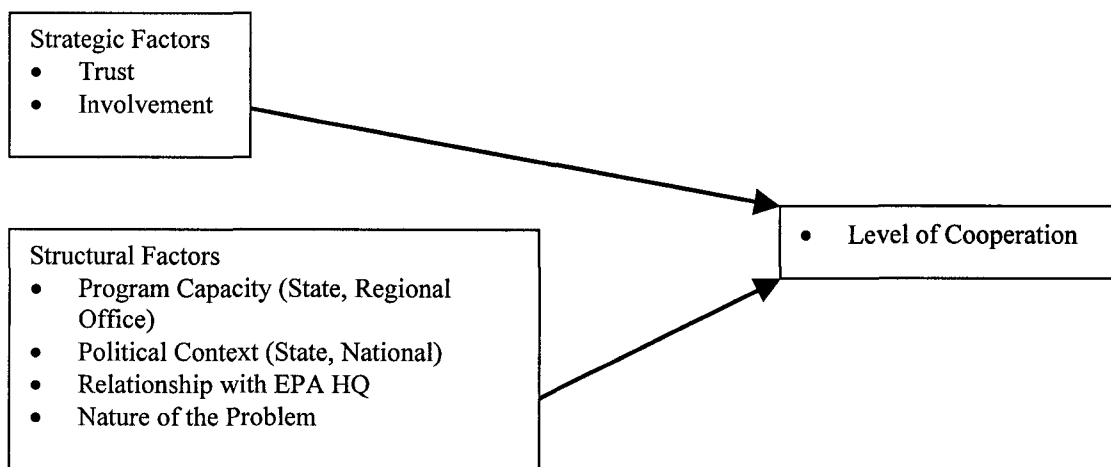


Figure 2.1. A Model of Cooperative Working Relationships

Dependent Variable - Level of Cooperation

The level of Cooperation is the dependent variable in this study of the working relationship between state and regional Superfund officials. While the focus of much discussion, cooperation is rarely explicitly defined in the literature. In order to overcome this, the study starts with a basic definition laid out by Gambetta (1988) and then adds other important elements. According to Gambetta (1988, 214-215):

‘cooperation’ is meant in the broad sense of agents, such as individuals, firms, and governments, agreeing on any set of rules - a ‘contract’ - which is then to be observed in the course of interaction. Agreements need not be the result of previous communication but can emerge implicitly in the course of interaction itself, and rules need not be written but can be established as a result of habit, prior successful experience, trial and error, and so on.

Thus, cooperation can be conceptualized as a set of rules or norms agreed upon by those participating in a working relationship (Ostrom 1990). These rules or norms can then be used to characterize the nature or character of the interaction.

Stoker (1991) adds a necessary addition to this basic conceptualization. He argues that “cooperation [is the] negotiation to bring separate entities into conformity with one another; this highly political activity can occur only when actors adjust their behavior to the actual or anticipated behavior of others” (Stoker 1991, 61). States are many times the reluctant partners of the federal government. The federal government must bargain with states in order to create a ‘capacity to act.’ Creating this capacity to act has been the goal of both EPA and the states as they seek to build a cooperative and effective partnership in order to protect the environment. Both the *Joint Policy Statement* (EPA 1994) and the *National Environmental Performance Partnership System* (EPA 1995a) recognize the importance of EPA and the states working together to effectively protect the environment. Given this important trait, the working relationship between regional and state officials takes on the characteristics of a negotiation in a long-term mutually interdependent relationship among relative equals (Sheppard 1995). This characterization is important because these types of negotiations have different nature than those that are strictly transactional and distributive (Sheppard 1995).

Deutsch (1962) adds another important piece to the conceptualization of cooperation in this study. He notes, “In a cooperative social situation, the goals for the

individuals are *promotively interdependent*. ‘Promotive interdependence’ specifies a condition in which individuals are so linked together that there is a positive correlation between their goal attainments” (Deutsch 1962, 276). If regional and state officials perceive their goals to be promotively interdependent, then a state of cooperation exists between them. Deutsch’s insights coincide nicely with that of Sheppard and provide a context for the norms/rules discussed by Gambetta. Thus, this study is examining cooperation in terms of norms or rules that are developed in a long-term mutually interdependent relationship among relative equals and enhance the promotive interdependency (perception of) between regional and state officials.

Given this basic framework, the task now becomes one of identifying the basic rules or norms in a cooperative relationship. A review of the relevant literature suggests that there are four basic norms or rules that characterize a cooperative relationship. The first is **mutual development**. Sheppard and Tuchinsky (1996) and Sheppard (1995) point out the need to invest in mutual development in order to sustain an effective and ongoing relationship. This mutual development entails learning about one another; improving ones’ value to the other; and the development of plans to integrate the interests of others into larger decisions (Sheppard and Tuchinsky 1996). The mutuality of the relationship also points to such things as the generation of shared meanings, a stronger group identity or sense of community, and the development of mutual long-term interests (Ostrom 1990; Deutsch 1962; 1973). One can conceptualize mutual development as organizational learning (Scheberle 1997). Regional and state officials in a working relationship come together and develop mutual goals, share information, and learn about the other party.

The discussion of mutual development leads directly to another important rule in a cooperative relationship. **Inclusiveness** of participants that have a stake in the outcome is essential to assuring a cooperative system (Weber 1998; Ostrom 1990). The views and interests of all relevant participants are taken into account and incorporated into important policy decisions. If this is done, it can signify that all of the participants recognize the legitimacy and credibility of others' ideas and perspectives (Deutsch 1973). Not only do these competing perspectives and ideas need to be integrated into the process, but it is also important for participants to perceive their input is meaningful (Scheberle 1997; 1998). All of this points to the need for flexibility and discretion in the working relationship. One party does not try to over-prescribe the situation, but allows the incorporation of other views and approaches into the process (Ostrom 1990).

Tripp, Sondak, and Bies (1995) discuss the importance and centrality of **fairness** to negotiators involved in an ongoing relationship. They suggest that, "because negotiation is an interpersonal process, and because fairness is a fundamental characteristic of social contexts, negotiators seek fairness and evaluate both the process and outcomes of negotiations in terms of fairness" (Tripp, Sondak, and Bies 1995, 45). This aspect of fairness is captured in the *JPS* and *NEPPS* discussions concerning the use of outcomes and environmental indicators as preferred modes of evaluation (EPA 1994; 1995). Parties in negotiations are concerned about fairness "because they care about building and preserving their relationship with each other" (Tripp, Sondak, and Bies 1995, 52). The negotiators emphasize procedural and interactional fairness over the allocation of resources (e.g., distributional fairness). Fairness is viewed in terms of equity (based on contribution) and equality.

The fourth and final norm in a cooperative relationship focuses on **limiting opportunistic behavior**. Even parties committed to a cooperative effort will from time to time be tempted to take advantage of the other party. Many scholars point to the need for some type of constraint or assurance mechanism to discourage this kind of behavior (Ostrom 1990; Weber 1998). In her study of self-organizing, self-governing common pool resource situations, Ostrom (1990) suggests several important design principles for long enduring relationships. In particular she suggests that monitoring and graduated sanctions are useful principles in deterring opportunistic behavior (Ostrom 1990, 90). Weber (1998) discusses the need for an assurance mechanism to keep parties from seeking to void the results of a negotiated rule. Both Ostrom and Weber note the importance of something in a multi-party situation that guarantees accountability and responsibility to fellow participants. The *JPS* and *NEPPS* also recognize the importance of maintaining accountability and responsibility in the EPA-State relationship. One of the founding principles stated in the *JPS* points out the importance of shared accountability and responsibility for success in promoting and implementing environmental programs (EPA 1994).

The EPA-State working relationship is an interactive process that is aimed at producing a more cooperative and environmentally effective partnership. Scheberle (1997; 1998) notes the inherent tensions between federal and state officials due to their different roles in the intergovernmental system. To the extent the working relationship can function as a process to reduce conflict (e.g., facilitate cooperative interaction), the more likely it will also produce an environmentally effective effort. Given the highly strategic nature of this interaction,⁵ Teisman (1992) and Klijn and Teisman (1997)

suggest that goal attainment is not a proper way to evaluate interactions.⁶ Instead they suggest the use of an “ex post satisficing criterion: the extent to which game participants consider the interaction and its results satisfactory” (Kickert et al. 1997, 172). Kickert et al. (1997, 173) suggest that, “By making an inventory of the ex post judgements of participants, this evaluation offers a far more sophisticated image of the quality of interaction than is produced by evaluation based on the attainment of ex ante goals.”⁷ Thus, the EPA-State working relationship is evaluated in terms of how well the participants perceive it to have developed norms or rules based on mutual development, inclusiveness, fairness, and limitations on opportunistic behavior. These perceptions are measured by a series of items on the questionnaire. These focus on the general perceptions the participants have about the nature of the working relationship.⁸

Independent Variables - Strategic Factors

The first set of independent variables is strategic in nature. According to Stoker (1991), the strategic context of the implementation process refers to the degree of conflict that exists between the participants. These variables are more dynamic and manipulable by participants in the working relationship. This is due to the bargaining nature of the working relationship between federal and state officials (Ingram 1977; Press 1975; Derthick 1972). These factors arise from and are in turn influenced by the interactions of these participants. They have an important influence on the level of Cooperation in the working relationship.

The literature on working relationships identified several elements that determine the nature of the working relationship (see EPA 1990b; 1994a; GAO 1995A; and Scheberle 1997; 1998). Factors such as communication, goals and priorities,

expectations, and roles were identified as important determinates of the nature of any working relationship. However, it was not until Scheberle (1997) that these disparate elements were placed in a coherent framework. According to Scheberle, there are two important factors that influence the nature of working relationships. These factors are Trust (mutual) and Involvement (by federal oversight personnel). The concepts of Trust and Involvement capture the underlying impact of many of the above elements. Hence, they can be seen as the ends, while communication, goals and priorities, expectations, and roles can be seen as means to these larger ends. Accordingly, this study utilizes Scheberle's (1997) conceptions of Trust and Involvement as the basis for its discussion of strategic factors.

Trust

Gormley (1987, 286) asks an important question, "can the states be trusted to protect the environment without strong federal control?" In turn, can states trust federal officials to treat them as equal partners when conditions warrant? In the context of the working relationship, trust can be viewed as an alternative approach to the regulatory relationship between EPA and the states (Sydow 1998, 31). Regions that do not trust states may well employ more coercive mechanisms in the relationship (Scicchitano and Hedge 1993). In the case of Superfund, regional offices may be less likely to grant state applications for lead-agency status at NPL sites. The state response is very likely to be one of hostility and could very well result in a policy blockage. In other words, reliance on federal hierarchical power is not likely to produce a cooperative working relationship. However, an approach based more on bargaining and persuasion could result in a more understanding and cooperative relationship.

Several scholars discuss the multidimensional nature of this construct (see Mishra 1996; Sheppard and Tuchinsky 1996; Lewicki and Bies 1996; and Butler 1991). This study adopts a view of trust that is based on notions of vulnerability and expectations or beliefs (see Mishra 1996, 265 for a more detailed discussion).⁹ According to Mishra (1996, 265), “*Trust* is one party’s willingness to be vulnerable to another party based on the belief that the latter party is [a] competent, [b] open, [c] concerned, and [d] reliable.” Furthermore, Mishra (1996, 265) points out that trust is “distinguished from related behaviors such as cooperation or delegation that follow from one’s trust in another.”¹⁰ This study utilizes Mishra’s conception of trust.

As stated above there are four components to the Trust construct. The first is **competence**. Both Mishra (1996) and Butler (1991) suggest the importance of competence in building trust not only within organizations, but between them as well. Items in the questionnaire focus on issues of competence pertaining to both functional and specific knowledge and skills, as well as judgment (the ability to make good decisions).

The second component of Trust is **openness**. This refers to the ability of parties in a relationship with one another to level and express ideas freely (Butler 1991). Mishra (1996), Butler (1991), and Scheberle (1997) argue about the importance of openness in building trust. Scheberle (1997) focuses on the openness of the communication process between parties in a working relationship. In particular, Scheberle (1997, 194) focuses on the need for open dialogue, timely communication, and providing adequate opportunity for feedback. For the purposes of this study, items on the questionnaire focus

on the nature of the communication process between parties in the working relationship (e.g., its level of openness).

The third component of the Trust construct is **concern**. According to Mishra (1996, 267) this component of Trust suggests that a truly concerned party “will also be concerned about my interests or the interests of the whole. This does not mean that the other party lacks any self-interest. Rather, trust in terms of concern means that such self-interest is balanced by interest in the welfare of others.” Many scholars support the inclusion of this component in trust (see Butler 1991; Lewicki and Bunker 1996; Sheppard and Tuchinsky 1996; Hardy et al. 1998; and Scheberle 1997). In particular, Hardy et al. (1998, 69) suggest that goodwill among parties in a relationship is essential to the development of meaningful trust. Goodwill alludes to the mutual expectations of reciprocity between partners (Hardy et al. 1998). Scheberle (1997, 19) points out the importance of federal officials taking a genuine interest in the success of state officials in the building of a relationship that ‘pulls together.’ Items on the questionnaire focus on such topics as genuine concern, mutual respect, and (possibly) level of supportiveness.

The fourth component is **reliability**. This refers to the consistency between word and action. According to Gabarro (1987, 104), “judgments about trust in working relationships become specific based on accumulation of interactions, specific incidents, problems, and events.” This points out the importance of cumulative experiences between partners in building a reputation of trustworthiness. This reputation can be enhanced by increasing the predictability of your actions with respect to the other party in the relationship (Hardy et al. 1998; Sheppard and Tuchinsky 1996; and Lewicki and Bunker 1996). The reliability, dependability, or consistency of parties in a working

relationship is built over time and based on the experiences parties have with one another. Items on the questionnaire reflect these types of issues (e.g., history of the relationship, reputation, consistency of behavior, reliability, and dependability).¹¹ It is expected officials that perceive higher levels of Trust will also perceive their working relationship as more cooperative.

Involvement

Involvement is not nearly as complex a concept to define as Trust is. However, it is not as clear that more involvement is going to produce a more cooperative federal-state working relationship (Scheberle 1997). According to Scheberle (1997; 1998), involvement is limited to federal oversight personnel in state programs. While it is certainly important, it does not present the whole picture of what involvement is. It is missing the level of state involvement in the federal program. Involvement is more than issues of the level of oversight and provision of resources. It is also about what roles federal and state officials play in the implementation of a particular program.

Using the Superfund program as the focus of the study allows for an examination of state involvement in the federal program. The statutory structure of Superfund is such that states may apply for increasing levels of responsibility in the implementation of the federal Superfund program.¹² It is at this point the application is evaluated by officials at a particular state's regional office. The criteria used are based on the regional office's assessment of a state's capacity to handle an enhanced or increased role in the Superfund process.¹³ Hence, this study takes a broader view of involvement than does Scheberle (1997; 1998).

Currently, the working relationship in Superfund revolves around the “lead/support agency dichotomy” (Markell 1993). Either the federal or state agency is assigned the lead responsibility at a particular NPL site. The lead agency is responsible for making the important decisions concerning enforcement and cleanup issues. The support agency provides assistance in whatever areas are deemed appropriate. The support agency also is allowed to comment on the activities and decisions of the lead agency. While state agencies may apply for lead responsibility, it is the federal regional office that makes the decision as to which level of government assumes the lead responsibility at a particular site.

Items on the questionnaire focus on the following issues: **actual roles** in the implementation of the Superfund cleanup process and the **decentralization of authority** within the program.¹⁴ Items dealing with programmatic roles include the issues of oversight, resource provision, and overall division of responsibility. Decentralization of authority in the Superfund program is closely linked to such issues as who should have responsibility for project planning and the selection of remedies. These items also address the issue of the proper role for federal regional offices (e.g., provider of resources, backup regulatory authority, and overseer). Items concerning the question of decentralization center on the lead/support agency dichotomy set up by the Superfund statute. It is expected that state and regional officials who feel their level of Involvement, as well as that of their counterpart, is appropriate will perceive a higher level of Cooperation in the working relationship.

Independent Variables - Structural Factors

While the strategic factors arise from individual-level interaction, structural factors reflect the larger institutions within which these individuals operate. They provide the larger context for the participants of the working relationship.¹⁵ Hjern and Porter's (1981) idea of implementation structure captures this linkage of actor and institution in the implementation process. According to Hjern and Porter (1981), the implementation of a program may not include the whole organization, but rather the interactions of program-relevant individuals in these organizations (see also O'Toole et al. 1997). These individuals do not operate totally independent of their organizations, but carry the organization they are representing as a "frame of reference" (Kaufman 1986).

The views of individual actors and their organizational frames of reference shape their interaction in the working relationship. Kickert et al. (1997, 185) also stress the important "role of rules and organizational frameworks, which set the stage for strategy formulation and interactions." Thus, it is important to note the impact of these frames of reference on the interaction of federal and state officials within the working relationship.

Relationship with EPA Headquarters

Headquarters personnel are charged with translating legislative goals into workable programs. According to Scheberle (1997, 164), "rule-making activities to implement new or established programs occur within agency headquarters, as do any activities that result in new program guidance or other implementation documents." This puts headquarters program staff in the position of initiating policy change. They are also responsible for making general funding decisions. It is in these different ways that headquarter program officials form the basic parameters for regions and states.

Many scholars have noted that there is an important distinction between federal regional offices and headquarters (see Scheberle 1997; Crotty 1987; and Gormley 1987). Scheberle (1997) notes that both regional OSM and EPA officials believe headquarter officials possess different views of state programs and have less commitment to implementation efforts than they do. Scheberle (1997, 172) also reports that “regional staff perceive higher levels of training to successfully implement the program in the regions and field offices rather than headquarters.” Gormley (1987) finds that regional and headquarter officials disagreed about how to implement intergovernmental regulation strategies. In a later study, he finds disagreements between federal headquarter and regional officials in how to gain state compliance (Gormley 1992). Given these differences, it is important to investigate the impact a regional office’s relationship its federal headquarters could have on its relationship with state agencies.

While Scheberle (1997) notes that regional offices are a state agency’s most frequent federal-level contact, it is important to examine the state-federal headquarter link. Some scholars have taken note of the states tenuous connection with federal headquarters staff (see Scheberle 1997; Tobin 1992). Scheberle (1997, 119) notes, “From the perspective of the states, EPA headquarters personnel are more remote, less interested, and less helpful than EPA regional staff.” She also shows that state officials recognize problems going on between headquarters and regions, as well as the impact this has for the EPA- State working relationship. She reports, “Another state official noted the lack of communication, ‘Make some program managers at [EPA] headquarters more accountable for their actions and improve communication between [EPA] headquarters and [EPA] regions, as well as between [EPA] headquarters and states’” (Scheberle 1997,

118-119). Scheberle (1997, 187) also finds that states desire more contact with headquarters staff on program related issues. Tobin (1992) also examines the important state-headquarter linkage. He finds states tend to have a more positive view of the regional offices than they do of headquarters (Tobin 1992). This should not be overly surprising considering that regional offices are the most frequent federal-level contact for states (Scheberle 1997). States also expressed a dissatisfaction with the level of EPA headquarters' understanding of state problems (Tobin 1992, 102). These findings suggest that the regions and states tend to share somewhat similar views of EPA headquarters officials. The quality of the relationship between headquarters and the regional offices, as well as states has an important impact on the level of Cooperation in the working relationship.

Regional and state officials were asked to evaluate several different aspects of their relationship with EPA Headquarters. One aspect of this relationship is a **comparison of regional office and headquarters** in terms of sensitivity to state issues and commitment to the Superfund program. Another aspect is the source of **policy innovation and leadership** in the program. The final aspect is the **provision of technical support** to administer the program. Items focus on the level of agreement both regional and state officials have of their relationship with headquarters' staff.^{16, 17} If both regions and states perceive they have a better relationship with one another than with the headquarters, it is expected the level of Cooperation in the working relationship will be higher. States are more likely to work with regional officials in this context. And regional officials may side more with the states in their contacts with headquarters'

officials. If either state or regional officials believe they have a better relationship with headquarters, then it is likely there is a lower level of Cooperation in the relationship.

Program Capacity

The issue of capacity is at the heart of the debate between those who seek a strong federal presence and those who seek to increase devolution to the states (Rabe 1997). Many scholars have noted the importance of organizational capacity to any effort to implement public policy (Goggin et al. 1990; Scheberle 1997). It is also a central issue in the continuing debate to reform the Superfund program (Markell 1993). States that want enhanced responsibility within the national program must apply to their respective regional offices. If deemed capable by regional officials, states can take the lead agency role at federal NPL sites. However, this grant is not automatic. According to the GAO (1997a, 5), “New Hampshire and Texas have disagreed with their respective EPA regions over the optimal balance in cleanups at NPL sites.” Markell (1993) notes the importance of perceived program effectiveness at the national level. He suggests that those who see the national program as effectively cleaning up hazardous waste sites are much less likely to favor any kind of reform that gives states increased responsibility. States that view their program as lacking may seek increased support from a federal regional office (Gormley 1987, 277). All of this suggests two things. First is that state and federal program capacity is important. Second, not only is it important how one perceives his own program, it is also important how they perceive their ‘partner’s’ program. Both of these can influence the level of Cooperation in the working relationship.

Program capacity is a difficult concept to define. Markell (1993), Scheberle (1997), and Goggin et al. (1990) all provide a discussion of the important elements of

program capacity.¹⁸ What each of these studies has in common is the idea that capacity is a multi-dimensional concept. Markell (1993) identifies such things as adequate legal authority, adequate staffing (in terms of number and competence), and a proven track record of cleaning up complex sites to be important in determining capacity. Scheberle (1997) suggests training, commitment, support, and funding of programs are important. Goggin et al. (1990) identify organizational structure, personnel, and resources.

Reflecting the above discussion, this study asks a set of items on the questionnaire to gauge both the capacity of state and federal regional Superfund programs. The items focus on three different sets of characteristics.¹⁹ **Capability** incorporates such items as budgetary authority, staffing levels, and statutory enforcement authority. **Commitment** includes such things as a willingness to take on added responsibility and dedication to program goals. A third set of characteristics, **outcomes**, focus on program effectiveness and a proven track record of performance. Program capacity is analyzed along the lines of both Regional and State Program Capacity. Regional and state officials rate their own capacities, as well as that of their counterpart (e.g., how state officials rate regional capacity and vice versa). Overall, it is expected that the higher ratings of program capacity will be associated with more cooperative working relationships.²⁰

Political Context

Just as those participating in the working relationship do not operate independent of their organizational frameworks, these actors are also impacted by the larger political system. Many of those studying the implementation of environmental policy have found the state-level political context to have an impact on the attitudes and performance of state implementors (see Scheberle 1997; Bowman and Lester 1993; Wood 1992;

Gormley 1987; Goggin et al. 1990). Findings range from little political support from state-level actors (Scheberle 1997) to state legislators and governors having relatively high levels of influence in the implementation process (Bowman and Lester 1993). Scheberle (1997) and Gormley (1987) suggest that regional officials are also impacted by state-level political variables. Scheberle (1997, 171) reports that regional officials find little political support for certain environmental programs at the state level. Gormley (1987) found that state-level political context was an important determinate in the success or failure of regional enforcement approaches.

The regional offices of the EPA find themselves immersed in the national-level political context. While it has been documented that regional offices do not follow the headquarters in lock step, their activity must take these larger political forces into account (see Scheberle 1997; Gormley 1987; Church and Nakamura 1993). National-level political actors such as the president, Congress, federal courts, and environmental and regulated interests all have some level of influence on the shape of EPA policy (Fiorino 1995). The president has appointment power with respect to the EPA administrator and other political leadership positions in the agency. The Office of Management and Budget (OMB) has the power of regulatory review, which can enhance the power of the president (Fiorino 1995). The Congress designs the legislation that the EPA has to implement. They also possess oversight powers over the agency. Rosenbaum (1994; 1997) and Durant (1993) note the continued micro-management of the EPA by Congress. The federal courts, especially at the district level, have played a very important role in shaping the liability provisions of the Superfund law (McSlarrow et al. 1991; also see Fiorino 1995 on the role of the courts). Both environmental interests and affected industries have

become involved in the rulemaking process and lobbying Congress in order to influence EPA policy (Kerwin 1994; Fiorino 1995).

For the purposes of this study, questionnaire items focus on how the perceptions of these political contexts impact the level of Cooperation between federal regional and state officials in the Superfund program.²¹ Federal regional and state officials were asked about both the national and state political contexts. Specifically, the items gauge the **level of political support** provided by important political actors at each level.²² The resulting data is handled in the same manner as program capacity (e.g., using levels of agreement). It is expected that the higher the levels of political support (both national and state) are associated with cooperative relationships. However, the reverse situation could have the same effect. If state and regional officials perceive a lack of political support, they might be more likely to band together and cooperate. State and regional officials would “come together” to protect their programmatic interests.

Nature of the Problem

Several scholars have found the severity of the problem to be an important element in explaining implementation performance (see Sabatier and Mazmanian 1980; and Goggin et al. 1990). Those examining state comparative environmental policy have also found problem severity to be an important indicator of state environmental performance (see Lowry 1992; Bacot and Dawes 1996; and Hays et al. 1996). Scheberle (1993) links the differing perceptions about the nature and seriousness of the environmental problem to poor federal-state relationships in the implementation of SMCRA. In particular, she finds that federal inspectors view coal mining as more of a serious environmental threat compared to state inspectors (Scheberle 1993, 202-203).

Items on the questionnaire probe the perceptions that state and federal regional officials have about the **nature and seriousness** of cleaning up abandoned hazardous waste sites. Along with the perceived seriousness of the problem, items also probe the **regulatory approaches** used in the program (e.g., the impact of the liability scheme on the pace of cleanup), and its **technical aspects** (e.g., use of future land use as a criteria for cleanup).²³ It is expected that those who see the problem as more severe will be more likely to cooperate with their counterpart (e.g., higher level of Cooperation). It is expected that officials agreeing with stated EPA policy will be more likely to view their relationships as more cooperative.²⁴

DATA AND METHODOLOGY

The Data

The vast majority of the data used for this study was collected using a questionnaire and is perceptual in nature. One of the underlying premises of this study is that the perceptions of those involved in a working relationship can have an important impact on the policy process. According to Termeer and Koppenjan (1997, 82), “A perception is an image through which the complex, ambiguous world which surrounds actors can be made sense of and acted upon. It guides the process of perception of stimuli and the shaping of responses.” Actors’ perception of the situation affects how they define a problem, as well as “their image of other actors in the [working relationship], the nature of their dependency upon others and vice versa, and the advantages or disadvantages of working together” (Termeer and Koppenjan 1997, 79). These perceptions are constructed and reconstructed in the interactions of those in the working relationship (Termeer and Koppenjan 1997, 79). When actors have conflicting

perceptions, the result can be a blockage in the interaction process. Not only do perceptions influence the nature of the interaction directly, but they can impact how actors view the more ‘impersonal’ or ‘objective’ social forces. Smith (1992) and Weick (1979) argue that actors, which can include organizations, in a network construct their own world. These more ‘objective’ or structural forces “also have to be interpreted” (Termeer and Koppenjan 1997, 81). Hence, it is argued, “Facts do not exist outside a social context...” (Termeer and Koppenjan 1997, 81). All of this indicates the importance of examining the perceptions of actors about their interactions, as well as larger social and institutional forces.

The importance of perceptual data in examining intergovernmental relations is supported by many scholars of federalism. Deil Wright (1988, 243) argues that one of the best ways to examine intergovernmental relations is to investigate the overall perceptions state officials “have of the attitudes held and actions pursued by national officials.” In fact, many studies of working relationships have found attitudinal or perceptual differences between federal and state implementors to have important impacts on their level of Cooperation (see Scheberle 1993; 1997; Bowman and Lester 1993; and Gormley 1987). Hedge et al. (1988) have established the link between attitudes and behavior. Bowman and Lester (1993, 171) have even gone so far as to suggest:

a reliance upon traditional sources of aggregate data (e.g., data concerned with state capabilities or state context) may not provide as much in the way of explaining the process of state implementation as reliance on individual level data drawn from surveys, field observations or in-depth elite interviews....these findings suggest that future work on intergovernmental policy implementation must consider individual-level variables in any reliable explanation of implementation behavior.

The questionnaire used for this study collected attitudinal/perceptual data from both regional and state officials involved in the implementation of the remedial aspect of the federal Superfund program.²⁵ Federal regional officials from all 10 EPA regions were recruited to participate in the study. Federal regional officials were selected for the study if they held administrative positions in the Superfund program.²⁶ State officials that administer or manage the federal Superfund cleanup program were also selected for participation in the study. This is an important distinction because almost all states have a separate state Superfund program that encompasses such things as voluntary cleanup and brownfield programs. State officials at the administrative level were chosen because it is much more likely they will engage in negotiations and discussions with their regional counterparts.²⁷ Both regional and state officials fitting these criteria were identified using a variety of data sources.²⁸

The questionnaires used to gather this data were administered according to the procedures discussed by Dillman (1978).²⁹ Copies of the questionnaire were sent to State Coordinators of the Superfund program at different EPA regional offices. This group was selected to pretest the questionnaire because they are familiar with the Superfund program, as well as issues that arise between regional and state officials who administer it. After reviewing the comments and concerns of the State Coordinators, the questionnaire was revised and administered to both EPA regional office and State Agency officials in the following manner:

- (1) The initial packet was sent to potential participants. This packet contained a cover letter explaining the study and why they had been selected for participation; a copy of the questionnaire; and a return envelope.

- (2) A follow-up letter was sent to each potential participant one week after the initial packet. This letter served as a reminder for the participants to respond. If participants had responded, it served as a thank you for their participation.
- (3) A second replacement packet was sent to those who had not yet responded three weeks after the initial packet. This packet contained an explanatory letter; a copy of the questionnaire; and return envelope.
- (4) A third, and final, replacement packet was sent to those who had not yet responded seven weeks after the initial packet was sent. Like the other two packets it contained an explanatory letter; copy of the questionnaire; and return envelope.

Table 2.1 shows the response rates for both the State Agency and EPA regional office surveys. Questionnaires were sent to 141 state officials in all fifty states. Of those, 105 officials chose to respond. This provided a response rate of over seventy-four percent. In addition to this, officials in forty-eight of the fifty states provided input for the study. Questionnaires were sent to eighty-six region officials in all ten of EPA's Regions. Of those, forty-nine returned completed questionnaires. The response rate was just under sixty percent. Responses were received from all ten of the regions.

Table 2.1. Response Rates for State Agency and Regional Office Officials

	# Sent	# Returned	Response Rate
State Agency	141	105	74.5%
Regional Office	86	49	57.0%

Methods of Analysis

The methodology used to analyze the data collected for this study is unidimensional scaling, analysis of variance (e.g., difference of means), and logistic regression techniques. The items on the survey questionnaire are constructed using the Likert scaling approach. According to McIver and Carmines (1981, 9), "In Likert scaling, individuals are presented with a list of statements about a single topic...and are

instructed to respond to each statement in terms of their degree of agreement or disagreement.” The scaling models developed in this study are use to “develop...unidimensional scale[s] on which individuals can be given scores” (McIver and Carmines 1981, 9). This technique is applied to the items in the questionnaire in order to construct the variables in the Model of Cooperative Working Relationships.³⁰

The next step in the construction of these variables is “to combine responses from each individual in such a way that valid and reliable differences among individuals can be represented. Validity refers to the ability of an indicator to measure the intended concept (Carmines and Zellers 1979, 13). This will be assessed in terms of construct validity. According to Carmines and Zellers (1979, 23), “construct validity is concerned with the extent to which a particular measure relates to other measures consistent with theoretically driven hypotheses concerning the concepts (or constructs) that are being measured.” Reliability “concerns the extent to which an experiment, test, or any measuring procedure yields the same results on repeated trials” (Carmines and Zellers 1979, 13). This suggests that a reliable measure does not fluctuate due to random error. For the purposes of this study, reliability will be assessed using the internal consistency method (Carmines and Zellers 1979, 43). This method is based on the calculation of an interitem correlation measure (Cronbach’s Alpha).³¹

An important focus of this study is the level of Cooperation perceived by regional and state officials. Individual respondents are placed in one of two groups (or levels) based on their perception of cooperation in their working relationship. These two groups are Highly Cooperative and Low-Moderately Cooperative. Analysis of variance provides a way to examine whether or not these two groups of officials have significantly different

views concerning individual items in the survey (Knoke and Bohrnstedt 1994, 121). Specifically, the study will utilize a mean difference hypothesis test on the mean score of responses from each of the two groups for each survey item.

While difference of means testing is used to discover the difference between individual responses, logistic regression provides a way to assess dichotomous dependent variables in a multivariate model (see Knoke and Bohrnstedt 1994; Menard 1995). It provides information concerning which variables differentiate between the two different groups. It answers the question, “what variables/factors account for the differences between Highly Cooperative and Low-Moderately Cooperative officials?” In addition, this technique will be used to shed light on which factors differentiate between regional and state officials.

CONCLUSION

This study develops and tests a model of cooperative working relationships. The model was based on a thorough review of the intergovernmental literature. Its focus is the level of Cooperation exhibited in the federal-state working relationship. The model is tested with original data gathered from those participating in the federal-state working relationship of the Superfund program. The data is based on the individual-level perceptions of study participants. It is expected that given the intersubjective nature of cooperation, factors constructed in this fashion will have more impact on the level of Cooperation. The results of the questionnaire are reported for both State Agency and EPA Region officials. Unidimensional scaling and logistic regression techniques are applied to the data. This allows for a discussion of which factors differentiate between the different levels of Cooperation for both state and region officials. Additional analysis

focuses on factors that distinguish regional and state officials from one another. In the end, the findings of this analysis offer important implications for those within the federal-state working relationship, as well as those seeking to improve them.

ENDNOTES FOR CHAPTER 2

1. Stoker (1991, 50) uses game theory analyze the implementation process. Thus, he conceptualizes total consensus or agreement as the case of Harmony and total conflict or disagreement as the case of Deadlock.
2. Mixed motive games are those games that are combinations of cooperation and conflict.
3. The focus on regional and state officials builds on previous research on working relationships. For examples see Scheberle (1991; 1993; 1997); Gormley (1987; 1992); GAO (1997a); Hedge et al. (1988).
4. The focus on regional and state officials is not meant to suggest that headquarters staff have an unimportant role in the implementation, but it is one that is external to the regional (federal) and state implementors of the program. For this reason, they are not the focus of data collection and analysis.
5. This refers to the bargaining nature of intergovernmental relations. Stoker (1991) suggests that much of the interaction between levels of government is ‘mixed-motive’ (e.g., participants have motives to both defect and cooperate with one another). See also Ingram (1977) and Press (1975) on the bargaining nature of intergovernmental relations.
6. Teisman (1992) and Klijn and Teisman (1997) argue against using a strictly instrumental measure to evaluate an interactive process. This relates directly to the bargaining nature of the relationship, which allows for strategy on the part of the participants. Goals are defined in the interaction. Goal displacement is not necessarily considered a bad thing. To simply focus on the efficiency of a process is to miss many of its other aspects.
7. This method is not without its shortcomings. According to Kickert et al. (1997, 173), there are three dangers in the use of an ex post satisficing criterion. The first is the danger of ex post rationalizing and social pressure. This is the price one must expect to pay for the use of perceptual data. It has been argued in this study the value of perceptual data is worth this risk. A second problem is one of aggregation. In essence, do all judgments count as equal or are some more important in deciding if the process was satisfactory. For the purposes of this study, it is assumed that both state and regional officials have an equal weight in determining the “success” of the process. This is based on the bargaining nature of intergovernmental relations in the larger context. Third, and most serious problem, is the issue of demarcation. Exactly whose evaluations are included in the analysis? This issue is harder to deal with. In terms of the study,

Scheberle's (1997; 1998) conception of the working relationship is followed. Regional and state perceptions are examined because federal environmental statutes create only a federal-state working relationship with regions being the primary federal-level contact for states. However, with the increasing importance of local governments, one could argue that federal environmental statutes should recognize this part of the relationship (e.g., extending the conception of the working relationship). See John (1994) for a discussion about the growing role of local governments in environmental protection.

8. Exact wording for these items can be found in the state and regional questionnaires contained in Appendices A and B respectively.

9. According to Mishra (1996, 265), vulnerability can be seen as "taking action where the potential for loss exceeds the potential for gain." And Moorman et al. (1992, 82) argue, "Without vulnerability, trust is unnecessary because outcomes are inconsequential for the trustor." Without vulnerability, choosing a course of action would simply become a rational calculation "because the risks remain within acceptable limits" (Mishra 1996, 265). In essence, without vulnerability there would be no need for trust in the first place.

10. Gambetta (1988), Ostrom, and Deutsch (1962; 1973) also suggest that trust is an important precursor to cooperation. In essence, there has to be trust because someone has to initiate cooperative behavior in the first place.

11. Exact wording for these items can be found in the state and regional questionnaires contained in Appendices A and B respectively.

12. Currently, states are heavily involved in pre-remedial activities such as discovery of sites, preliminary assessments, and site investigations. These activities precede a listing of a site on the NPL. States have recently increased their role in the performance of remedial cleanup activities including remedial investigations, feasibility studies, and records of decision, remedial design, and remedial actions. (EPA 1990). There are many states that would like to be more involved in such areas as remedy selection, removal activities, and cleanup at more complex sites. States such as Washington and Minnesota have been active in applying for lead responsibility at many of the NPL sites within their jurisdictions (GAO 1997a). States are seeking to play roles that have previously been reserved for the regional offices (e.g., lead agency status and remedy selection).

13. The exact nature of these criteria is very much in dispute. According to the GAO (1997a), regional offices have not made it clear to states exactly what these criteria are. Markell (1993) provides some suggestions as to what might constitute fair evaluations of state capacity.

14. Exact wording for these items can be found in the state and regional questionnaires contained in Appendices A and B respectively.

15. While not a variable, the policy characteristics of the Superfund program definitely

provide structure for the interactions within the federal-state working relationship. This issue will be examined later.

16. This set of items will focus on the comparison of headquarters' staff understanding of state programs to that of regional officials. It will also include comparisons on commitment and communication issues.

17. Exact wording for these items can be found in the state and regional questionnaires contained in Appendices A and B respectively.

18. Markell (1993) provides a discussion of criteria that are more specific to the Superfund program than the other two. His discussion also focuses exclusively on state programs in their effort to gain enhanced authority at national NPL sites. However, many of his suggestions can be applied to the above discussion.

19. Exact wording for these items can be found in the state and regional questionnaires contained in Appendices A and B respectively.

20. This argument is based on the idea high capacity actors will be better able to deal with the complex issues present in the Superfund program. This should be especially true if regional and state officials perceive their counterpart to have a high program capacity.

21. Exact wording for these items can be found in the state and regional questionnaires contained in Appendices A and B respectively.

22. Political actors at the state-level include governor, state legislators, local governments, public support, as well as environmental and affected industry interest groups active at the state-level.

23. Exact wording for these items can be found in the state and regional questionnaires contained in Appendices A and B respectively.

24. Currently, EPA sees the cleanup of hazardous waste as a serious problem. EPA's state policy concerning the liability scheme is strict application with few exceptions. Official policy concerning the technical aspects of the program is a preference for permanent cleanups and residential land use standards (although there has been some relaxation of the residential land use standards recently). Official EPA policy is used to provide a yardstick to compare both region and state officials. If there is a cohesive view of the program, it is more likely the relationship is cooperative.

25. The Superfund program consists of two separate aspects. The first is emergency response. This part of the program deals with emergency actions that must be taken immediately to preserve environmental and public health. The other aspect of the program is remedial cleanup. This is the more visible of the two parts of the program. The remedial process involves identifying a site, performing assessments, deciding on a cleanup remedy, implementing the remedy, and eventual delisting of the site from the

NPL. This study focuses on the remedial or cleanup part of the program for several reasons. First, states are much more involved in this aspect of the program and have developed some capacity in this area. Second, longer term relationships have developed here due to the fact cleanups take more time than emergency responses.

26. This is an important distinction because there are many officials at the regional level that are involved in some form of state, tribal, or local relations in the Superfund program (e.g., remedial project managers). The focus of the study was on administrators at the regional level. These included the following positions: division head, branch and section chiefs for the remedial aspect of the program. The questionnaire was sent to those regional officials involved in the remedial aspect of the federal Superfund program.

27. This differs from many of the previous studies on working relationships, which have focused on “street-level” bureaucrats like state inspectors (see Gormley (1987); Hedge et al. (1988); and Scheberle 1991; 1993)).

28. These data sources include the following: FOIA requests to each of the 10 EPA regional offices regarding federal regional and state actors involved in the federal Superfund program; various state and federal regional websites; the *EPA Headquarters Telephone Directory - Customer Service Edition*; studies of state Superfund programs conducted by the Environmental Law Institute (ELI); studies conducted by the Association of State and Territorial Solid Waste Management Officials (ASTSWMO); and *Resource Guide to State Environmental Management* published by the Council on State Governments (CSG).

29. This project was conducted under a protocol approved by Colorado State University’s Human Subjects Committee (Protocol No. 01-1904).

30. Variables not amenable to scaling techniques were operationalized as summed indexes and converted into dichotomous variables. Specific operationalizations are discussed in more detail in Chapters Four, Five, and Six.

31. A Cronbach’s Alpha ranges in value from 0.0 to 1.0. The rule of thumb is scales are deemed reliable if they have an Alpha of at least 0.50. Thus, higher Alpha scores indicate a more reliable scale.

Chapter 3: A Closer Look at the Superfund Program

INTRODUCTION

To understand the nature of the EPA-State working relationships in the Superfund program, it is helpful to examine the structural context of the program itself. The purpose of this chapter is to discuss the important aspects of the Superfund program that structure the interaction of both State Agency and EPA regional office officials. Chapter Three begins by highlighting the central features of the federal Superfund program. These features include the main goals of and policy instruments used in the Superfund program. There is also a discussion of the removal and remedial cleanup programs. Next, the chapter looks at the development of Superfund cleanup programs at the state level. The focus here is on areas of interaction between EPA and State Agencies (e.g., cleanup authority, resources, and voluntary remediation programs). Finally, the chapter offers some conclusions about how the characteristics of the program have shaped the EPA-State working relationship.

THE FEDERAL SUPERFUND PROGRAM

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) established a program to address the problem of hazardous waste contamination at abandoned and uncontrolled sites. The overarching goal is to protect public health and environmental quality. In order to accomplish this, the EPA was given the authority:

(1) to carry out emergency responses to spills and leaks, (2) to promptly and effectively cleanup abandoned and other uncontrolled hazardous waste disposal sites, and (3) to shift the costs of such cleanup to the responsible parties to the maximum extent possible. (Center for Hazardous Waste Management 1989, 3-1)

CERCLA provides EPA with several different types of enforcement tools to facilitate the cleanup of sites. These tools include a trust fund, a strong liability scheme, and settlement authority. The statute also establishes two separate, but related processes to address contamination at abandoned waste sites. Emergency response (removal) actions can be undertaken by EPA at a site to reduce an imminent and substantial threat to public health or the environment. The statute also establishes remedial procedures for making decisions at non-emergency Superfund sites.

Authority to Address NPL Sites and Recover Costs

The EPA possesses three mechanisms to cleanup National Priority List (NPL) sites, which is supposed to represent the most hazardous sites needing attention. The first is Superfund's extremely broad liability scheme. Parties can be held liable for the costs of responding to a release or the threat of a release of hazardous substances. These responsible parties include: both current and former owners and operators; generators (those who arranged for treatment or disposal); and transporters. Thus anyone involved in the management of hazardous substances, from production to final disposal and beyond, can be held liable.

Superfund liability is applied in three different ways. The first is retroactive. Potentially responsible parties (PRPs) can be held liable for releases that occurred prior to the enactment of the statute in 1980. Strict liability is assessment of legal responsibility regardless of the fault or diligence of the PRP. All the government must do is show that the PRP meets the statutory definition of liability (e.g., the PRP is in one of the four

statutory classes of liable parties) and the release or threat of release of a hazardous substance occurred at the facility. Joint and several liability is the third type of Superfund liability. Joint and several liability means that “if harm at a site is indivisible, the government can hold one or more parties liable for the full cost of the cleanup, even if other parties are liable as well” (Probst et al. 2001, 32). The burden is on responsible parties to show that their contribution to the release (real or threatened) is separable from the other parties. Thus, this liability scheme provides a very powerful and effective cost recovery mechanism for the EPA should they have to expend their own funds to lead a response action.

The second mechanism EPA uses to cleanup NPL sites is the Trust Fund (what some have called the ‘Superfund’). The fund allows EPA to finance cleanups at orphan sites (e.g., where no financially viable responsible parties can be found) or where responsible parties are recalcitrant (Probst et al. 2001, 33). With the fund, EPA can pursue cleanup first and worry about cost recovery later. According to Probst and Portney (1992, viii), “The Trust Fund is financed by petroleum excise taxes, a chemical feedstock tax, a corporate environmental tax, general revenues, and other sources.” Congress enhanced the overall size of the Trust Fund in 1986 when they increased the petroleum excise tax tenfold and added in the corporate environmental tax. The Trust Fund is based on the polluter pays principle (e.g., those who contributed to the problem should pay for its resolution). Thus, the majority of the Trust Fund’s finances come from the three “environmental” taxes. According to Probst et al. (1995, 15), these three taxes accounted for approximately sixty-nine percent of the Trust Fund revenues from FY 1981 to FY 1993.¹

The EPA have used both the liability-based and tax-based (e.g., Trust Fund) approaches to cleanup more effectively under their “enforcement first” strategy. In 1989, then EPA Administrator William K. Reilly announced that the Agency would seek to make responsible parties “undertake long-term cleanup efforts, known as remedial actions (RAs)” (Probst et al. 2001, 33). Through the use of CERCLA Section 106 enforcement powers (e.g., administrative orders, court orders, and consent decrees) in conjunction with the stringent liability regime, EPA has reduced its direct costs of implementing cleanups and consequently the strain on the Trust Fund. Probst et al. (2001) note that from FY 1980 to FY 1986, EPA funded sixty-seven percent of all RAs. However in FY 1991 – FY 1999, EPA only funded twenty-seven percent of RAs. There were similar reductions in the number of RI/FS and RDs over the same periods (Probst et al. 2001).

The Superfund statute provides EPA with a third mechanism to pursue cleanups at NPL sites. CERCLA Section 122 provides EPA with settlement tools that can be used as incentives to encourage PRPs to settle and avoid being sued for cost recovery. Under the settlement provisions, EPA can negotiate with PRPs concerning the conduct of a removal or remedial activity.² The 1986 Superfund amendments allowed EPA to use this settlement authority more extensively. Several tools were developed with the intent of speeding settlement and reducing transaction costs (Probst et al. 1995, 13). *De minimis* (or *de micromis*) settlements allows parties found to be liable for a small percentage of hazardous substances at a site to be released from at least part of their liability. Mixed-funding arrangements “allow the government to reimburse responsible parties for a portion of cleanup costs at some sites” (Probst et al. 1995, 13). Another important

settlement tool is the covenant not to sue. This allows the EPA to release PRPs from responsibility at a given site. EPA is also authorized to provide nonbinding preliminary allocations of responsibility (NBARs) to help expedite the process of settling and allocating response costs for remedial actions at a given facility or site.

The Removal Program

The removal program is one of the two major cleanup processes conducted under the Superfund statute. It is the part of the Superfund program that is responsible for carrying out emergency responses and short-term cleanup actions (Probst et al. 2001, 15).

Removal actions are taken “in the event of a release or threatened release of hazardous substances into the environment” (Probst et al. 2001, 16). Removal actions can include the following types of tasks: evaluation of the release or threatened release, disposal of removed material, or mitigation of damage to public health or environmental quality.

The different types of removal activities conducted under Superfund are most easily differentiated by the amount of time that is allowed to elapse before the commencement of cleanup. Emergency responses begin within hours of the lead agency’s determination that a removal action is appropriate. Time critical responses and non-time critical actions are based on site evaluations to determine the necessary timing of the activity. Time critical responses must be initiated within six months of the evaluation, while non-time critical activities can exceed this limit. The most common type of removal actions conducted by EPA is time-critical responses.

EPA’s authority to conduct removal actions was expanded by the enactment of Superfund. While emergency removal actions can be conducted at sites irrespective of whether or not they are on the National Priority List (NPL), EPA faces monetary and

time limitations. The majority of removal actions are carried out at sites that are not even on the NPL. From FY 1992 to FY 1999, approximately seventy-six percent of removal actions were performed at non-NPL sites (Probst et al. 2001, 16). According to Probst et al. (2001, 16), the statute “limits removal actions carried out by EPA and paid for using Trust Fund monies to 12 months and \$2 million,” although there have been exceptions.³ There is no time or monetary limits for removals carried out by responsible parties.

Given the time-sensitive nature of removal activities, the decision-making process at EPA, as well as on site, must be fluid. The system for identifying a pool of sites needing time-critical actions is largely informal. EPA receives notifications from sources including: the remedial program, state programs, local officials, and citizen complaints. While half of the Regions have formal meetings to discuss program priorities, none of the Regions have a planning horizon that exceeds one year (Probst et al. 2001, 28). According to Probst et al. (2001, 28), “The lead time available for a Region to assess a possible time-critical removal action can be as short as a few days, which indicates that the removal program’s priorities must be fluid as the regional program managers perform a kind of triage...” The decision-making on site reflects this time-sensitive context. Regional staffs known as on-scene coordinators (OSCs) are given primary decision-making authority for time-critical decisions. Non-time critical decisions follow a more formal process (Probst et al. 2001, 19).

EPA’s regional offices are essential to the success of the Superfund removal program. Given the time-sensitive nature of these actions, EPA leads a vast majority of removal activities and pays for them using Trust Fund monies. From FY 1992 to FY 1999, EPA has lead ninety-eight percent of emergency responses and seventy-one percent

of the time-critical removal actions (Probst et al. 2001, 25). It is only the non-time critical activities where potentially responsible parties (PRPs) lead a higher percentage of removal activities. The EPA removal program also provides an important safety net for both tribal and state programs. Most states do not have strong removal programs and rely on “the federal programs for emergency response and removal action support” (Probst et al. 2001, 29). According to Probst et al. (2001, 27), “State programs...respond to most of these releases, with EPA often providing support through technical assistance and oversight.” These factors suggest the need to maintain a strong federal role in the removal program.

EPA’s predominant role in the removal program along with the time-critical nature of the cleanups means most removal actions are paid for with Trust Fund monies. Probst et al. (2001) analyze EPA expenditures for the removal program from FY 1992 to FY 1999.⁴ The increases in spending from FY 1992 to FY 1995 represent a “ramping up” of the program in response to the Superfund accelerated cleanup model (SACM), which sought to quicken the pace of cleanups by encouraging “early actions” (e.g., removal actions). From FY 1995 to FY 1999, extramural expenditures ranged from \$200 million to \$250 million and averaged about \$216 million. The overall level of expenditure has been fairly stable over time. Increases in FY 1995 and FY 1997 reflect special circumstances in the program.⁵

In FY 1999, EPA spent \$317.8 million for the removal program. The vast majority of these funds were spent at the regional office level (\$283.8 million). According to Probst et al. (2001), approximately eighty-seven percent of the total funds are spent on site related activities. The single biggest item is incurred for extramural and

staff costs associated with removal activities carried out or financed by EPA. Other site-related costs include response support, enforcement activities, and EPA oversight of removal actions conducted by responsible parties, and community and state involvement activities.

EPA's use of its authority to conduct removal actions has increased substantially since the enactment of Superfund over two decades ago. According to Probst et al. (2001, 19), "There has been a 70% increase in the number of removal actions conducted by the Agency in the 1990s compared with the decade before." Over the period ranging from FY 1992 to FY 1999, EPA has conducted an average of 315 removals a year. This number has remained constant over this time period (Probst et al. 2001, 19). The EPA removal program has enjoyed a measure of success. The main goal of the removal program is to stabilize the site in the case of a release or threatened release of a hazardous substance. From FY 1992 to FY 1999, EPA has only had to conduct one removal action at eighty-seven percent of sites. This suggests EPA succeeds a vast majority of the time in mitigating and stabilizing the threat at a site the first time around.

Even with these successes, the EPA removal program faces a number of challenges in the future. The first is the unpredictability of the task itself. The fluidity and short-term nature of the planning process reflect the time-sensitive nature of task itself. One of the most common sources of sites needing removal activities are smaller "economically marginal" manufacturing facilities. These facilities are most vulnerable to any downturn in the economy. If this were to occur, these smaller facilities could fail and overwhelm the removal program. State removal programs have not progressed to the point where they can handle large-scale removal activities. EPA will have to maintain its

role of supporting the states in this area. Another issue is the growing set of responsibilities placed on the removal program by other statutes. The removal program is required to respond to oil spills, hazardous substance releases due to natural disasters, and new counter-terrorism initiatives (Probst et al. 2001, 18). While Superfund monies are not used to pay for these added responsibilities, it increases the workload on the removal programs.

The Remedial Program

The remedial program is the other major cleanup process in Superfund. The Superfund program addresses long-term cleanup at sites under a different process. While EPA and State Agencies have cataloged more than 43,000 potentially contaminated sites, it has only placed a handful of these on the NPL. These sites are addressed under EPA's remedial program. Figure 3.1 illustrates Superfund's remedial process.

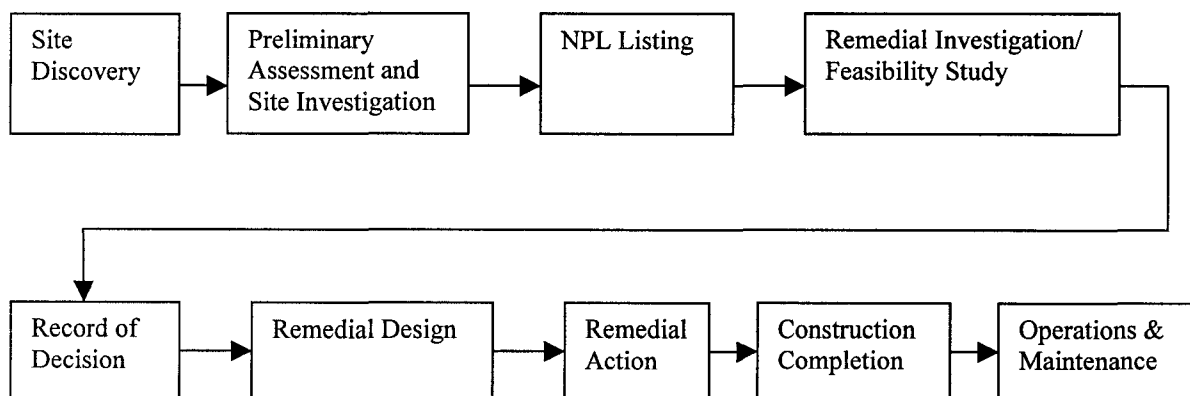


Figure 3.1 Superfund Remedial Process.

Once a site is discovered (e.g., brought to the attention of either a State Agency or EPA), its' threat to public health and/or environmental quality is evaluated. The first step in this process is the preliminary assessment/feasibility study.⁶ The preliminary assessment (PA) involves a review of existing reports and documentation about the site. It seeks to establish the potential risk posed by a release of hazardous substances. If

further action is warranted, then a site investigation (SI) is conducted. A SI involves an on-site inspection/examination of soil and water samples to better characterize the level of site contamination (Probst et al. 2001, 79). The data collected from the PA and SI are used to develop a hazard ranking system (HRS) score. This is EPA's primary tool for placing sites on the NPL.

The HRS takes into account the likelihood/potential for release of hazardous substances into the environment; characteristics of the waste, such as toxicity; and the sensitivity of targets (e.g., people and environments) affected by the release. Four pathways are scored under the HRS. These include groundwater migration; surface water migration; soil exposure; and air migration. A score of 28.5 or greater out of 100 qualifies a site for the NPL.⁷ Sites receiving higher scores do not necessarily receive higher priority. While the vast majority of sites reach the NPL in this manner, Probst et al. (2001) note that there are two other mechanisms used to place sites on the NPL. States can designate a site for the NPL regardless of its HRS score. The other way is for the Agency for Toxic Substances and Disease Registry to issue a health advisory in conjunction with the EPA's agreement to define the release as a threat to public health. According to EPA as of FY 2000, there were a total of 1,232 sites listed on the final NPL.⁸

The remedial investigation/feasibility study (RI/FS) is the first phase of what is known as "the remedial pipeline" (Probst et al. 2001, 34). The RI is used to characterize the conditions at a site and assess the potential risk to public health and the environment. The FS establishes remedial action objectives with respect to specific contaminants, potential pathways of exposure, and remediation goals (Probst et al. 2001, 34). In the

final part of the RI/FS phase, EPA proposes its preferred remedial alternative. After a period of public comment, EPA formalizes its final decision in a document called a record of decision (ROD).

This process of remedy selection is based on two important criteria. The first is the protection of public health and environment. The Superfund Amendments and Reauthorization Act (SARA) of 1986 placed a “more explicit recognition of the role of health-based standards” than had existed previously in the Superfund program (Center for Hazardous Waste Management 1989, 3-16; hereafter CHWM). The second criteria used in selecting remedies was that the selected alternative be held to the following standards, “ ‘at least’ attain the legally applicable or relevant and appropriate federal ‘standard, requirement, criteria or limitation...’”(CHWM 1989, 3-17). These applicable or relevant and appropriate requirements (ARARs) could include more stringent state environmental laws. After these criteria are met, EPA must balance such factors as short- and long-term effectiveness; permanence of remedy; and cost effectiveness. However, these standards set a preference for permanent site remedies over temporary methods of shifting toxics that might result in the creation of future NPL sites.

The remedial design (RD) and remedial action (RA) are the final two phases of the remedial pipeline. The RD involves the development of an engineering plan to guide the implementation of the remedy. The RA is the final phase of the process. It is at this point “the remedy is put in place and actual cleanup at the site begins” (Probst et al. 2001, 34-35). While not an “official” part of the remedial pipeline, constructions completed is a term used to categorize sites where the physical construction of all cleanup actions are completed and all immediate threats have been addressed (Probst et al. 2001, 271).

However, the site still has a remedial action underway. Operations and maintenance (O&M) activities occur after the remedy is completed. Since some O&M activities such as pump-and-treat systems involve actual cleanup, Probst et al. (2001, 35) characterize these activities as long-term remedial actions. Regardless of how O&M activities are characterized, they “are often required to ensure that the remedy continues to function as designed” (Probst et al. 2001, 35).

Rarely do sites follow the remedial process in the linear fashion described above. Early in the process most sites are divided into multiple projects, known as operable units. These units are divided in terms of geography, media (e.g., soil, groundwater), or remedy type (Probst et al. 2001, 35). Operations are staggered at these different operable units and their pace through the pipeline may depend on a number of factors including funding, complexity of cleanup, or the cooperation of responsible parties. There can also be multiple actions of the same type (e.g., RODs or RAs). New information can push a site back in the pipeline. Finally, there is the possibility for actions to overlap. There are times when RAs precede the completion of an RD. Thus, “the remedial pipeline should be thought of as a general guide to the remedial cleanup process, rather than as an exact characterization of how the process actually unfolds at all sites and all operable units” (Probst et al. 2001, 35).

The overall effectiveness of the Superfund remedial program has been a point of contention from the inception of the program (Mazmanian and Morrell 1992; Hird 1994; GAO 1998c, 1999a, 1999b). The remedial program has been examined in terms of cost, progress of cleanup at NPL sites, and pace of cleanup. According to Probst et al. (2001, 36), “The largest component of Superfund expenditures is, as one would expect, the cost

of the remedial program.” In FY 1999, \$622.3 million (40 percent of program expenditures) went to remedial activities. The vast majority (ninety-five percent) of these funds were used for conducting Fund-lead actions at NPL sites. In addition to these overall numbers, Probst et al. (2001, 45) also provide a look at the average cost of each of the three types of remedial pipeline actions. These figures are provided below in Table 3.1.⁹ There are several factors that determine the cost of remedial activities for EPA. These include whether or not the site is classified as a mega site, site type (e.g., wood preserving or mining), and whether or not the activity is fund-lead (especially RAs).¹⁰ Mega sites have higher per unit costs in all remedial pipeline activities.¹¹ Mining sites, wood preserving sites, and transportation sites are the most expensive types of sites to cleanup. And of course, EPA’s overall cost is increased if they have to conduct more Fund-lead actions.

Table 3.1. Unit Costs of Remedial Pipeline Actions for All Site Types

Type of Action	Cost (1999\$)
RI/FS	1,363,000
Remedial Design	1,331,000
Remedial Action	11,059,000

Whether or not the cost of cleanup has actually declined in recent years is a point of contention. EPA claims to have reduced the cost of cleanup activity by twenty percent due to the implementation of 1995 administrative reforms regarding remedy selection.¹² However, Probst et al. suggest that costs may not be declining, but actually increasing. They point out, “The average cost of an RA (at the operable unit level) completed during

FY 1992 through FY 1995 was \$10.2 million, but the average cost of an RA completed during FY 1996 through FY 1999 was \$11.9 million...” (Probst et al. 2001, 46).

The Superfund program faces two related cost issues in the future. The first is the ability of EPA to conduct Fund-lead actions. According to Probst et al. (2001, xix),

A central question now facing Congress is whether there is enough money in the Hazardous Substance Superfund (Trust Fund) to continue to pay for the program. If not, funds for the program will need to come from general revenues, unless the now-expired taxes that stocked the Trust Fund are reimposed.

This is currently the case. Congress is funding cleanups using what remains in the Trust Fund and supplementing it with general revenues. Given the uncertainty of the financing of the Trust Fund, there is the related issue of Superfund’s future cost. Whether or not the Superfund program will “ramp down” in terms of task and cost is a major concern. Resources for the Future (RFF) has conducted an exhaustive ten-year projection (FY 2000 to FY 2009) of Superfund’s future cost. Their findings and conclusions suggest that a ramping down of the Superfund program is not imminent. Using three different cost scenarios, they project the cost of the program to range from \$14 billion to \$16.4 billion over ten years (Probst et al. 2001, xxii). A major factor in this is Fund-lead actions at current NPL sites. Even with the increase in the number of constructions completed there is still much cleanup left to do. There is also the issue increasingly difficult and expensive sites will be paid for by Trust Fund monies.¹³ Thus, cost remains very much a part of the debate over the future of Superfund.

The progress and pace of cleanup at Superfund sites has long been a contentious issue in debate concerning the program (Probst et al. 2001, 47). According to EPA there has been a steady increase in the number of constructions completed “and ‘Superfund cleanup durations have been reduced approximately twenty percent, or two years on

average” (Probst et al. 2001, 47). In testimony before the House Subcommittee on Water Resources on May 12, 1999, former EPA Administrator Browner noted the progress of the Superfund program to date at sites currently listed on the NPL. The following is a synopsis of this testimony:

- Final cleanup decisions at 990 of 1,233 current NPL sites
- Begun or completed cleanup construction at 90 percent of NPL sites (begun at 464 sites; completed at 599 sites)
- Removals underway at 208 sites
- Cleaned more than 132 million cubic yards of hazardous soil, solid waste, and sediment
- Cleaned more than 341 million gallons of hazardous liquid waste, groundwater and surface water
- Provided alternative drinking water supplies to hundreds of thousands of people
(General Accounting Office [GAO] 1999b, 3-4)

In addition to this, EPA claims that more than three times as many Superfund sites have been cleaned up from January 1993 to September 2000 than in all of the prior years of the program combined. Some attribute this progress to EPA’s 1993 decision to focus its’ efforts on completing constructions at existing Superfund sites, as well as administrative reforms aimed at creating a more effective program (GAO 1999c, 4-5). Table 3.2 shows the progression of sites through the remedial pipeline to constructions completed.¹⁴

Table 3.2. Measuring the Progress of Site Remediation at NPL Sites from FY 1993 to FY 2000

	Remedial Action Not Begun	Study Underway	Remedy Selected	Design Underway	Construction Underway	Construction Completions
January 1993	73	367	92	213	380	155
September 2000	50	178	39	61	417	757

However, the progress of existing Superfund sites through the remedial pipeline toward construction completions has been achieved at a price. In 1998, GAO determined that out of the 3,036 sites classified as “awaiting an NPL decision,” 1,789 are still

potentially eligible for placement on the list (1999a, 10). This fact raises a red flag for the Superfund program for a couple of reasons. The first is the risk these sites present to human health and the environment. According to state and federal officials, “about 17 percent of the potentially eligible sites currently pose high risks to human health and the environment, and another ten percent of the sites reportedly may also pose high risks in the future if they are not cleaned up” (GAO 1999c, 10).¹⁵

Another important issue is who will perform the cleanups. Federal and state officials identified approximately 232 sites that could be placed on the NPL (GAO 1999a). However, these same officials could only agree on the listing of 26 sites. There was agreement that about one-third of these sites would be cleaned up by state programs (GAO 1999a). However, state officials expressed the concern that at about two-thirds of these sites, the extent of participation of responsible parties was uncertain. Given the limited financial and enforcement authority of some states this poses a serious obstacle to the undertaking of cleanup activities. All of this increases the uncertainty of whether these sites will be cleaned up; when cleanup actions, if any, will begin; and who (federal, state, responsible parties) will be doing the cleanup.

An issue closely related to progress at NPL sites is the duration or pace of cleanup at Superfund sites. Not only does EPA report an increase in the number of constructions completed, it also claims to have reduced the duration of cleanups at Superfund sites by about twenty percent, which equates to about two years on average (Probst et al. 2001, 47). Former EPA Administrator Carol Browner indicated that out of the 175 sites that completed construction in 1997 and 1998 combined, 111 (or about two-thirds) of these sites were added to the NPL in the 1990s (GAO 1999c, 6). These sites reached

construction completion status in less than eight years. This indicates an increase in the pace of Superfund cleanups. EPA calculations show the average duration for remedial pipeline actions conducted from FY 1993 to FY 1999 was 8.1 years (Probst et al. 2001, 48).¹⁶

However, there are other points of view concerning the current pace and whether it is actually decreasing the length of time needed to cleanup sites. Analysis of average cleanup times by the GAO reveals that average cleanup times for sites listed in FY 1986 through FY 1994 will exceed eight years. As of July 1, 1997, remedial action had been completed at ninety-five of the 752 sites listed on the NPL from FY 1986 to FY 1994. The average cleanup time (from listing to completion) was 6.3 years. However, construction had not been completed at eighty-seven percent of these sites. The GAO concluded, "because such a large proportion of the sites are still in process, the average cleanup time for these sites will exceed eight years, possibly by a substantial margin" (GAO 1998a, 7). According to GAO (1998a, 6) testimony, cleanup completions in 1996 averaged 10.6 years for nonfederal operable units. A study of the Superfund program prepared by Resources for the Future reaches similar conclusions. They suggest the average duration of cleanup at Superfund sites ranges from 11.1 to 11.8 years (Probst et al. 2001, 48-51).¹⁷ The GAO has also noted an upward trend in the cleanup times for completed sites from FY 1986 to FY 1996 (GAO 1998a, 5-6). There are several important factors that can account for this continual increase in cleanup times. Most of these fall under the overarching argument that NPL cleanups are becoming increasingly complex. The GAO (1998a, 8) notes that cleanup times will most likely increase because of the greater complexity of both contamination and necessary remedy at ongoing

projects. The EPA must also find responsible parties and negotiate settlements. Probst et al. (2001, 103-104) point out, “that states are now addressing the majority of single-party sites and sites with cooperative responsible parties. These sites are being cleaned up in state voluntary programs or enforcement programs, leaving EPA the orphan sites with recalcitrant parties...” EPA officials also argue they have been hamstrung by budget constraints. The GAO (1998a, 8) reported, “EPA was not able to fund \$200 million to \$300 million in cleanup projects in fiscal year 1996.” With limited resources, EPA’s focus on designing and completing cleanups has resulted in longer remedy selection times (GAO 1998a). Given these obstacles, it is not surprising that cleanup times at NPL sites have increased over the last decade.

ROLE OF STATE PROGRAMS IN SUPERFUND

CERCLA grants EPA statutory enforcement authority at NPL sites. The first six years of the program were marked by a lack of state participation. The 1986 Superfund amendments sought to change this. The amendments guaranteed states a “substantial and meaningful” role in all aspects of the program. There are three important areas of federal-state interaction in the Superfund program. The first is cleanup authority at NPL sites. Under certain situations, states can take the lead in cleaning up NPL sites and recovering costs from responsible parties. States receive funds from EPA when involved with the cleanup at NPL sites. Even when states are in the role of “support” agency, they are required to provide comment on the decisions made by EPA. For example, the EPA must incorporate applicable or relevant and appropriate regulations (ARARs) set by states in Superfund cleanups.

Another important area of interaction is program resources (e.g., financial and technical). The Superfund program also requires states to make financial contributions to cleanups under certain conditions. States are required to cover ten percent of costs at privately owned sites and fifty percent at state- or municipality-owned sites if private responsible parties cannot be identified. In addition to this, states must provide ninety percent of long-term operations and maintenance funds, as well as assurances for the long-term storage, treatment, and disposal of any hazardous waste. EPA and states must both address cleanup at non-NPL sites. A vast majority of hazardous waste sites do not qualify for the NPL. This means Superfund is not available to finance cleanup of these sites. Total responsibility for these sites falls upon the states. States can address these sites via enforcement, state funds, or voluntary remediation programs. Each of these areas of federal-state interaction will be examined in this section.

Cleanup Authority

There are several important linkages between state cleanup programs and the federal statutory framework. The first of these is the distribution of program authority between EPA and the states. The EPA-State relationship in the Superfund program differs structurally from that of most other environmental programs. According to the GAO (1997a, 12):

EPA usually relies heavily on the states to develop discharge permits, monitor facilities' compliance, take enforcement actions, and perform other basic functions. EPA sets the program's general direction, provides technical support, and exercises oversight responsibilities. In the case of the Superfund program, however, EPA has generally exercised a lead oversight responsibility and a direct role in cleaning up most NPL sites.

Thus, EPA maintains more of a direct implementation role in Superfund than in other environmental programs. Currently, the EPA is the lead agency at approximately ninety

percent of NPL cleanups. And at many of these sites, the states perform certain cleanup activities under the guidance of EPA (GAO 1997a, 13).

The basis of the EPA-State relationship in the Superfund program is the lead agency/support agency paradigm.¹⁸ Under this paradigm, states may either assume the lead for the response (cleanup) actions or may be the support agency in EPA-lead remedial responses. Even though the EPA is usually the lead agency, Superfund legislation guarantees state agencies in the support role “substantial and meaningful” input into federal decisions. For instance, selected remedies must meet state environmental standards, which can be more stringent than existing federal standards. When state agencies are the lead agency, they enter into cooperative agreements with the EPA to fund their efforts and Superfund Memorandums of Agreement (SMOA) to specify schedules and EPA involvement in the cleanup process. According to Markell (1993, 41-42), “The regulations provide that a cooperative agreement is a ‘legal instrument EPA uses to transfer money...to a recipient in which *substantial [EPA] involvement is anticipated during the performance of the project.*’ ” Given this structure, the EPA-State relationship is more interdependent than it might first appear.¹⁹

There are those who call for a greater state leadership role in cleaning up NPL sites. The argument for a greater state role is based on two related ideas. In recent years, “a growing number of states have demonstrated both the capability and willingness to assume a greater role in overseeing NPL cleanups” (GAO 1997a, 13). Both state Superfund officials and the Association of State and Territorial Waste Management Officials (ASTSWMO) believe that a majority of states are capable of taking lead agency status in the regulatory aspects of the Superfund process.²⁰ At the same time that some

states are increasing their capacity to lead parts of the Superfund process, EPA is experiencing increases in the time it takes to cleanup NPL sites.²¹ It is taking EPA longer to both evaluate sites for placement on the NPL and cleanup sites once they have been evaluated (GAO 1997a, 13). Given this situation, Barnett (1994, 99-100) points out the relationship of a strong state program to the federal program:

A comprehensive and well-funded state program can achieve maximum leverage from a comprehensive and well-funded federal program and can substitute, to some extent, for a weak or under funded federal program. In contrast, a fragmented or under funded state program leaves state level achievements dependent on the vagaries of federal policy.

Thus, the situation in the Superfund program lends itself to the need for both EPA and State Agencies to maximize or leverage the available resources to accomplish cleanups (Markell 1993).

Congress recognized the need to increase state participation in all phases of the Superfund process when it passed SARA in 1986. However, the actual extent of this involvement is determined by EPA regional office officials. Officials at each EPA regional office make the decisions about whether or not to allow State Agencies to take on more responsibility (e.g., lead agency status) at NPL sites (GAO 1997a). Unlike other environmental programs, the Superfund program lacks a written set of criteria establishing critical program elements a state needs to handle its lead responsibilities (GAO 1997a). While there is not a formal set of national program criteria, EPA Region officials have informally evaluated states in the following areas: authorities (enforcement, cost recovery, contracting); cleanup standards (independently developed by the state); staffing (both numbers and quality); financial and technical resources; and a

proven track record of performance (see Markell 1993; GAO 1997a; and Probst et al. 2001 for a more detailed discussion of these criteria).

This lack of formal national criteria for determining a state's readiness to lead NPL cleanups has led to poor EPA-State relationships in at least a couple of instances. In its 1997 report *Stronger EPA-State Relationship Can Improve Cleanups and Reduce Cost*, the GAO documented the detrimental effect this had on the relations of New Hampshire and Texas with their respective EPA regional offices. According to the GAO (1997a, 28-29):

In each of these cases, the state's perception of its capability to assume added responsibilities without detailed regional oversight was at variance with that of EPA. Specifically, the two states believed that their experience, resources, and commitment demonstrated that they were capable of overseeing cleanups of PRP-financed sites as well as fund-financed sites. Their respective regions (Boston and Dallas) questioned whether the states had resources to oversee these cleanups. In addition, the Boston office questioned whether New Hampshire had the legal authority to take effective action against PRPs if necessary.

In light of states growing interest and ability to lead cleanups, there is a need for written criteria to dispel the appearance of arbitrary decision-making at the regional level.

On the other hand, there are those in the Superfund community who feel the existence of detailed and prescriptive criteria "could have the effect of preventing, rather than encouraging, a greater state leadership role in NPL cleanups" (GAO 1997a, 30). Rather than these criteria, states should be judged in terms of overall environmental effectiveness. Even in the absence of formal national criteria, GAO has found examples of states and regional offices successfully dividing cleanup responsibilities at NPL sites (1997a). The states of Washington, Minnesota, and Wisconsin reported the benefits of being able to clearly delineate agencies' roles at the states' NPL sites. Both Washington

and Minnesota established formal agreements with their regional offices, which specified a lead agency for each of the state's sites.

A joint EPA-State effort known as the *Plan to Enhance the Role of States and Tribes in the Superfund Program* (hereafter referred to as *Plan*) was launched in order to build on both of these different experiences (e.g., readiness criteria and development of a model agreement). The Readiness Workgroup in this initiative developed performance-based criteria designed to identify those states and tribes ready to assume enhanced responsibility as well as resources and capabilities that demonstrate readiness (EPA 1998). The Readiness Workgroup created a list of activities they felt characterized an effective cleanup program. A list of these activities is presented in Table 3.3. These minimum standards apply to all aspects of the Superfund program ranging from site identification to post-cleanup site monitoring and evaluation.

Table 3.3. Activities to Determine Capability.

- | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">• Access to Resources (Trained Personnel; Analytical Services)• Public Access to Non-Enforcement Sensitive Documents• Community Involvement• Health and Safety• Coordination with Other Agencies• Budgetary, Accounting, Procurement, Cost Recovery, and Tracking Systems• Site Access and Information Gathering• Site Records• Site Closeout |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

The readiness assessment criteria were tested using seventeen Tribal and State pilot programs (EPA 2000a). According to the EPA, the process provided a clearer picture of what responsibilities needed to be shared between EPA and the states. For example, it was found that most states relied on EPA enforcement capabilities not

available at the state level (EPA 2000a, 6). It also created a better understanding between the negotiating parties themselves. However, there were some communication problems in some of the pilots. Overall, the EPA found the readiness assessment well received by the pilot participants and does not plan any modification of the readiness criteria (EPA 2000a, 7).

As part of the *Plan an Agreements* Workgroup was also formed. This Workgroup developed a model agreement to “define the type of relationship EPA and the state or tribe plan to develop, based on the most efficient way to clean up sites in the state or Indian country, and the capabilities and interests of the state or tribe” (EPA 2000a, ES-10). The model agreement is meant to be broad in nature with site-specific issues being dealt with in sub-agreements. Its’ goal is to clearly define the roles and responsibilities of the various parties involved, as well as the type of sites to be included (EPA 2000a, ES-10).²² The components of the model agreement are listed below in Table 3.4.

Table 3.4. Components of the Model Agreement

<ul style="list-style-type: none">• Background (Provides basic information about participants)• Program Authorities• Roles and Responsibilities• Program Elements/Components• Protective Cleanup• Community Involvement• Program Planning and Review• Dispute Resolution• Funding• Terms of Agreement• Signature of Agreement• Appendices to Agreement

The model agreements were tested in the same manner as the readiness criteria. The EPA drew several important conclusions from the experience of participants in the pilots. The format of the agreement is less important than the discussions among

participants leading to the agreement. Only six of the seventeen pilots used the model agreement outlined in the *Plan*. The most important factor in determining the perceived success of the agreement was the development of mutual understanding and trust gained from a discussion of roles and responsibilities among the various parties. Given this finding, EPA stresses the need to allow both the scope and format of the agreement to be flexible. EPA believes that the main focus should be on enhancing communication among the involved parties, as well as increasing the understanding of the intent and flexibility of the agreement process.

The EPA has also used a set of administrative initiatives known as the Superfund Reforms aimed specifically at increasing the ability of State Agencies to assume a greater leadership role in cleaning up NPL sites. One of these initiatives seeks to enhance the role of selected states to select remedies at certain Superfund sites. The selection of a remedy for an NPL site has been the traditional domain of the EPA (Markell 1993). However, this initiative allows qualified states to select remedies at certain Superfund sites, consistent with applicable laws and regulations governing cleanups. According to EPA (1991):

States may select the remedy (and publish a proposed plan), without EPA concurrence, at NPL sites when the State has been assigned the lead role for response action at the site, the State is taking an enforcement action under state law, and the State is not receiving funds from the Trust Fund for response activities at the site.

Currently, this initiative has been implemented in pilot form at 11 sites in six EPA Regions (GAO 2000a, 92).

The other Superfund Reform that seeks to enhance the responsibility of states in the cleanup process focuses on integrating federal, state, and tribal site management

(GAO 2000a). Under this initiative, the EPA defers placement of certain sites on the NPL so that states (or tribes) can oversee cleanup actions at these sites conducted and funded by PRPs. These sites are considered to be NPL equivalent sites, which means they are eligible for NPL listing and will be held to the same cleanup standards as NPL sites.²³ Capable states (and tribes) are allowed to gain management experience at these sites, while leveraging federal effort in terms of the number of sites addressed and resources expended (Probst et al. 2001, 41). Currently, the EPA has signed deferral agreements for sites in 12 states in six EPA Regions (GAO 2000a, 91).²⁴

Program Resources

Another important link between the EPA and State Agencies is the provision of federal resources that will enable states to carry out additional NPL responsibilities successfully (GAO 1997a, 35). This includes both financial support and access to EPA's technical expertise. CERCLA Section 104 provides the statutory framework for the administration of funds from EPA to the states. Specifically, "EPA and States must enter into a CA (cooperative agreement) or Superfund State Contract (SSC) and share costs for the Agency to undertake remedial actions at a site" (EPA 1997, 3). Currently, EPA and the states enter into several types of site and non-site-specific CAs to implement the Superfund program including: removal, pre-remedial, remedial, enforcement, support agency, and core program (EPA 1997).

According to some EPA and state officials, "While each type of CA is intended to fulfill a unique purpose, the award and administrative requirements of multiple CAs can limit the flexibility and discretion of EPA Regions, states, and tribes in addressing highest priority needs expeditiously" (EPA 1997, 2). There are two factors, which create

this restrictive funding situation. The first is the CA award and management process. States must have EPA's prior written approval to transfer funds between different CA categories when this transfer would exceed ten percent of the total approved budget for the activity. They must also have written approval for changing the scope of work or project objective. These requirements along with the other federal regulations governing the CA process tend to restrict fund movement by site and activity.

A second factor restricting the flexible use of funds in the Superfund program is the program's Advice of Allowance (AOA) budget structures. Each fiscal quarter, funds pass from Headquarters to Regions according to AOAs. In the Superfund program, there are five AOAs used to allocate resources to states and tribes for specific activities. These include the following: site characterization, remedial actions, removals, and other response (e.g., technical assistance grants and core program cooperative agreements), and enforcement (EPA 1997 4-5). The ability of EPA Regions to move funds between the different AOAs is restricted. EPA Regions must have Headquarters approval to move funds from site characterization, enforcement and other response AOAs to any other AOA.²⁵ In addition, there are some movements of funds that are not allowed. EPA Regions may not shift resources from remedial actions or removals AOAs to other AOAs and to the other response AOA from any other AOA (EPA 1997, 6). These restrictions inhibit the ability of Regions to make block awards to states, as well as limit pre- or post-award adjustment to CA budgets.²⁶

In order to overcome this restrictive situation, "States and Regions often resort to amending a CA through a formal CA amendment process. However, this procedure is time consuming and does not always solve the problem. This has led to the initiation of

an alternative form of funding that will provide greater flexibility to states in their use of CA resources. As part of the Superfund Reforms, EPA launched the State/Tribal Superfund Block Funding initiative. There are two important elements to this initiative. It allows states to direct funds between sites and activities within the approved tasks of the CA without prior EPA approval.²⁷ The block funding option also reduces, where appropriate, the specific administrative budget and reporting requirements for states concerning CA-related activities.²⁸

These ideas have been incorporated into Block Funding Pilot projects that are currently underway in thirteen states and three tribes. Initial results from these pilots are encouraging.²⁹ The use of the Block CA has allowed the State of Illinois to save time and resources in their implementation of the Superfund program. According to the EPA (1997, 14), “under their (State of Illinois) Block Funding Pilot, to cut at least three months out of the remedial process for one Superfund site (Parsons Casket) and insured that construction would not be delayed into the next construction season.” The Illinois EPA is allowed to submit one budget for the entire Block CA and sends project status reports to EPA on a bi-yearly basis. These reductions in administrative paper work have reportedly led to an eighty-five percent decrease in the preparation and processing of paperwork.

In addition to financial support, states also need the technical assistance of EPA if they are to assume a greater role in cleaning up Superfund sites. State officials have looked to EPA for technical support in three separate, but related, areas. The first is site-specific assistance. The EPA has been asked to provide expertise on complex issues beyond a state’s in-house capability, as well as functioning as a “sounding board” for

problem-solving or decision-making. A second important area is the conduct and funding of research concerning the development of hazardous waste cleanup technologies.³⁰ The last area of technical support is the development of standards and technical guidance for such areas as risk assessment and remedy selection (GAO 1997a).

As states take on greater responsibilities at NPL sites, their need for EPA's technical assistance will most likely increase. In response to this potential increase in demand, a joint federal-state effort known as the Assistance to States Workgroup identified three areas as being important to meeting the technical support needs of states (EPA 1998, AS-2). The first area is training for state officials. Recommendations in this area focus on increasing Superfund-related training opportunities through an expansion of the Superfund Academy concept and better access to personnel and resources at EPA. A second is increased access to federal resources. The focus here is increase the availability of technical and scientific experts to State Agencies by providing easier access to teams of multi-disciplinary experts; utilization of the Contract Lab Program (CLP); and coordinating with both the U.S. Army Corps of Engineers (USACE) and Bureau of Reclamation (BoR), which possess useful investigative, technical, and remediation services (EPA 1998, AS-3). And in the area of research, the Workgroup suggests EPA maintain a centralized approach, but enhance its role as an information clearinghouse by providing "easier access to information about what is happening at other NPL sites across the country" (GAO 1997a, 40).

Voluntary Remediation Programs

The EPA and state enforcement programs handle the most seriously contaminated hazardous waste sites, both NPL and non-NPL sites. Both have established strong

liability standards, as well as stringent cleanup standards. Given the dedication of resources and time to these more serious sites, thousands more non-NPL sites go unaddressed at the federal or state level. To deal with these sites, in the late 1980s, “some states began to establish voluntary cleanup programs that allow private parties to identify and clean up sites, use less extensive administrative procedures, and obtain some relief from state liability for past contamination” (GAO 1997b, 3). Voluntary programs allow states to leverage their resources and effort, while at the same time extending the reach of their cleanup efforts. The cooperative nature of voluntary programs along with their reduced cleanup procedures make them less costly and time consuming than those carried out under enforcement programs. In addition, more sites are cleaned up by the combination of voluntary and enforcement programs than by enforcement efforts alone.

The EPA sees state voluntary cleanup as a way to leverage limited resources available to cleanup hazardous waste sites. Accordingly, they have made it a priority to promote the development of these programs. In response to the deterrent effect Superfund cleanup standards and liability provisions have on participation in voluntary cleanup programs, EPA has drafted guidance “for establishing agreements with states that would specify, for programs meeting EPA’s criteria, that generally EPA will plan to take further action at sites in a state’s voluntary programs only in limited circumstances” (GAO 1997b, 14).³¹ EPA has also provided financial assistance to support the development of voluntary programs. It has allowed states to use funds from their Superfund CAs to build the organizational infrastructure of these programs.

According to ELI (1998, 39), 44 states have established voluntary cleanup programs. Thirteen states have created these programs since 1995.³² It is important to

note that states have created these programs in the absence of any guiding federal legislation. This means the formality and structure of these programs vary considerably across states. However, some general patterns can be observed. Most state voluntary programs (33 states) are specifically established by statute, while some rely on their general cleanup authority (3 states) and others on guidance and policy (3 states). A majority of states “require participants to reimburse them for voluntary cleanup oversight costs, either in the form of a flat fee or on the basis of actual costs, or a combination of both” (ELI 1988, 42). However, there are five states that do not charge volunteers any fees.

Some characteristics clearly demonstrate the relationship between voluntary cleanup and enforcement programs. Participation in the enforcement program is mandated by statute if parties are found liable for site contamination. In the case of voluntary cleanup programs, most states limit participation based on the type of site and/or parties that caused contamination. Most states do not allow sites already involved in the Superfund program or in the state enforcement program. However, some states would allow NPL equivalent sites under certain circumstances (GAO 1997b). A majority of states place some kind of restriction on the type of volunteer that is allowed to participate. These restrictions can include: those who contaminated the site; parties not in compliance with environmental laws; and those who are parties in either federal or state enforcement proceedings. However, seven states do not use any categorical restrictions.³³ While eligibility standards between the two types of programs are very different, the administration and cleanup standards used in voluntary cleanup programs are closely related to those used in state enforcement programs. Most state voluntary

cleanup programs are an integral part of the general hazardous site cleanup programs and are administered by the same offices. Four states have established separate administration for their voluntary programs, while in four other states almost all cleanups are carried out under voluntary programs. According to ELI (1998, 40), “Cleanup standards for voluntary sites are typically the same as the standards applied at state-lead or enforcement sites.”

According to the GAO (1997b, 28), the main objectives of voluntary cleanup programs “are to encourage and facilitate the transfer and economic redevelopment of contaminated property through environmental cleanup.” While enforcement programs use their legal powers to compel cleanup, voluntary cleanup programs offer incentives to get volunteers to perform cleanups. One of the most common incentives offered by states is some form of liability release upon completion of voluntary cleanup activities. The mechanisms used and the scope of release vary among the states. There are three prominent forms of liability relief used by states. The covenant-not-to-sue and certificate of completion typically provide liability relief for past contamination addressed by the voluntary cleanup. The no-further-action letter states that based on current information, the state agency will not require further action from the volunteer. Typically, though, this letter does not excuse the volunteer from further liability (GAO 1997b, 31). Some states also offer financial incentives to volunteers in the form of low interest loans or tax credits and incentives.

Voluntary cleanup programs use other types of incentives to attract volunteers. One of these is to offer flexibility in terms of cleanup levels and methods. While volunteers are technically given their choice of cleanup levels, most chose to clean up a

site to the state's established standards because it provided more certainty in the estimation of extent and cost of cleanup (GAO 1997b, 35). As for the method, according to the GAO (1997b, 37), "Voluntary programs have not always adopted this [federal Superfund program] preference for permanence, giving volunteers less expensive options to encourage their participation." Some programs offered exemptions from cleanup of contaminated groundwater and allowed partial soil cleanup (GAO 1997b, 38). Another type of incentive is the reduction of administrative requirements to meet during the cleanup process. While acknowledging the variation that exists between state programs, the GAO (1997b, 38-45) reports that voluntary programs tend to perform less monitoring for nonpermanent and partial cleanups; conduct less oversight (e.g., require submission of site related documents and independent visits); and have more limited opportunities for public participation. Thus, both of these types of incentives function to lessen the timeframe for cleanup as well as the cost.

Voluntary cleanup programs allow EPA and state enforcement programs to leverage their resources, while at the same time expanding the number of sites that are identified and cleaned up. In their 1997 study *State Voluntary Programs Provide Incentives to Encourage Cleanups*, GAO found the characteristics of state voluntary cleanup programs lead to less costly and faster cleanups. Since these programs have fewer reporting and oversight requirements, "they cost less for the state and for volunteers..." (GAO 1997b, 21). Most of these programs are to some extent privately financed because volunteers must pay some type of fee or charge to participate. The GAO (1997b, 21) also reported, "The less adversarial process, more streamlined voluntary process also leads to faster cleanups..." Of the 17 voluntary programs the

GAO studied, “Officials for each program [we] reviewed said that their state’s voluntary program is addressing more potentially contaminated sites than their state’s enforcement program alone could have accomplished” (GAO 1997b, 18).

The actual volume of cleanups accomplished by state voluntary cleanup programs varies dramatically across the states. The number of voluntary cleanups currently underway range from zero (Iowa) to 2,313 (New Jersey).³⁴ There are ten states with over 100 cleanups currently underway, while there are nine states that have less than ten cleanups underway. This pattern also appears when looking at the number of voluntary cleanups completed during FY 1997 and number of cleanups completed since the inception of the program. The number of completed cleanups in FY 1997 range from zero (seven states) to 1,721 (New Jersey). Minnesota is the only other state with over 100 sites completed in FY 1997. New Jersey (4,454) and Minnesota (500) have completed the most voluntary cleanups since the inception of their programs. There are six other states that have completed cleanups at over 100 sites. However, there are eleven states with less than ten cleanups completed since the beginning of their programs.³⁵

A second type of voluntary remediation is state brownfields programs. While states define brownfields in a variety of ways, “the term typically refers to urban industrial or commercial facilities that are abandoned or underutilized due, in part, to environmental contamination or fear of contamination” (ELI 1998, 43). In practice, it is hard to distinguish voluntary cleanup programs from brownfields programs. For example, “a voluntary program in one State may focus more heavily on cleanup of brownfields sites than a ‘brownfields’ program in another State” (ELI 1998, 43-44).

Given this close relationship, ELI suggests it is important to examine both voluntary and brownfields programs to accurately determine the quality of brownfields redevelopment in a given state. According to ELI (1998, 44), however, there are important differences between the two:

Typically...voluntary programs do not focus on redevelopment nor do they target urban sites specifically. Rather voluntary programs are more often aimed at getting simple, less contaminated sites cleaned up regardless of whether they are reused. Brownfields programs, on the other hand, are more likely to focus on redevelopment and be part of a broader State strategy or set of social policies aimed at improving distressed urban areas.

According to ELI (1998, 44), “By the end of 1997, a little over half (28) of the States reported they had brownfields programs; an increase of 13 States since 1995.” About half of these programs are separate and distinct programs, while the other half are part of states’ voluntary programs. In addition, there are some states that do not have formal brownfields programs, but address brownfields through other mechanisms, such as their voluntary cleanup programs.³⁶ Brownfields programs also utilize the same cleanup standards and types of incentives (e.g., liability relief and financial incentives) as voluntary programs. While particulars vary, the most common criteria for inclusion used by states for including sites in their brownfields programs “are that the sites are abandoned or underutilized and have potential for redevelopment” (ELI 1998, 45).

ELI (1998, 45) reports, “The number of brownfields sites identified and the size and the scope of many programs has increased since 1995, as a result in part of the increased focus on urban revitalization and the growing maturity of many State programs.” For example, Illinois doubled the number of sites they had identified from 1995 (400-500 sites) to 1997 (1,101 sites). In addition to Illinois, five other states had identified over 100 sites by the end of 1997. The same states that have identified the

largest number of sites also have the most cleanups underway. Again, Illinois leads the way with 439 cleanups underway at the end of 1997. Connecticut, Delaware, and Michigan also have over twenty-five cleanups underway. According to ELI (1998, 45), “Given that site redevelopment is a cornerstone of most brownfields programs, the number of commitments for reuse is often an indication of the success of a program.” In almost all of the states who reported the number of commitments to ELI, the number of commitments to reuse is equal to or greater than the number of cleanups underway. However, only four states reported over ten commitments for redevelopment, which suggests these numbers are still relatively low for most states.³⁷ Overall, state brownfields programs show a steady pattern of activity and development.

CONCLUSION

The discussion in this chapter provides an examination of the major structural components of the Superfund program at both the federal and state level. The federal Superfund program has generated much debate in its first 20 years of existence. It utilizes a unique liability scheme to hold parties liable for releases (or threatened releases) of hazardous substances. It utilizes a Trust Fund, which is financed by a set of environmental taxes, to pay for EPA-lead cleanups at NPL sites. This aspect of the program is currently being debated in Congress. There are those who would like to scrap the environmental taxes and finance the Trust Fund solely from general revenues.

The removal and remedial programs are also a source of debate on the national level. While many view the removal program as the “hidden success” of the program, the remedial program receives a much tougher assessment. The issues of cost, progress, and pace are unsettled at best. Probst et al. (2001) suggest the program is unlikely to

ramp-down in cost in the near future and will require a rededication of resources to accomplish its goals. The EPA and GAO (along with other critics) have different views concerning the meaningful progress of cleanup at NPL sites. Specifically, there are delays in listing sites on the NPL and potentially harmful sites are going unaddressed. The EPA and GAO also have different views concerning the pace of cleanup. While EPA suggests their pace is increasing, GAO argues otherwise and suggests the pace is likely to slow even further in the future.

While the Superfund program appears to be a federally dominated program, there are important federal-state interactions that suggest otherwise. EPA-State interaction in the areas of cleanup authority, program resources, and voluntary remediation has important impacts on the effectiveness of Superfund cleanups. The ability of EPA regional offices to leverage their limited resources and efforts at NPL sites depends on how well they are able to identify capable state programs and enhance their leadership ability at these sites. These efforts can be further enhanced by the efficient provision of financial and technical resources to these state programs. Increasing the proficiency of state programs in these areas will make Superfund a more effective program. EPA has also shown an interest in developing state programs that deal with non-NPL sites. Voluntary cleanup and brownfields programs address sites that would otherwise go unaddressed and could eventually pose increased risk to the environment and public health.

This examination of the intergovernmental nature of the Superfund program accomplishes two things. The first is to demonstrate the important link between the federal and state aspects of the program. The federal Superfund program provides the

overarching structure for the EPA-State interactions. This chapter also provides a look at the way the Superfund statute structures the relations that take place between the intergovernmental implementors of this program. Both the EPA regional offices and State Agencies work within the structure created by the liability scheme, Trust Fund, settlement authority, and program goals lay out by the federal statute. The role of the EPA regional offices concerning the allocation of cleanup authority, program resources, as well as their relationship to voluntary remediation programs are also shaped by the legal structures (regulations) of the Superfund program. This provides an excellent segue into Chapters Four and Five, which examine the perceptions of state enforcement and EPA regional office officials implementing the Superfund program.

ENDNOTES FOR CHAPTER 3

1. As it currently stands, the taxes used to finance the Trust Fund have expired. The Superfund program is being financed through the monies that remain in the Trust Fund and appropriations from general revenues. This uncertainty is a cause for concern as a Resources for the Future (RFF) report by Probst et al. (2001) suggest the cost of the Superfund will not “ramp down” in the near future.
2. Settlements can be reached at various stages of the remedial process. If settlement negotiations fail or no good faith offer is received, EPA may issue a Unilateral Administrative Order (under CERCLA Section 106) to force liable parties to conduct the response action. EPA also has the option of using Trust Fund monies to perform the cleanup and attempt to recover costs from PRPs at a later date.
3. Probst et al. (2001, 16) note that since the inception of the Superfund program approximately eight percent of removal actions have cost over \$2 million.
4. Probst et al. (2001) focus their analysis on the extramural expenditures over this time period. They suggest this provides a useful way to look at program expenditures given that extramural expenditures are such a large portion of program costs (approximately 70%). Extramural costs are expenditures made by EPA that are “external” to the agency, including contracts, interagency agreements, and cooperative agreements with states (Probst et al. 2001, 271).
5. The increased expenditure in FY 1995 represented a disbursement of funding related to the SACM initiative. The increase in FY 1997 largely reflects EPA spending on expensive cleanups in Jackson County, Mississippi and New Orleans (Probst et al. 2001, 25).
6. Technically, the preliminary assessment/feasibility study (PA/SI) is considered to be pre-remedial as they occur before the site is listed on the NPL. However, they are included in this discussion because they are a necessary step in the process of a site reaching the NPL. Information generated at this phase of the process is used to decide whether or not the site warrants further attention and cleanup.
7. Sites receiving a score of 28.5 are considered “NPL eligible.” They are only proposed to the NPL after additional review and screening.

8. In addition to these sites on the final NPL, EPA includes 218 deleted sites and 59 proposed sites when discussing their total cleanup figures at the end of FY 2000.
9. These numbers are adapted from Probst et al. (2001, 45). The numbers in this table represent the average total cost (extramural unit costs + intramural unit costs) at all sites (e.g., the average of mega and nonmega sites).
10. Probst et al. (2001) define mega sites as those sites with actual or expected total removal and remedial actions costs of \$50 million or more.
11. This is due to a combination of factors including: complexity of proposed remedy, uncooperative responsible parties, level and type of contamination, and age of the site (e.g., how long it has been on the NPL).
12. These activities include the use of presumptive remedies (response action for common categories of sites based on historical information), use of future land use as criteria for cleanup, and a new approach and method for groundwater cleanup (Probst et al. 2001, 46).
13. According to Probst et al. (2001, xxv), this will increasingly be the case as state programs take over sites with viable and cooperative responsible parties, as well cleanup the less expensive sites. This more complex, conflictual, and expensive sites to the EPA.
14. Data for this table was taken from www.epa.gov/superfund/action/process/mgmttrpt.htm on April 14, 2002. These national figures include 218 deleted sites (including 7 sites that were deleted and referred to another authority), 59 proposed sites, and 1,232 final NPL sites for a total of 1,509 NPL sites.
15. Risks of exposure to the contaminants at these sites could occur through groundwater, drinking water, proximity to populated areas, and other various forms of contact (GAO 1999c).
16. The time frame analyzed includes: NPL proposal date to RI/FS start (1.0 years); RI/FS (2.6 years); RI/FS completion to remedial design start (1.0 years); Remedial design (1.7 years); and Remedial action (1.8 years).
17. Probst et al. (2001) suggest that EPA's methodology for calculating duration is flawed in at least two respects. The first is that EPA only includes completed sites in its calculations. This leads to the exclusion of sites that have started, but not finished remedy construction. These are the sites that tend to have the longer cleanup times. Thus, EPA excludes what are known as "long-term" remedial actions. The other is EPA's calculations are based on actions, not an operable unit basis. Since there can be two more types of the same action (e.g., RI/FS) at the same unit, this tends to shorten the estimated duration of cleanup.

18. The lead agency designation indicates which agency is charged with the responsibility for making cleanup-related decisions at a given (usually NPL) site. This can be for the entire site or for a set of specified cleanup activities. The support agency can make comments and suggestions concerning these decisions. The lead agency/support agency paradigm is at the core of the current EPA-State relationship.
19. According to many Superfund officials, the lead agency/support agency creates an unnecessary overlap of responsibility and duplication of effort at NPL sites (see Markell 1993).
20. The membership of the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) include environmental officials from each state.
21. The debate about state capacity centers more on the universality of the claim. In other words, not many doubt that some states have increased their capacity, but there are some states that lag behind. See the following for a more in-depth treatment of this topic: Markell (1993); ELI (1998); Probst et al. (2001); GAO (1997a); and Barnett (1994).
22. Once the parties have identified and defined their respective roles and responsibilities in the model agreement, they will then formalize these roles in a Memorandum of Agreement (MOA).
23. According to the EPA, response actions at these sites will be consistent with the National Contingency Plan (NCP). It is the NCP that sets the standards for NPL site cleanups. Probst et al. (2001, 41) suggest that cleanup at these NPL equivalent sites may not be meeting NCP standards.
24. Probst et al. (2001) provide a more critical look at the use of the NPL equivalent designation. They suggest that it is premature to conclude cleanups at these sites are truly equivalent to NPL cleanups. They also point out the NPL equivalent designation may not be expanding the reach of the program. Instead, it may just be “redefining” sites that would have been listed on the NPL in previous years. Finally, they report that “it does not appear that the number of NPL equivalent sites is likely to increase appreciably in the future,” although this varies somewhat by region (Probst et al. 2001, 42).
25. This is true except to the other response AOA, which cannot be augmented.
26. This situation is created because each type of CA is funded with a specific category of money (AOA) that cannot be commingled and that requires separate awarding and tracking. In addition to this, some CAs are site specific, although Regions and States can negotiate multi-site CAs. Furthermore, funds obligated under an AOA for the previous fiscal year may not be shifted to the next fiscal year without recertification (EPA 1997, 6).

27. This is accomplished by allowing cumulative transfers among direct cost categories that exceed 10% of the total approved budget for an activity and the revision or adding of tasks to the statement of work without prior approval.

28. Under Block Funding Pilots, states are allowed to submit only one budget for the entire block CA. There have also been revisions to the information requirements of the progress reports. In addition, states are allowed to submit project status reports on an annual or bi-annual basis (not quarterly, as is usually required).

29. As of this time, the evaluation of the other Block Funding Pilots is currently ongoing and a report is pending.

30. Many state officials have cited the Superfund Innovative Technology Evaluation (SITE) as a particularly helpful EPA effort.

31. According to the GAO (1997b; 2000), the current guidance, while very flexible, are very general and do not clearly establish EPA's premise for deciding whether a state's voluntary program will qualify for agreement in the future. However, EPA's subsequent attempt to draft a new set of criteria failed to gain consensus on critical aspects from various stakeholders. Thus, the current criteria used to evaluate state voluntary programs include: (1) Provide for meaningful levels of community involvement; (2) Use protective cleanup requirements; (3) Adequate resources; (4) Ensure completion of cleanups; (5) Oversee cleanups; and (6) Take enforcement action if necessary (GAO 1997b, 49).

32. These states include: Alaska, Florida, Georgia, Hawaii, Idaho, Iowa, Kansas, Maryland, Mississippi, New Hampshire, New Mexico, Utah, and West Virginia.

33. These states include: Alaska, Michigan, Minnesota, Nebraska, Nevada, Oregon, and Pennsylvania. These states do reserve the right of rejecting applications if appropriate.

34. These numbers are reported in ELI (1998) and are up to date through the end of 1997.

35. ELI (1998) provides some insights as to why this variation exists. Programs vary in age. Many of have only recently (as of 1995) been established. The number of sites and volunteers vary considerably among states. Some states rely more heavily on their voluntary programs, while others emphasize state enforcement or state-funded approaches to cleaning up sites.

36. These states include: Texas, Tennessee, and Oregon.

37. These numbers are somewhat of a low estimate because prominent states like Illinois and Connecticut did not report the number of redevelopment commitments to ELI.

Chapter 4: The View from the States

INTRODUCTION

The purpose of this chapter is to examine the perceptions of state officials involved in implementation of the remedial cleanup efforts in the Superfund program. These officials are part of their state's enforcement program. This chapter starts by describing the general status of these enforcement programs, as well as state officials' perceptions of their state's program capacity. Next, the chapter will focus on the issue of cooperation. Specifically, it will look at the perceptions state officials have about cooperation in their working relationship with EPA regional office officials. After this, the state officials' perceptions of other elements in the Model of Cooperative Working Relationships will be presented. Finally, there will be an analysis of what differentiates Low-Moderately Cooperative officials from Highly Cooperative officials.

STATE ENFORCEMENT PROGRAMS

Structural Elements of State Enforcement Programs

State cleanup programs work both independently and in concert with the EPA to address the issue of contaminated land. For many non-NPL sites, State Agencies are the sole providers of oversight, enforcement, and funding for cleanup. At NPL sites, state activities range from cost sharing at EPA-lead cleanups to active site management. Given the size of the contamination (both land and water) problem and increasing cost of cleanup, the capacity of state cleanup programs is critical to the success of the Superfund

program. According to the ELI (1998, 3), which has conducted a series of studies on state cleanup programs, “collectively, the States have steadily increased their capabilities since 1989.” Variations in development among the state programs is to be expected due to the fact the Superfund program does not set any national standards (ELI 1998, 2). To get an accurate picture of this development it is important to look at several different factors of these state programs. These include the following components: availability of funds, enforcement authorities, staffing, cleanup standards, and cleanup activities.

An important element of any state cleanup program is the ability to pay for cleaning up sites in the absence of responsible parties. According to ELI (1998, 14), this ability is enhanced by “a fund separated from the operating funds of the environmental agency and continuing from year to year without the need for annual appropriations or other legislative action allows the agency to avoid disruptions to cleanups.” Forty-nine states have established cleanup funds or other mechanisms to pay for cleanup activities at contaminated sites. With respect to sources of funding, “States did not prefer one method of funding over others...the funds were broadly and evenly distributed” across a variety of different types of sources” (ELI 1998, 22). Some of the more popular mechanisms providing significant (>twenty percent of fund additions) sources of funding include: waste fees (nineteen states), cost recoveries (sixteen states), appropriations (fourteen states), taxes (fourteen states), user fees (eleven states), and bonds (nine states). The most widely authorized use of these funds is for emergency response and removals (forty-eight and forty-seven states, respectively). The vast majority of states also use their funds for remedial actions (forty-two states) and activities supporting both short- and long-term cleanup activities (>forty states).^{1,2}

There are two trends to be observed in the development of these funds. The first is not all of these funds are created equal (see Table 4.1). The development of these funds in terms of balances, additions and expenditures is concentrated in a few states. There are six states that have fund balances over \$50 million. As of the end of 1997, the total fund balances for these six states was \$1.079 billion. This was 76.4 percent of the aggregate balance of state funds at the end of 1997. The three states adding over \$50 million totaled \$239.4 million or 43.7 percent of the aggregate added to state funds. And only New Jersey and New York reported spending over \$50 million at all sites in 1997. A second important trend is the continued drawing down of the balances of state cleanup funds in the aggregate. In 1997, the overall balance of state cleanup funds was \$1.41 billion. This represents a 2.5 percent decrease from 1995 and continuing decrease from the peak of \$2.43 billion in 1990 (ELI 1998, 3). This trend continued in 1997. FY 1997 expenditures (\$565 million) and obligations (\$448 million) exceeded additions (\$ 538.3 million).

Table 4.1. State Cleanup Fund Balances, Additions, and Expenditures in 1997

	\$ in Millions				
Number of States (in each category)	<1	1-5	5-10	10-50	>50
Fund Balances	10	14	6	11	6
Fund Additions	19	8	7	8	3
Fund Expenditures	16	11	6	9	2

Many of enforcement provisions present in state hazardous substance cleanup laws are similar to those in the federal statutes. The vast majority of states has followed the lead of CERCLA and holds the same type of parties liable – owners, operators,

generators, and transporters. Forty-three states impose retroactive liability. Forty-three states use the standard of strict liability to assign culpability to responsible parties. And thirty-six states use joint and several liability as their allocation standard. Virtually all state programs have the authority to issue administrative cleanup orders or seek injunctions for cleanups. Many states (32) have followed the lead of CERCLA in establishing independent authority to recover natural resource damages from responsible parties. In addition to these authorities, “An increasing number of States have adopted property transfer provisions. Thirty-one (31) States report that they have some type of property transfer provision related to sites contaminated with hazardous substances” (ELI 1998, 36).

The number of full-time equivalent (FTE) staff working in the states’ cleanup programs is also an important factor in determining capacity. At the end of 1997, there was a total of 3,474 FTE staff working in state Superfund programs. This represents a decrease of about three percent from figures reported in 1995 (ELI 1998, 13). Within this aggregate, there is a great deal of variation among the states (see Table 4.2). New Jersey reported having 512 FTE staff, while South Dakota had only 2.5 FTE staff.

Table 4.2. Number of FTE Personnel in State Cleanup Programs

	Number of States
Number of Personnel	
(1-10)	6
(10.5-50)	25
(51-100)	7
(>100)	11

According to ELI (1998, 8), “Another indicator of the maturation of State cleanup programs is the degree to which States have standardized their decisions on the crucial question of how clean is clean.” In the late 1980s, most states determined cleanup

standards on an ad hoc basis and relied on EPA for guidance. By 1997 the situation had changed drastically. Forty-four states have established some cleanup standards by regulation (ELI 1998, 8). These cleanup criteria include: risk assessments for carcinogens and noncarcinogens (forty-four states), surface water quality (forty-two states), drinking water (forty-two states), land-use (forty-one states), groundwater (thirty-five states), and soil (thirty states). Thus, states have moved in the direction of “widespread adoption of statutes and regulations governing specific cleanup criteria” (ELI 1998, 28).

State enforcement programs are responsible for both NPL and non-NPL site cleanups. As discussed earlier, states have varying roles at NPL sites, which can range from cost sharing to active site management (e.g., state-lead activities). Currently, approximately thirty percent of the states have over seventy-five percent of the sites listed on the NPL. New Jersey and Pennsylvania each have over 100 sites on the final NPL. Another five states have over fifty sites, while nine others have over ten sites. Since the inception of the Superfund program, only seven states have seen the deleting of ten or more sites from the NPL.

Besides partnering with EPA at NPL sites, state enforcement programs are also charged with managing cleanup activities at the more serious non-NPL sites within their jurisdictions. At the end of 1997, the number of cleanups underway ranged from zero (several states) to 2,050 (New Jersey). New Jersey, Alaska, and Florida had over 1,000 cleanups underway. Another fourteen states currently have over 100 cleanups underway at non-NPL sites. The figures are more skewed for the number of cleanups completed in FY 1997. Only three states (Texas, Massachusetts, and New Jersey) completed over 100

cleanups during this time. And only another six states managed to cleanup over fifty sites. This pattern is also reflected when looking at the total number of cleanups completed since the inception of each state's cleanup program. There have only been three states (Texas, Massachusetts, and New Jersey) that have completed over 1,000 cleanups during their programs history. Another four states have completed between 500 and 1,000 sites, while thirteen states cleaned up between 100 to 500 sites.³

Perceptions of State Enforcement Program Capacity

Thus far the discussion has focused on the structural aspects of state enforcement programs. It is also important to examine how state officials working in these enforcement programs perceive their state's capacity to implement Superfund. Table 4.3 reports the responses state officials in the remedial part of their state's Superfund cleanup program.

Table 4.3. State Officials' Perceptions of State Program Capacity

	% Satisfied	% Dissatisfied	Mean Score (Std. Dev)	N
Statutory authority to enforce cleanups	68.3	22.1	2.62 (1.135)	104
Staff's training	77.9	12.5	2.84 (0.936)	104
Financial resources	37.3	51.0	1.79 (1.238)	102
Cleanup standards	79.8	10.6	2.87 (0.893)	104
Staff's commitment to program	95.1	1.0	3.36 (0.608)	103
Willingness to take on enhanced leadership at NPL sites	71.3	5.9	2.85 (0.805)	101
Track record of performance	85.6	5.8	3.09 (0.814)	104
Overall effectiveness	79.8	20.2	3.01 (0.806)	104

Note: 0 = Very Dissatisfied to 4 = Very Satisfied
Number in parentheses is standard deviation

Generally speaking, state officials are satisfied with their program's overall capabilities. Over seventy percent of respondents expressed satisfaction with both their staff's training and the stringency of their cleanup standards. Sixty-eight percent were satisfied with the statutory authority they have at their disposal to enforce private party cleanups. However, less than forty percent perceived their financial resources as meeting the cleanup needs faced by their state. Actually, over half of the respondents felt dissatisfied with the resources available. This finding is not unexpected given the budget concerns the federal program is facing, as well as the budget deficit situation facing many states (Lemov 2002).⁴

A vast majority of state officials express satisfaction with their program's commitment, as well as the outcomes it produces. Ninety-five percent of respondents were satisfied with their staff's commitment to the implementation of the Superfund program. Just over seventy percent reported their state's willingness to take on more responsibility at NPL sites met with their approval. And approximately eighty percent rated their program's overall performance in terms of effectiveness and track record at large and complex sites as satisfactory.⁵

LEVELS OF COOPERATION AMONG STATE OFFICIALS

The purpose of this study is to examine the level of cooperation perceived by those within the EPA-State working relationship in the Superfund program and the factors that explain it. Table 4.4 shows the responses of state officials to questionnaire items used to measure cooperation.

Table 4.4. State Officials' Perceptions of Cooperation within the EPA-State Working Relationship

	% Agree	% Disagree	Mean Score (Std. Dev)	N
EPA is accountable	48.0	38.5	2.06 (1.298)	104
EPA seeks meaningful input	50.5	19.4	2.32 (1.021)	103
EPA acts as full partner	55.3	32.4	2.30 (1.160)	105
EPA fairly assesses State readiness	58.7	5.8	2.60 (0.782)	104
EPA does not use authority to take advantage of States	44.2	25.0	2.14 (1.028)	104
EPA-State relationship fosters mutual understanding	71.4	14.3	2.67 (0.873)	105
EPA-State relationship integrates all parties interests	52.9	22.1	2.36 (1.060)	104
EPA-State relationship is flexible	63.8	18.1	2.45 (0.909)	105

Note: 0 = SD to 4 = SA

Number in parentheses is standard deviation

The responses in Table 4.4 paint a picture of a relationship that is not overly hostile, but is also not overly cooperative. A majority of state officials feel their relationship with EPA is inclusive of their views. Over sixty percent felt the relationship was flexible enough to accommodate different perspectives on programmatic issues. Fifty percent agreed EPA seeks their input in a meaningful way. However, echoing the sentiments of several state officials one commented that the EPA fails “to accept our state hazardous site cleanup regulations as ARARS and they [need to] take our technical comments on proposed RODs more seriously.”

State officials did express some concern about EPA’s willingness to take advantage of their decisionmaking authority at Superfund sites. Close to forty percent of respondents do not think EPA is accountable to them for decisions made concerning activities at NPL sites. One state official put it this way, “While there is flexibility to have differences of opinion between EPA and the state; EPA ultimately makes the final

decision.” Another official offered a less positive view of the EPA-State relationship, stating that , “[There needs to be] a greater willingness on the part of regional personnel to compromise. EPA currently has all of the decision authority and there isn’t anything that compels them to compromise when there is a dispute.”

There is also a strong perception of mutually developed program goals and objectives. Over seventy percent of state officials agreed their relationship with EPA helped to create a better understanding of one another. However, just over fifty percent felt their interests were integrated into actual policy. Several state officials expressed the concern that EPA regional offices’ program goals are not the product of region-state negotiations, but rather are driven by “bean-counts.”⁶ Many state officials believe these bean-count driven goals or quotas are driven by forces beyond the EPA-State relationship. According to one state official the pressure comes from a high-level political source:

Due to increased pressure on EPA [Headquarters] by Congress to show progress, EPA has become more interested in showing progress (e.g., counting RODs , constructions completed, etc.) than doing the job well. I don’t blame this on regional personnel as much as I do on the reward system currently in place.

Thus, the regional offices striving to meet the goals set by Headquarters are provided with the incentive to measure the progress of states by counting the number of activities. According to this view, states are precluded from any kind of mutual development of program goals or performance measures.

While close to sixty percent of respondents believe that EPA fairly assesses their program, there was some doubt as to whether states function as full partners with EPA at NPL sites. One state official suggests that the EPA regional offices needed to increase their, “understanding of what constitutes a partnership in a working relationship.” One of

the issues seen as a barrier towards partnership is the behavior of EPA Remedial Project Managers (RPMs).⁷ A state official put it this way, “In general region[al] management believes that the EPA-State [relationships] are a partnership. Unfortunately the individual project managers on specific sites do not always share that sentiment.” Some state officials see RPMs as acting with too much autonomy at sites and not respecting the rules negotiated between regional offices and their respective state partners.

Defining Levels of Cooperation

These questionnaire items were used to construct an index to measure the underlying construct of cooperation. Unidimensional scaling techniques were applied to these items to produce a Cooperation Index. The result is a seven-item (28 point) index that includes each of the norms/rules discussed in Chapter Two is included in the index.⁸ Table 4.5 shows that the scores of state officials range from zero to twenty-six with higher scores indicating a more cooperative relationship. Their mean score is 16.81, which suggests a moderate level of cooperation. The index has Cronbach’s Alpha of 0.87. This indicates a consistent set of responses to these items among state officials.

Table 4.5. State Officials’ Responses to the Cooperation Index

Number of Items	7
Minimum	0
Maximum	26
Mean	16.81
Standard Deviation	5.38
Cronbach’s Alpha	0.87

N = 101

In order to examine the levels of Cooperation that state officials perceive in the EPA-State working relationship, respondents were divided into two groups based on their scores on the Cooperation Index. Respondents who scored from zero to 20 were placed in the Low-Moderately Cooperative group. Those scoring 21 and above were placed in

the Highly Cooperative group.⁹ Dividing respondents in this manner allows the analysis to move beyond simply looking at minor changes along the Cooperation Index. Instead, the analysis can focus on what distinguishes one group from another. It answers the question, “what variables/factors account for the differences between Highly Cooperative and Low-Moderately Cooperative officials?”

The rest of the chapter will focus on this very question. The next section focuses on the perceptions of Low-Moderately Cooperative and Highly Cooperative respondents concerning each of the different factors in the Model of Cooperative Working Relationships. Do these different groups have differing views concerning Trust and Involvement? Do they differ with respect to the issues of Program Capacity (Regional and State), Political Context (State and National), and the nature of the Superfund program (Nature of the Problem)? The following section will examine the dynamic interplay of these factors in explaining what makes a Highly Cooperative state respondent different from a Low-Moderately Cooperative one.

PERCEPTIONS OF STATE OFFICIALS

Strategic Factors

The Model of Cooperative Working Relationships developed in Chapter Two examines the impact of two different sets of factors on the level of cooperation perceived by state officials in the Superfund program. One set of factors is considered to be strategic in nature. These factors tend to be more dynamic and manipulable by those actually participating in the working relationship because they are a product of this interaction. The first of these is Trust. This variable examines the perceptions of state officials concerning the issues of reliability, concern, competence, and openness in their

relationship with regional office officials. The concept of Involvement looks at how perceptions of roles and decentralization of authority impact how state officials view their regional counterparts.

According to the findings in Table 4.6, Highly Cooperative state officials perceive more Trust in their relationships with their regional office counterparts than Low-Moderately Cooperative officials. There is a significant difference between the two groups of state officials concerning the issues of reliability, concern, competence, and openness. Highly Cooperative state officials find both themselves and their regional counterparts as being reliable in the implementation of the Superfund program. They have significantly more positive view of their consistent application of their own standards, as well EPA's federal requirements. However, Low-Moderately Cooperative officials feel very differently with respect to EPA's application of federal standards. Some feel the relationship could be improved by the development of a consistent and predictable plan for addressing priority sites. One of the sources of this inconsistency is the RPM at particular sites. One state official felt the quality of RPMs was too inconsistent across sites, another commented, "[D]ue to the authority EPA RPMs have some information from EPA HQ and the RO [regional office] doesn't seem to be adhered to by the RPMs."

Table 4.6. Perceptions of Trust among Low-Moderately Cooperative and Highly Cooperative State Officials

	Low-Moderate	High
States consistently apply own cleanup standards	3.23 (1.092)	3.74* (0.447)
EPA more interested in cleaning sites than enforcing regulations	2.32 (0.923)	3.11* (0.751)
EPA is committed to developing State programs	2.17 (0.862)	2.93* (0.829)
EPA exercises good judgment in decision making	2.34 (0.961)	3.04* (0.854)
EPA clearly communicates guidance	2.05 (0.935)	2.89* (0.751)
EPA encourages open dialogue	2.57 (0.784)	3.37* (0.492)
EPA possesses high degree of expertise	2.57 (0.893)	3.26* (0.656)
EPA apply federal requirements in predictable manner	2.00 (1.020)	2.96* (0.808)

N = 102 to 105

Note: 0 = SD to 4 = SA

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

Highly Cooperative state officials also perceive higher levels of concern for their program on the part of their regional office. They feel that their regional office is more interested in cleaning sites than enforcing federal regulations, as well as showing a commitment to the development of their state program capacity. Those who perceive a lower level of cooperation in their working relationship have a different point of view. According to one official there is “[w]hat appears to be a deliberate attempt to find ways to interpret federal laws/regulations in order to discount state ARARs. We seem to be at odds more often with EPA than with PRPs.”

There are also significant differences between the two groups concerning the issues of competence and openness on the part of regional office personnel. Highly Cooperative officials feel that their regional counterparts exercise good judgment in making decisions at NPL sites. They also feel that regional personnel possess a high

degree of program-related expertise. These officials also perceive an open line of communication with region officials. One official put it this way, “Although EPA will meet with us as often as we’d like, we typically meet on a quarterly basis to discuss our projects. Currently, there is nothing I would change about our relationship with the EPA regional office.”

Low–Moderately Cooperative officials express a different opinion on both of these issues. Regional personnel possess a more limited level of program-related competence for at least a couple of different reasons. One is due to the high level of staff turnover at this level. Another reason is a lack of understanding of the impact of “state and local conditions as they relate to NPL remedial work.” There is also the belief that the EPA regional office doubts the competence of the state agencies. One official noted, “They should not second guess technical decisions made by the states and should help to find solutions rather than barriers.” These officials also report more problematic communications with the EPA regional office. Some felt there needed to be more timely notification of important decisions. Others suggested there needed to be more frequent communications concerning such things as budgeting issues, which could impact the level of resources provided to states. One official suggested, though, that the problem does not simply lie with the EPA, but also with their state agency, “[There is] no communication regarding sites where EPA is the lead agency. Some of this is our fault, not providing enough input to EPA on these sites.” Whatever the reason, though, communication is less than clear.

The second strategic factor in the Model of Cooperative Working Relationships is Involvement. Important issues here are the decentralization of authority and the roles

played by region and state officials within the program. The findings in Table 4.7 show there is a significant difference of opinion between Highly and Low-Moderately Cooperative state officials concerning both the decentralization of authority and proper programmatic roles for region and state officials. Highly Cooperative officials are more likely to agree that EPA is willing to grant their state agency enhanced responsibility at Superfund sites. On the other hand, Low-Moderately Cooperative officials are much less likely to believe this is the case. In this vein, one official comments, “The Superfund program should have been delegated to the states five years ago!”

Table 4.7. Perceptions of Involvement among Low-Moderately Cooperative and Highly Cooperative State Officials

	Low-Moderate	High
Clear division of responsibility	2.23 (1.067)	3.15* (0.662)
EPA willingly grant enhanced responsibility at NPL sites	2.10 (1.161)	2.74* (1.095)
States should have increased role in selecting remedy at NPL sites	3.53 (0.851)	3.15 (1.099)
States should be more involved in project planning	2.78 (0.997)	2.52 (0.935)
EPA oversight commensurate with State’s capacity	2.09 (0.953)	2.50* (0.860)
EPA’s primary role at State-lead sites should be more than simply providing resources	1.00 (0.862)	1.37 (0.926)

N = 102 to 105

Note: 0 = SD to 4 = SA

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

These two groups also have disparate views concerning the proper assignment of roles within the Superfund program. Highly Cooperative officials are significantly more likely to see a clear division of roles and responsibilities between themselves and their EPA regional office. This finding is similar to that of the General Accounting Office in their study of EPA-State working relationships in the Superfund program (GAO 1997a).

These officials are also more likely to view EPA oversight as being commensurate with their program's capacity.

Low-Moderately Cooperative officials are significantly less likely to agree with both of these views concerning roles in the Superfund program. First, the division of responsibility in the working relationship is less than clear. One official expressed the concern that the Superfund Memorandum of Agreement (SMOA), which outlines the roles and responsibilities of both the state and region activities at a particular site or group of sites, is generally "unenforceable." Another official stated that confusion about proper roles goes beyond NPL sites to non-NPL sites. According to this official, "It is our policy to let EPA have [the] lead on NPL sites.... We also have several non-NPL sites where EPA has taken lead. In general, these tend to be put into the lowest priority. In my opinion, EPA should turn these sites over to the state." These officials also do not view oversight as being conducted in line with their states' capacities. According to one, "I would prefer that they were even more focused on getting the job done right than on process." They feel that oversight is driven by bean counting at every step in the Superfund process and does not take into account the other accomplishments (e.g., cleanups at non-NPL sites) of state programs.

Structural Factors

The other type of factors discussed in the Model of Cooperative Working Relationships focus on the different structural forces that impact the interaction between regional office and State Agency officials. These structural factors reflect the larger institutional context that different sets of actors find themselves in. The first of these is the role of EPA Headquarters in the Superfund program. The questionnaire items

focused on a region-headquarters comparison in terms of their relations with regional and headquarters officials, policy innovation and leadership, and resource provision. The adequacy of resource provision is also examined. The findings for state officials are presented in Table 4.8.

Table 4.8. Perceptions of the EPA Headquarters’ Role among Low-Moderately Cooperative and Highly Cooperative State Officials

	Low-Moderate	High
Regional Office more sensitive to State perspective than EPA HQ	2.32 (0.967)	2.52 (0.935)
Regional Office more committed to the implementation of the program than EPA HQ	2.28 (0.953)	2.68* (0.852)
EPA HQ are not primary source of policy innovation	1.93 (0.912)	2.22 (0.974)
EPA HQ not effectively communicate policy guidance	2.04 (0.730)	1.74 (1.023)
EPA HQ not provide adequate technical support	1.77 (0.732)	1.41* (0.747)

N = 101 to 105

Note: 0 = SD to 4 = SA

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

Highly Cooperative state officials view their regional office counterparts as more important to the implementation of the Superfund program than headquarters’ personnel. One official expressed the desire to give their regional office “...more power than HQ. Remedial cleanup is best handled at the most local level available rather than a one-size-fits-all approach, which is what HQ tends to do.” These officials are also more likely to view EPA headquarters as providing adequate technical support than their Low-Moderately Cooperative counterparts. This is not surprising given the acceptance of both regional and state officials that the generation and dissemination of technical is best handled as a very centralized function (see GAO 1997a; EPA 1998).

Another important structural factor impacting the level of cooperation in the EPA-State working relationship is program capacity. Items on the questionnaire focus on the

issues of capability (e.g., personnel, financial resources, and cleanup standards), commitment to the program, and outcomes. The findings for state officials on both their own and their regional office's capacity are presented in Table 4.9.

Table 4.9. Perceptions of Program Capacity among Low-Moderately Cooperative and Highly Cooperative State Officials

	Low-Moderate	High
State Agency Program Capacity:		
Statutory authority to enforce cleanups	2.61 (1.083)	2.54 (1.240)
Staff's training	2.66 (0.969)	3.35* (0.562)
Financial resources	1.89 (1.181)	1.50 (1.304)
Cleanup standards	2.76 (0.841)	3.12 (1.033)
Staff's commitment to program	3.28 (0.562)	3.58* (0.703)
Willingness to take on enhanced leadership at NPL sites	2.65 (0.795)	3.31* (0.549)
Track record of performance	2.97 (0.844)	3.31* (0.679)
Overall effectiveness	2.89 (0.804)	3.31* (0.618)
Regional Office Program Capacity:		
Program funding	2.05 (1.019)	2.37 (1.363)
Cleanup standards	2.07 (0.970)	2.67* (0.784)
Staff's commitment to the program	2.64 (0.674)	3.04* (0.587)
Staff's level of effort	2.41 (0.890)	3.04* (0.437)
Track record of performance	2.28 (0.899)	2.93* (0.267)

N = 101 to 104

Note: 0 = Very Dissatisfied to 4 = Very Satisfied

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

Highly Cooperative state officials differ from their Low-Moderate counterparts in several important respects. First, they have a very positive view of their program as a whole. Many state officials remarked that their cleanup standards (e.g., risk assessment standards) are more stringent than EPA's. Many also felt their personnel were better

trained than those in similar positions at the regional office. They also express a higher level of commitment to the program in terms of their staffs' commitment, as well a willingness to take on lead-agency responsibilities at NPL sites. These officials also feel that their programs produce better overall results. Thus, this very positive evaluation of one's program leads to a more cooperative relationship. According to one official, "[Our state and regional office] enjoy an excellent relationship. [Our state] program is the premiere program in the region, and one of the top programs nationally....It is difficult to identify an area of weakness in the overall relationship."

Another important difference between these two groups of state officials is their respective views of their regional office's program capacity. Highly Cooperative state officials are more satisfied with their regional office's capabilities, commitment, and overall performance than do their Low-Moderate counterparts. Low-Moderately Cooperative state officials are especially critical of their regional personnel's commitment and effort in the implementation of the program. One official commented that regional staff should be required "to have necessary experience and education to deal with [complex issues at] sites." Highly Cooperative officials are able to define their working with regional officials based on "a healthy respect for our mutual capacities." On the other hand, Low-Moderately Cooperative officials are not as positive that anybody's program is really able to handle the problems posed by the cleanup of contaminated sites.

The EPA-State working relationship does not take place outside the larger state and National Political Context. The performance of state officials implementing environmental programs is influenced by the political context in their state (Scheberle

1997; Bowman and Lester 1993; Wood 1992; Gormley 1987; Goggin et al. 1990). Given the strong intergovernmental nature of the Superfund program, the state officials in this study can also be influenced by national level political factors that shape the rules, regulations, and funding for the program (see Chapter Three for a discussion of these federal-state program links). The findings for state officials concerning their views of both their own and national-level political support are presented in Table 4.10.¹⁰

Table 4.10. Perceptions of Support in State and National Political Contexts among Low-Moderately Cooperative and Highly Cooperative State Officials

	Low-Moderate	High
State-Level Political Context:		
State Legislature	2.52 (0.892)	2.59 (0.931)
State Citizenry	2.59 (0.748)	2.59 (1.047)
Local Government Officials	2.81 (0.764)	2.56 (1.050)
Environmental Interest Groups at the State Level	2.79 (0.558)	2.74 (0.984)
National-Level Political Context:		
Congress	2.13 (0.735)	2.63* (0.492)
President	1.90 (0.679)	2.00 (0.632)
Environmental Interest Groups at the National Level	2.46 (0.532)	2.38 (0.496)
Federal Courts	2.32 (0.824)	2.62 (1.061)
General Public	2.79 (0.558)	2.48 (1.087)

N = 97 to 102

Note: 0 = Strongly Unsupportive to 4 = Strongly Supportive

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

Highly and Low-Moderately Cooperative officials tend to view their own (state) Political Context as generally supportive of their efforts to cleanup hazardous waste sites in the state. These two sets of officials also possess similar views of political support from national-level political actors. The one exception is Congress. Low-Moderately

Cooperative officials tend to feel that Congress has placed undue political pressure on EPA Headquarters, which in turn has created the “bean-counting” phenomenon discussed earlier. According to one official, it is Congress that creates a reward system for EPA that is based on simply counting the number of activities initiated or completed (e.g., RODs signed and constructions completed), while ignoring other forms of program performance.

The final structural factor examined in this study is the Nature of the Problem. State Agency officials implementing the Superfund program must work within the rules and regulations of the program. The federal Superfund statute prescribes a strong liability scheme to recover costs from responsible parties. The regulations governing cleanup standards for NPL sites favor permanent cleanups and cleaning sites to exacting standards (cleaning sites to the point where they can safely support future residential use). These regulatory approaches and technical program points are supported by the notion that cleaning up NPL sites is important work. All of these different ideas relate to issues and problems specific to the Superfund program. The views of state officials with respect to these ideas are presented in Table 4.11.

Table 4.11. Perceptions of the Superfund Program among Low-Moderately Cooperative and Highly Cooperative State Officials

	Low-Moderate	High
Abandoned hazardous waste sites is a serious threat	3.32 (0.724)	3.63 (0.742)
NPL accurately represents the seriousness of the problem	2.19 (1.043)	2.04 (1.018)
Greater acceptance of containment remedies weakens program effectiveness	1.80 (1.033)	2.33* (1.240)
Greater willingness to consider future industrial use of site endangers environment and public health	2.68 (0.742)	2.59 (1.338)
Strong liability scheme necessary to enforce cleanups	2.95 (0.858)	3.41* (0.572)
Responsible parties should be made to bear costs and risks of cleanup	3.15 (0.655)	3.37 (0.565)

N = 105

Note: 0 = SD to 4 = SA

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

Highly and Low-Moderately Cooperative officials tend to view the seriousness of the problem in a similar fashion. Both believe abandoned hazardous waste sites pose a serious threat to public health and environmental quality. They also agree that the NPL does not really capture the totality of the problems posed by sites contaminated by hazardous substances. However, there are significant differences concerning both technical issues and regulatory approach. Highly Cooperative officials are more likely to favor the use of permanent remedies at contaminated sites. These officials also favor the use of a strong liability scheme, which is prescribed by the federal Superfund statute. Both of these views coincide with the stated position of EPA and their program guidance with respect to cleanup standards and enforcement. Sharing the views of the EPA on these programmatic issues helps to create the perception of more cooperative relations with their regional offices.

EXAMINING THE MODEL IN A DYNAMIC SETTING

The previous section examined the relationship between the levels of Cooperation and each of the factors in the Model of Cooperative Working Relationships independently of one another. This section will investigate the dynamic interplay of these factors with one another, as well as their impact on the level of cooperation perceived by state officials. In order to do this, the items on the questionnaire were used to construct indices of concepts included in the Model of Cooperative Working Relationships. Unidimensional scaling techniques are used to create the measures used in the multivariate analysis of the Model.¹¹ Logistic regression is applied to these variables in order to determine which of them differentiate Highly Cooperative state officials from

Low-Moderately Cooperative state officials. The findings of this analysis are presented in Table 4.12.

Table 4.12. Logistic Regression Estimates for State Agency Officials

Variables	Unstd LR Coeff (b)	Std LR Coeff	Std Error of b	Sig.	Exp(B)
Trust	.850	.655	.268	.002	2.339
Involvement	.881	.334	.452	.051	2.413
Relationship with EPA HQ	-.163	-.062	.269	.546	.850
State Capacity	.364	.266	.171	.033	1.439
Regional Capacity	-.055	-.028	.296	.853	.947
State Political Context	-.554	-.244	.251	.027	.575
National Political Context	-2.525	-.184	1.451	.082	.080
Nature of the Problem	-.099	-.042	.183	.587	.905

N = 85

-2LL: 36.09

Model Chi-Square: 66.90 (.000)

Goodness of Fit: 7.96 (.336)

Cox & Snell R-Square: .545

Nagelkerke R-Square: .776

An examination of the measures of model adequacy in Table 4.12 suggests the model provides a statistically significant explanation of the level of cooperation. The Goodness of Fit measure is not significant, while the Model Chi-Square is significant. The Goodness of Fit measure indicates how *poorly* the model fits the data with all of the independent variables in the equation. A significant Model Chi-Square, on the other hand, suggests the model does indeed fit the data.¹² Both the Cox & Snell and Nagelkerke statistics are what is known as “pseudo” r-square. These are analogous to the r-square statistic for linear regression. So, these statistics suggest the model provides a moderate to strong explanation of the level cooperation. Thus, all of these measures suggest a good fit between the model and the data.

Menard (1995) offers some useful insights for interpreting logistic regression results. One of these is to focus on the odds ratio (Exp [B]). According to Menard

(1995, 49), “The odds ratio is the number by which we would multiply the odds [of being in the group designated with a 1]...for each one unit increase in the independent variable.” An odds ratio of greater than 1 indicates the odds of being in the highly cooperative group (the groups designated with a 1) increase as the independent variable increases. An odds ratio less than 1 indicates the odds of being in the highly cooperative group decrease as the independent variable increases. However, Menard (1995) also cautions about the limits of the odds ratio when attempting to ascertain the relative impact of the independent variables on the dependent variable. He states (1995, 49), “the odds ratio cannot take the place of a standardized logistic regression coefficient for evaluating the strength of the influences of the independent variables on the dependent variable” because the odds ratio provide the same information as unstandardized logistic regression coefficients.

According to Table 4.12, both of the strategic variables have an important impact on whether a state official is a member of Highly Cooperative group or not. Trust exhibits a strong, positive influence on the level of cooperation expressed by state respondents. A one-unit increase in Involvement increases the likelihood a state respondent will be in the Highly Cooperative group by about 2.5 times (2.413). This finding for Involvement is not surprising given that it represents a positive view of the regional office presence in the program. Trust also demonstrates this same type of impact. A one-unit increase in Trust increases the odds the respondent will be in the highly cooperative group by over 200 percent as well (2.339). So, increasing levels of both Trust and Involvement are associated with the perception of more cooperative working relationships. This finding supports Scheberle’s (1997) contention that trust and

involvement are very important in determining the quality of EPA-State working relationships.

Structural factors also play a key role in explaining the level of cooperation perceived by state officials. Perceptions of both the National- and State-level Political Context have a negative influence on a respondent's level of cooperation, while their perception of State Program Capacity has the opposite effect. If state officials perceive the national political climate to be highly supportive, they are 92 percent less likely to be highly cooperative with their regional counterpart.¹³ A one-unit increase in State-level Political Context is associated with a 43.1 percent decrease in the odds of being the highly cooperative group.¹⁴ This indicates that state officials who perceive more support from important national- and state-level political actors/institutions are less likely to be highly cooperative with their EPA regional office. Another way to interpret this, of course, is state officials who perceive less overall political support will be more likely to be highly cooperative with their EPA region. A state's program capacity has a positive influence on a respondent's level of Cooperation. A one-unit increase in State Program Capacity results in a 46 percent increase in the odds of a respondent being in the highly cooperative group. State officials expressing a more positive view of their own capacity to implement Superfund are more likely to perceive a higher level of cooperation from their EPA counterparts.

A look at the standardized logistic regression coefficients reveals the relative strength of the influence of each of the independent variables on the level of cooperation. Trust (.655) demonstrates the strongest influence on the level of cooperation. Involvement, the other strategic variable, has the next strongest influence (.334). State-

level Political Context (-.244), State Program Capacity (.266), and National-level Political Context (-.184) all have a smaller impact than both of the strategic factors. While strategic factors are relatively more important to state officials than structural concerns, it should be noted that both types of factors are important when it comes to how they perceive the quality of the working relationship with their EPA regional office.

CONCLUSIONS

The findings of this study concerning the responses of state officials yield several interesting implications for both the Superfund program, as well as the larger context of environmental policy. The first is that from the perspective of state officials, there is room for improvement in the EPA-State relationship. Overall, state officials found a moderate level of cooperation in their relationships with regional management personnel. Many expressed a desire for a more cooperative relationship with their regional counterparts. According to one official, “[We should] increase partnering [and engage in] joint implementation, relying on each other’s strengths.” Another official added, “We should interact on a more frequent basis, share information, collaborate and assist one another.” Not only did state officials express a desire to improve the relationship, but also offered some suggestions that could bring about an enhanced mutual understanding between the parties. One state official offered, “States should receive credit (and EPA as well) for all Superfund related activities. Currently, only NPL listed sites ‘count’ for anything, even though EPA monies help support state superfund and voluntary cleanup programs.” This idea has the potential to increase the policy learning taking place in the EPA-State relationship, as well as bolster the public perception of Superfund program successes. This would benefit both sets of actors in the relationship.

Another significant finding is the importance of strategic factors in explaining the level of cooperation. Both Trust and Involvement were significant and relatively important explanations for the differing levels of Cooperation perceived by state Superfund officials. While increased levels of both are important to more cooperative relationships, state officials identified some important barriers to increasing positive perceptions of these concepts. With respect to Trust, state officials expressed concern about the role of RPMs at specific sites. They raised issues of competence and reliability with respect to the actions of these project managers. As for Involvement, state officials took issue with the level of EPA oversight of their activities at NPL sites. In particular, state officials felt regional oversight was not commensurate with their capabilities; focused too much on counting activities at NPL sites, while ignoring progress at non-NPL sites; and emphasized process over results.

Both Trust and Involvement are strategic factors that are considered to be more dynamic and manipulable than the other elements in the Model of Cooperative Working Relationships. This suggests the nature of working relationship (e.g., degree of cooperation) is fluid and not determined solely by the perceptions of structural factors. So, good relationships may not always remain this way and bad (e.g., uncooperative) ones can improve. These interpersonal characteristics are an integral part of the contact between EPA region and state agency officials. All of this leads to the conclusion that the manner in which EPA and state officials interact with one another will go a long way in producing a cooperative (or uncooperative) working relationship.

All of this does not suggest structural variables are unimportant. On the contrary, perceptions of State Program Capacity and overall political support also play an

important role in the degree of Cooperation state officials perceive in their working relationship with EPA region officials. Officials who reported strong program capacity were very likely to view their programs as being equal to or better than their regional counterparts. In fact, some felt this was the basis for their excellent working relationship with their regional office.

While the variable measuring State Program Capacity works as expected, National and State Political Context do not. The findings concerning both levels of Political Context suggest that state officials view political support as an important program resource. Those officials who feel they have support at the national and state levels are less likely to seek out programmatic support from their regional counterparts. However, state officials will increase their degree of cooperation if they feel overall political support beginning to fail. This means the theory of picket-fence federalism, which suggests bureaucrats of like professional training will tend to hang together because of the similarities they share due to this training, does not necessarily hold true in all circumstances (see Peterson et al. 1986 for a more detailed discussion of this “type” of federalism). What this finding emphasizes is the notion that cooperative working relationships are works in progress. One cannot simply rely on similar background and training as the sole reason for cooperation, but must use it as a stepping stone to building solid interpersonal relationships.

It is important to note that two of the three structural variables that demonstrated a statistically significant influence on perceived cooperation are at the state-level.¹⁵ This is not surprising considering that the EPA regional offices and state agencies deal mostly with state political, environmental, and organizational (program) capacity issues.

Superfund does not have nearly the transboundary issues facing other environmental programs like air quality and water quality (especially surface water) programs. The NPL sites are much more of a “localized” problem. And as discussed earlier, “devolution” of responsibility to state programs is still a much debated decision. Since the criteria are not agreed upon, these decisions about lead agency status are debated on a site-by-site basis. This debate is still very much a fabric of the current EPA-State working relationships.

The implications of these findings reach beyond the Superfund program. EPA and the States have been involved in a joint effort to improve EPA-State relationships and the level of effectiveness of environmental policy since 1995. It was in that year that the National Environmental Performance Partnership System (NEPPS) was launched. One of its main tenets was the concept of differential oversight. Simply stated, states with higher levels of program capacity would gain more implementation responsibility, while at the same time receiving reduced oversight from their federal overseers. The findings of this study suggest the utility of linking program capacity to lessened oversight. Higher levels of Trust, Involvement, and State Program Capacity are all associated with more cooperative working relationships. Thus, if the concept of differential oversight is properly utilized it can produce the desired effect of higher quality EPA-State relationships, which in turn have the potential to produce more effective implementation of environmental programs.

ENDNOTES FOR CHAPTER 4

1. These support activities include: site investigation (46 states), CERCLA match (44 states), studies and designs (44 states), operations and maintenance (44 states), and program administration (44 states).
2. However, these funds can face restrictions in terms of size and use (see ELI 1998, 21-23, 25 for further discussion).
3. This information was taken from cleanup figures provided by ELI (1998). This information pertains only to state enforcement program cleanups and does not include cleanups being lead by state voluntary cleanup programs.
4. Probst et al. (2001, 95) report similar findings in terms of state officials' perceptions of their financial ability to cleanup sites potentially eligible for the NPL.
5. However, just over twenty percent were dissatisfied with their program's overall effectiveness. This is the second highest level of dissatisfaction (second to availability of financial resources) reported in this set of items.
6. Bean-counting refers to the counting of outputs such as the number of RODs completed in a year as a way to measure the success or effectiveness of a program activity.
7. Remedial Project Managers (RPMs) are regional officials in charge of remedial cleanup on site at NPL sites. They directly manage cleanup activities at specific sites.
8. The norms or rules for Cooperation mentioned in Chapter Two include: Fairness, Limits on Opportunistic Behavior, Inclusiveness, and Mutual Development.
9. The group boundaries (Low/Moderately Cooperative = 0-20; Highly Cooperative = 21-28) were chosen because a score of 21 on the seven-item index equates with a respondent "agreeing" with all of the items on the index. Thus, it can be argued the Highly Cooperative respondent agrees with all of the statements/items on the Cooperation Index. Based on these group boundaries seventy-four state officials were categorized as Low/Moderately Cooperative and twenty-seven as Highly Cooperative.
10. Both State and National-level Political Context is defined as the level of political support state officials perceive from selected political actors.

11. Indices were created for the following measures: Trust, Involvement, State Program Capacity, Regional Office Program Capacity, State Political Context, Relationship with EPA Headquarters, and Nature of the Problem. National Political Context is operationalized as a dichotomous variable (items for this concept could not be scaled). See Appendix A for more detail on the development of these variables.

12. The Model Chi-Square is analogous to the F-test for linear regression.

13. In the analysis of State officials, National-level Political Context is coded as a dichotomous variable. State officials were coded as either perceiving a low level of political support (0) or a high level of political support (1) given their responses to a series of questions. See Appendix A for a more detailed look at how this variable was coded. The figure of 92 percent is arrived at in the following manner: The odds of being in the highly cooperative group are multiplied by the odds ratio (.080), which is .92 less than 1 ($1.000 - .080 = .92$).

14. The 43.1 percent figure is arrived at in the following manner: The odds of being in the Highly Cooperative group are multiplied by the odds ratio (.569), which is .431 less than 1 ($1.000 - .569 = .431$).

15. State officials also pay attention to the larger national political context (Tobin 1992). Many state officials made reference to the influence that Congress has in setting the agenda for EPA headquarters (and some felt) and regional offices with respect to oversight. Several officials also demonstrated a wider knowledge of the potential budgetary straits facing the program in the future (see Probst et al. 2001 for future funding issues facing the national Superfund program) and how this would impact their programs.

Chapter 5: The View from the Regions

INTRODUCTION

The previous chapter examined the perceptions of state officials involved in the implementation of the remedial cleanup efforts in the federal Superfund program. This chapter looks at the other part of the federal-state working relationship in this program. In this chapter, the perceptions of the Environmental Protection Agency's (EPA) regional office officials are analyzed. The chapter will begin by describing the jurisdiction, structure, and expenditures of the regional offices themselves. In addition to this, the chapter will discuss regional offices' role as "middleman" between EPA headquarters and state officials. Next, the chapter will look at the perceptions of regional office officials have concerning cooperation, as well as of the strategic and structural factors in the Model of Cooperative Working Relationships. Finally, there will be an analysis of what differentiates Low-Moderately Cooperative officials from Highly Cooperative officials.

A CLOSER LOOK AT REGIONAL OFFICES

Ten EPA regional offices serve the fifty states. They vary in their geographic ranges; number of states, and number of National Priority List (NPL) sites within their jurisdictions (see Table 5.1). The geographic differences range from Region 1's coverage of the New England states to Region 10 in the Pacific Northwest. While Region 2 covers only two states, Region 4 is responsible a total of eight. With respect to the Superfund,

the most important variation occurs in the number of NPL sites within a regional offices' jurisdiction. Five of the regions have responsibility for over 100 NPL sites. Region 5 is the only one of these with over 200 NPL sites (225). While Region 2 contains only two states, it contains 198 NPL sites. Region 7 and Region 8 contain the fewest NPL sites with 54 and 47 respectively.

Table 5.1. U.S. EPA Regions with Final NPL Sites.

Region 1: (96)		Region 4: (157)		Region 6: (84)		Region 9: (109)	
Connecticut	15	Alabama	13	Arkansas	12	Arizona	9
Maine	12	Florida	51	Louisiana	13	California	96
Massachusetts	30	Georgia	14	New Mexico	11	Hawaii	3
New Hampshire	18	Kentucky	14	Oklahoma	10	Nevada	1
Rhode Island	12	Mississippi	2	Texas	38		
Vermont	9	North Carolina	26			Region 10: (72)	
		South Carolina	25	Region 7: (54)		Alaska	7
Region 2: (198)		Tennessee	12	Iowa	12	Idaho	6
New Jersey	87			Kansas	10	Oregon	11
New York	111	Region 5: (225)		Missouri	22	Washington	48
		Illinois	39	Nebraska	10		
Region 3: (165)		Indiana	28				
Delaware	16	Michigan	67	Region 8: (47)			
Maryland	17	Minnesota	24	Colorado	15		
Pennsylvania	93	Ohio	29	Montana	13		
Virginia	30	Wisconsin	38	North Dakota	0		
West Virginia	9			South Dakota	2		
				Utah	15		
				Wyoming	2		

Source: <http://www.epa.gov> accessed on September 1, 2002.

EPA regional offices are still organized in divisions or offices to implement the Superfund program. However, efforts at reinventing government and the National Environmental Performance Partnership System (NEPPS) have begun to alter the structure and focus of these Superfund divisions. Reorganization efforts, which were begun in 1995 as part of reinventing government initiative of the Clinton administration, have resulted in the centralizing of enforcement activities, attempts at more holistic management, downsizing, and a more collaborative working style (Scheberle 1997, 161).

The Region One office has begun to take a more ecosystem-oriented focus with respect to addressing environmental problems. Region Seven has flattened its organizational structure in its Superfund division in hopes of being more responsive to state needs.¹ Superfund divisions in the regional offices have also recognized the need for a more collaborative management style with states. According to one regional official, there is a need for “more cooperative relationships on both sides.” Another discusses the increased focus on relationship building activities taking place at the regional offices. This official states, “We have worked very hard on communication issues but it is a continuous process. Communication and ‘soft’ skills are not a strength of most scientists and engineers [involved in the Superfund program].”

In the Role of the Middleman

The EPA regional offices form the all-important link between EPA headquarters and state Superfund programs. According to Scheberle (1997, 163), “Staff in regional offices are often placed in difficult implementation positions, because they simultaneously have to please both their fellow federal colleagues in the national office and their counterparts in state environmental programs.” According to Scheberle (1997, 164), regional officials are placed in the position of receiving new policy, rather than developing or initiating it. Headquarters personnel are charged with developing workable programs out of legislative mandates, while management in the regional offices is engaged in “system maintenance and program management and supervision” (Scheberle 1997, 164). Evidence of this can be seen in Table 5.2, which shows the distribution of full-time equivalent (FTE) in the EPA’s Superfund workforce over a variety of programmatic tasks. Workforce at the regional level form the vast majority of FTEs in

such areas as site technical, site enforcement, management, and information and record keeping. As one might expect, headquarters has almost a four to one advantage in terms of personnel in the area of policy development.

Table 5.2. FY 1999 Distribution of EPA Superfund Workforce (Number of FTE)

	Regions	Headquarters	Total
Site technical	1,020.7	45.4	1,066.1
Site enforcement	501.6	107.1	608.7
Policy development	39.1	164.3	203.5
Contracts and grants	173.2	91.4	264.6
Information and records management	128.7	32.7	161.4
Accounting, budget, and financial services	87.0	74.5	161.4
Human resources	29.7	10.6	40.3
Facilities operation	27.3	5.6	32.9
Secretaries, clerks, and administrative	155.2	33.8	189.0
Management (supervisors only)	186.3	60.8	247.1
Total	2,348.7	626.2	2,974.9

Source: Probst et al. (2001, 120)

While regional staff receives program directives from above, they also function as the primary contacts for state agency officials. With respect to the federal Superfund program, regional officials are charged with administering the funding of state programs through federal-state cooperative agreements (CAs). While regional officials have some discretion in terms of allocating between program activities, they are limited in terms of significantly increasing the amount they can give to states.² As can be seen in Table 5.2, regional officials are also responsible for communicating and clarifying EPA requirements, as well as providing the necessary technical guidance for state agencies. Superfund regional officials also make decisions concerning the capacity of state programs to take on enhanced responsibility at NPL sites. Unlike some other environmental programs, regional offices usually take on some direct implementation responsibility at NPL sites. Thus, EPA regional officials function as both overseers of state performance and potential implementation partners at NPL sites.

Given their position between EPA headquarters and state Superfund programs, regional offices are subject to both national- and state-level political pressures (Barnett 1994; Pressman and Wildavsky 1973). As part of the EPA, regional offices are viewed by headquarters as being their administrative functionaries. Congress holds headquarters accountable and, in turn, headquarters holds regions accountable. They are to implement the program as headquarters designs it. However, there have been many instances of regional variation in the implementation of the Superfund program (Barnett 1994; Church and Nakamura 1993; GAO 1997a; Markell 1993). The response of EPA headquarters has been to attempt to clamp down on this regional variation and get more uniformity in the implementation of the Superfund program (Hird 1994).

Viewed from perspective of the states, this variation in implementation is a necessary adaptation to the different conditions regional offices encounter at the state level (GAO 2000a). There is a great deal of variation in the number of NPL sites in each state, as well as the quality of state programs. Given the high level of involvement states are guaranteed in the Superfund program (e.g., match funding requirements, NPL veto of state governors), regional officials can also become enmeshed in the politics of particular states, which can add to the variation (Pressman and Wildavsky 1973). Several regional officials commented on the need to limit the powers of governors and the constraints imposed on state agencies by their own legislatures. One regional official commented on the overall impact of this political influence on regional-state interaction, "State agencies are often subject to political pressure which makes their responses on specific sites very unpredictable." Thus, while political pressure from above is for uniformity, the State-

level Political Context discourages uniformity. It is indeed a precarious position for the EPA regional official in the scheme of environmental federalism.

Perceptions of EPA Headquarters’ Role in the Superfund Program

Thus far the discussion has focused on the position of regional offices with respect to the states and EPA headquarters. It is also important to examine how the regional officials perceive the role of headquarters compared to their administration of the program.³ Table 5.3 reports the responses of regional officials concerning their perceptions of headquarters officials.

Table 5.3. Regional Officials’ Perceptions of EPA Headquarters’ Role

	% Agree	% Disagree	Mean Score (Std. Dev)	N
Region Office more sensitive to State perspective than EPA HQ	71.4	8.2	2.78 (0.798)	49
Regional Office more committed to the implementation of the program than EPA HQ	93.9	0.0	3.33 (0.591)	49
EPA HQ are not primary source of policy innovation	51.0	16.3	2.51 (0.960)	49
EPA HQ not effectively communicate policy guidance	10.2	70.8	1.29 (0.874)	48
EPA HQ not provide adequate technical support	6.1	61.2	1.37 (0.727)	49

Note: 0 = Strongly Disagree (SD) to 4 = Strongly Agree (SA)
Number in parentheses is standard deviation

Regional office officials show a very high level of agreement concerning their role in the Superfund program compared to their headquarters counterparts. An overwhelming ninety-four percent of regional officials feel they are just as or more committed to the implementation of the Superfund program than EPA headquarters staff.

Regional officials also believe they are more sensitive to the perspective of state officials than headquarters staff. Just over seventy-one percent of regional officials expressed this sentiment. In addition to this, fifty-one percent of regional officials do not consider headquarters to be the primary source of policy innovation in the program. However,

regional officials do express a more positive view of headquarters' ability to communicate policy guidance and provide adequate technical support to both regional and state officials.

LEVELS OF COOPERATION AMONG REGIONAL OFFICIALS

Again, the purpose of this study is to examine the level of cooperation perceived by those within the EPA-State working relationship in the Superfund program and the factors that explain it. While the perceptions of state officials were analyzed in Chapter Four, the discussion in this chapter focuses on regional office officials. Table 5.4 shows the responses of these officials to questionnaire items used to measure cooperation.

Table 5.4. Regional Office Officials' Perceptions of Cooperation within the EPA-State Working Relationship

	% Agree	% Disagree	Mean Score	N
EPA is accountable	77.1	10.4	2.87 (1.003)	48
EPA seeks meaningful input	74.5	6.4	2.94 (0.870)	47
EPA acts as full partner	77.1	12.5	2.85 (1.031)	48
EPA fairly assesses State readiness	77.1	4.2	3.00 (0.799)	48
EPA does not use authority to take advantage of States	83.7	6.1	3.16 (0.921)	49
EPA-State relationship fosters mutual understanding	79.6	8.2	2.98 (0.924)	49
EPA-State relationship integrates all parties interests	77.5	4.1	2.98 (0.854)	49
EPA-State relationship is flexible	85.7	6.1	2.90 (0.653)	49

Note: 0 = SD to 4 = SA
Number in parentheses is standard deviation

Overall, it is very easy to see that regional officials feel their overall relationship with states is very cooperative.⁴ The lowest level of agreement with any item is seventy-four percent. Many officials characterized the relationship as “very healthy” and having “very little friction” between EPA and the states. However, there are those officials who

express a need to continue to develop a more cooperative relationship. One official stated, “[There needs to be] more cooperative relationships on both sides.” While some regional officials suggest there is a need for improvement on both sides, others feel it is the states that must improve. In this vein, a regional official comments, “[The relationship needs to be] less confrontational. They [states] sometimes seem to have a chip on their shoulders, making it difficult to reach an agreement everyone can live with.”

Another official is even more specific in his assessment of the problem, “[It is] great to work with staff, state managers are a pain [due to their anti-EPA behavior] to work with.”

Given the formal powers of the EPA regional office in terms of making decisions regarding state responsibility at NPL sites, there exists a potential for regional officials to abuse this power at the cost of the states (see Chapter Three for a more detailed discussion of this interaction). A vast majority of regional officials feel they are accountable to states (seventy-seven percent) and do not use their authority at NPL sites to take advantage of state agencies (eighty-three percent).

Regional officials also perceive the EPA-State relationship to be oriented towards mutual developing the abilities of both parties. Over three-quarters of regional officials believe their working relationship with states fosters a mutual understanding (seventy-nine percent) and integrates all of interests of relevant parties (seventy-seven percent). While most regional officials hold a very positive view of level of mutual development in the EPA-State relationship, one official expresses some doubt about this and a possible solution to enhance the “mutuality” of the relationship. This official states, “I wish we both had the same targets. In other words, at the federal level, all we care about is our work at NPL sites. We can’t care or trade [on] what the states accomplish. The real goal

should be cleaning sites...period.” Given the amount of federal dollars spent in state programs, this official would like it “if the regions could take [partial] credit for the work done by the states, then they [regions] would be more supportive and responsive to the state’s Superfund programs.”

Regional officials also report a very inclusive and fair relationship with their state counterparts. With respect to inclusiveness, regional officials believe they seek meaningful input (seventy-four percent) and that there is sufficient flexibility in the relationship (eighty-five percent). As a matter of fact, one regional official who felt there was a need to enhance the flexibility of the relationship suggested that the limits on flexibility came from external political influences not from regional offices. Seventy-seven percent of regional officials feel they fairly assess state readiness to take on added responsibility at NPL sites, as well include states as full partners in the making of important decisions. They stressed the need to “continue to increase the partnership with the states.” One regional official went as far as to say, “[One of our regional priorities should be to] promote a strong feeling of cooperation and establish a partnership among federal, state, and local agencies.”

Defining Levels of Cooperation

These questionnaire items were used to construct an index to measure the underlying concept of cooperation. As in Chapter Four, unidimensional scaling techniques were used to produce a Cooperation Index that contains seven-items.⁵ Table 5.5 provides a more detailed examination of this index. The scores of regional office officials range from four to twenty-eight with higher scores indicating a more cooperative relationship. The mean index score for respondents is 20.46, which suggests a fairly high

level of cooperation is perceived to exist in the EPA-State working relationship. The index has a Cronbach's Alpha of 0.82. This indicates a consistent set of responses to these items among regional office officials.

Table 5.5. Regional Office Officials' Responses to the Cooperation Index

Number of Items	7
Minimum	4
Maximum	28
Mean	20.46
Standard Deviation	4.24
Cronbach's Alpha	0.82

N = 46

In order to examine the levels of cooperation that regional office officials perceive in the EPA-State working relationship, respondents were divided into two groups based on their scores on the Cooperation Index.⁶ The rest of the chapter focuses on what distinguishes Low-Moderately Cooperative regional officials from Highly Cooperative ones. The next section of this chapter looks at the perceptions of these two sets of regional officials concerning both the strategic and structural factors that make up the Model of Cooperative Working Relationships. Do these different sets of officials possess different perceptions of the levels of Trust and the 'right' kind of Involvement? Do they differ with respect to their views of Program Capacity, Political Context, and the nature of the Superfund program (Nature of the Problem)? The following section of the chapter examines the dynamic interplay of each of these factors in explaining what makes a Highly Cooperative regional official different from a Low-Moderately Cooperative one.

PERCEPTIONS OF REGIONAL OFFICE OFFICIALS

Strategic Factors

The Model of Cooperative Working Relationships developed in Chapter Two examines the impact of both strategic and structural factors on the level of cooperation

perceived by regional office officials in the Superfund program. The variables of Trust and Involvement are considered to be strategic in nature. They are more open to direct influence of those in the EPA-State working relationship than are structural factors. The following analysis focuses on regional office officials' perceptions of these two important variables.⁷

According to the findings in Table 5.6, Highly Cooperative regional officials perceive more Trust in their working relationship with states than do Low-Moderately Cooperative officials. There is a significant difference between the two groups with respect to the issues of reliability, openness, concern, and competence. While Highly Cooperative regional officials find themselves to be more reliable in the application of federal standards than Low-Moderately Cooperative officials, some regional officials point out the need for variation as a strategy for adapting to unique conditions. According to one official, "Variable site conditions, PRPs, community concerns, and politics make life unpredictable" and create the need to be flexible in applying federal standards to NPL sites. Both groups of regional officials express doubt about the ability of their state counterparts to consistently apply their own cleanup standards. Many regional officials see states as applying different cleanup standards at different types of sites (e.g., voluntary cleanup program, brownfields, and NPL sites). One regional official noted, "I would [like to see them be] more consistent in requiring the same level of cleanup at state sites as they do at NPL sites."

Table 5.6. Perceptions of Trust among Low-Moderately Cooperative and Highly Cooperative Regional Office Officials

	Low-Moderate	High
States consistently apply own cleanup standards	1.42 (0.769)	1.48 (1.156)
EPA more interested in cleaning sites than enforcing regulations	3.26 (0.562)	3.81* (0.396)
EPA committed to developing State programs	2.58 (0.902)	3.26* (0.764)
EPA exercises good judgment in decision making	3.21 (0.631)	3.78* (0.424)
EPA clearly communicates guidance	2.58 (0.838)	3.15* (0.818)
EPA encourages open dialogue	2.89 (0.567)	3.59* (0.501)
EPA possesses high degree of expertise	3.42 (0.507)	3.70 (0.465)
EPA apply federal requirements in predictable manner	2.95 (0.524)	3.41* (0.501)

N = 48 to 49

Note: 0 = SD to 4 = SA

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

Highly Cooperative regional officials also perceive their working relationship with states to be more open with respect to communicating guidance and encouraging dialogue. While this perception of good communication is widespread among regional officials, they also express a need to keep improving in this area. One regional official, they would like to see, “a more open and interactive relationship where all agendas are ‘on the table.’” Others would like to encourage a more ‘informal’ dialogue with their state counterparts in order to improve the quality of the EPA-State working relationship.

There are also significant differences between the two groups on the issues of concern and competence. Highly Cooperative regional officials were more likely than their Low-Moderately Cooperative counterparts to believe they are more interested in cleaning up sites than simply enforcing federal regulations and more committed to the development of state programs. One official noted the need to change the perception

among state officials that “EPA doesn’t care about or respect their [state] programs.”

While Highly Cooperative officials are also more likely to feel they exercise good judgment in the Superfund decision-making process, both groups of officials believe they bring a high level of expertise to the process. However, there is a concern that the states may lack this level of competence. One regional official suggested one of the reasons states may lack in this area is due to their inability to retain good employees. The consequences of this include the inability of a state to review and provide comments on technical documents concerning cleanups at NPL sites.

The other strategic factor in the Model of Cooperative Working Relationships is Involvement. The perceptions of regional officials concerning programmatic roles and issues of decentralization are reported in Table 5.7. The findings in this table show that there is a significant difference between Highly and Low-Moderately Cooperative regional officials on both of these issues. Highly Cooperative regional officials are more likely to grant enhanced responsibility to states at NPL sites. One regional official commented on the need for EPA to “work ‘much’ more in concert with states in arriving at [remedial] solutions” as opposed to “the states slowing the process by questioning every single proposal.” Given the current structure of lead agency/subordinate agency, granting states more authority at NPL sites could improve EPA-State relations by allowing regional and state officials to work as partners instead of competing in such areas as remedy selection.⁸ However, some regional officials feel the whole issue of decentralization is one-sided and relations would be improved by splitting up sites. With respect to this line of argument, one official commented, “States want a role in the federal

program, they want EPA funding, but they don't want us involved with their programs.

There is enough work for EPA and the states, let's split up the sites and move forward.”

Table 5.7. Perceptions of Involvement among Low-Moderately Cooperative and Highly Cooperative Regional Office Officials

	Low-Moderate	High
Clear division of responsibility	2.79 (0.787)	3.22 (0.801)
EPA willing to grant enhanced responsibility at NPL sites	2.47 (1.073)	3.19* (0.879)
States should have increased role in selecting remedy at NPL sites	2.26 (1.046)	2.59 (1.185)
States should be more involved in project planning	2.61 (0.698)	2.22 (1.013)
EPA oversight commensurate with State's capacity	1.84 (1.015)	2.63* (1.079)
EPA's primary role at State-lead sites should be more than simply providing resources	2.63 (0.831)	2.78 (1.155)

N = 46 to 48

Note: 0 = SD to 4 = SA

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

There seems to be a concurrence among regional officials their role should be more than simply providing resources to state agencies and that the EPA-State relationship is characterized by a clear division of responsibility. Even when states are the lead agency at sites, regional officials feel they have more to contribute than simply providing resources. One official suggests relations with state agencies would be improved by “getting states to work more cooperatively with EPA rather than viewing us primarily as a source of funding.” While the majority of regional officials feel there is a clear set of responsibilities for state and regional officials, there are some officials that suggest otherwise. At least one regional official expressed the opinion that not only does overlap of responsibility exist, but also it is a positive thing. Still others feel there is overlap, but consider this a problem that must be overcome.

Highly and Low-Moderately Cooperative regional officials do disagree on the level of oversight applied to state programs. Highly Cooperative officials are more likely to view their level of oversight as commensurate with a state's program capacity. The idea of reducing oversight for stronger, more capable state programs is one of the main principles of the National Environmental Performance Partnership System (NEPPS). This reduction in oversight is used to promote better relations between the EPA and states, as well as an incentive for stronger programs to take the lead at NPL sites. According to one official, the working relationship with state agencies could be improved by, "Reduce[ing] the amount of oversight by the agency that does not have the lead at the site (e.g., for state-lead sites reduce EPA involvement)."

Structural Factors

In addition to these strategic factors, the Model of Cooperative Working Relationships also examines the impact of different structural factors on the level of cooperation perceived by EPA regional office officials in their interactions with state officials. The first of these is the role of EPA headquarters in the Superfund program. The perceptions of regional officials concerning EPA headquarters in terms of their relations to the states, policy innovation and leadership, and resource provision are reported in Table 5.8. Highly and Low-Moderately Cooperative regional officials report similar perceptions of EPA headquarters' role in the Superfund program. Both sets of regional officials see themselves as being more sensitive to the state perspectives than headquarters. This supports the notion of regional offices acting as middleman or buffer between headquarters and the states. They also see themselves as more committed to the program than headquarters. While regional officials tend to view policy innovation as

being more equally divided among the actors in the program, they do feel that headquarters does a good job of communicating its policy guidance. However, Highly Cooperative officials are more likely to view headquarters as providing adequate technical support concerning complex administrative and cleanup issues than Low-Moderately Cooperative officials.⁹

Table 5.8. Perceptions of the EPA Headquarters' Role among Low-Moderately Cooperative and Highly Cooperative Region Office Officials

	Low-Moderate	High
Regional Office more sensitive to State perspective than EPA HQ	2.68 (0.749)	2.81 (0.879)
Regional Office more committed to the implementation of the program than EPA HQ	3.16 (0.501)	3.44 (0.577)
EPA HQ are not primary source of policy innovation	2.21 (0.787)	2.70 (1.068)
EPA HQ not effectively communicate policy guidance	1.56 (0.705)	1.22 (0.934)
EPA HQ not provide adequate technical support	1.63 (0.761)	1.19* (0.622)

N = 48 to 49

Note: 0 = SD to 4 = SA

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

Another important structural factor that impacts the level of cooperation in the EPA-State working relationship is Program Capacity. The perceptions of regional office officials concerning state agency capacity, as well as their own, is presented in Table 5.9.

A brief look at the table shows that there is no significant disagreement between Highly and Low-Moderately Cooperative officials. Another pattern that arises is the generally low standing with which regional officials regard states' capacity. With the exceptions of state agency commitment and stringency of cleanup standards, regional officials do not view state capability, commitment, and outcomes in a very positive manner.

Table 5.9. Perceptions of Program Capacity among Low-Moderately Cooperative and Highly Cooperative Region Office Officials

	Low-Moderate	High
State Agency Program Capacity		
Statutory authority to enforce cleanups	1.74 (0.933)	1.70 (1.068)
Staff's training	2.26 (0.872)	2.33 (0.877)
Financial resources	1.16 (0.834)	1.41 (1.083)
Cleanup standards	2.58 (0.692)	2.63 (0.884)
Staff's commitment to program	2.74 (0.806)	2.74 (0.813)
Willingness to take on enhanced leadership at NPL sites	2.26 (0.733)	2.33 (0.877)
Track record of performance	1.74 (0.872)	1.59 (0.931)
Overall effectiveness	2.16 (0.688)	2.15 (0.949)
Region Office Program Capacity		
Program funding	1.63 (0.955)	1.70 (1.031)
Cleanup standards	2.89 (0.459)	3.15 (0.456)
Staff's commitment to the program	3.21 (0.419)	3.74* (0.447)
Staff's level of effort	3.16 (0.375)	3.59* (0.501)
Track record of performance	3.21 (0.535)	3.48 (0.509)

N = 48 to 49

Note: 0 = Very Dissatisfied (VD) to 4 = Very Satisfied (VS)

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

On the whole regional officials express concern about the stringency of statutory authority, staff expertise, and availability of financial resources. One official commented on the continual “reinterpretation” of state laws, which makes their strength an open question. Regional officials also feel states have a limited ability to enforce these standards in the face of recalcitrant PRPs. Several more regional officials pointed out the need for state agencies to improve their expertise in such areas as toxicology. The financial condition of most state programs is also a concern for regional officials. Many

feel a state's ability to cleanup sites, take on more responsibility at sites, and take part in EPA training sessions is limited by a lack of financial resources. Another comment in this vein concerns how states choose to apply their limited resources (personnel and financial). A regional official stated, "I wish states would dedicate more human resources as well as financial, attention to the federal Superfund program."

The perception of regional officials that states have a rather limited capacity carries over to their views about overall state commitment to Superfund, as well as the results states produce. Even states with the reputation of strong capability and commitment have succumbed. According to one official:

[This state's] program is supposedly very sophisticated and successful, but has been so poorly staffed and funded over the past [several] years or so, that it's really in shambles. Taking over additional Superfund responsibilities is the last thing on their minds. They've been looking to unload sites they've held for years.

Thus, many regional officials feel states are more willing to focus on sites that are "easier" to cleanup (e.g., voluntary cleanup sites) than they are to maintain their commitment to the more difficult NPL sites. The combination of these views concerning state capability and commitment create doubt among regional officials concerning both past performance and overall effectiveness in the cleanup of Superfund sites.

Both sets of regional officials have similar view of their own program capacity concerning the issues of capability and program results, while they differ with respect to the level of commitment. Regional officials expressed concern about the funding the Superfund program receives. Several made note of the Resources for the Future study (Probst et al. 2001), which suggests the program will be facing a shortfall in funding in the coming years. They also shared the perception that national cleanup standards are

sufficiently stringent to protect the public’s health and the environment. However, Highly and Low-Moderately Cooperative officials differed on their perceived level of commitment to the Superfund program. While both sets of officials perceived their level of both commitment and effort to be strong, Highly Cooperative officials perceived their overall commitment to be higher than did Low-Moderately Cooperative officials.

As one regional official commented, “[There needs to be a] better understanding of the political pressure being applied when making a decision.” This can be applied to not only both regional and state officials, but also to both State- and National-level Political Context. Given their position as middleman between headquarters and state agencies, regional offices are subject to political influence at both levels. The findings for regional officials concerning their views of state- and national-level political support are presented in Table 5.10.

Table 5.10. Perceptions of Support in State and National Political Contexts among Low-Moderately Cooperative and Highly Cooperative Region Office Officials

	Low-Moderate	High
State-Level Political Context		
State Legislature	2.39 (0.698)	2.23 (0.815)
State Citizenry	2.50 (0.707)	3.08* (0.628)
Local Government Officials	2.63 (0.684)	2.77 (0.815)
Environmental Interest Groups at the State Level	2.68 (0.671)	3.19* (0.567)
National-Level Political Context		
Congress	2.06 (0.873)	2.23 (0.863)
President	2.00 (0.745)	2.12 (0.588)
Environmental Interest Groups at the National Level	2.21 (0.713)	2.69* (0.618)
Federal Courts	2.63 (0.684)	2.88 (0.711)
General Public	2.89 (0.323)	3.12 (0.516)

N = 47 to 48

Note: 0 = Strongly Unsupportive (SU) to 4 = Strongly Supportive (SS)

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

Generally speaking, Highly Cooperative regional officials had a more positive view of the support state political actors give to the Superfund program. This is especially true concerning both a state's populace and environmental interest groups active at this level. However, both sets of regional officials expressed concern about the limitations placed on state agencies by their own legislatures. A regional official summed up this sentiment in the following manner, "[There needs to be] more financial support to state agencies from state legislatures." As discussed above, this lack of financial support can have repercussions for State Program Capacity. In addition to what many regional officials see as a rather limited "baseline" of funding, states are also limited with respect to training and travel expenditures. This has the consequence of limiting the access of state officials to EPA training sessions and other capacity building activities.

Regional officials tend to share a similar perception of the support the Superfund program receives from national-level political actors. The two groups of officials only disagree with respect to the level of support they perceive from environmental interest groups operating at the national level. Highly Cooperative officials perceive a higher level of support than do their Low-Moderately Cooperative counterparts. Generally speaking, though, regional officials report a high level of support from the general public. This differs markedly from their shared perspective concerning both the Congress and president. Regional officials feel they only receive a moderate level of political support from these two important political actors. There are several explanations for this. One is that regional officials (and EPA headquarters as well) feel that Congress and the president have not been actively pursuing a remedy for the impending budgetary

shortfalls the program will face in the coming years (see Probst et al. 2001 for a more detailed discussion of this situation). Congress has failed to push for any kind of reauthorization concerning the main funding mechanism, the Hazardous Substance Trust Fund, and this has place the program in jeopardy. Secondly, both the president and Congress act as overseers of EPA activities. By applying pressure to EPA headquarters, regional officials feel squeezed to produce “beans” to prove both the regional and state programs are properly enforcing the program. Hence, the political climate is seen as more interference than support.

The final structural factor included in the Model of Cooperative Working Relationships is the Nature of the Problem. This factor examines the perceptions of Superfund officials concerning the environmental, technical, and regulatory aspects of the Superfund program. The perceptions of both groups of regional officials are presented in Table 5.11. Overall, regional officials share similar perceptions of the programs environmental and regulatory aspects, while showing some difference on technical issues.

Table 5.11. Perceptions of the Superfund Program among Low-Moderately Cooperative and Highly Cooperative Region Office Officials

	Low-Moderate	High
Abandoned hazardous waste sites are a serious threat	3.06 (0.873)	3.19 (1.075)
NPL accurately represents the seriousness of the problem	2.17 (0.786)	2.30 (1.068)
Greater acceptance of containment remedies weakens program effectiveness	1.61 (0.698)	1.85 (1.099)
Greater willingness to consider future industrial use of site endangers environment and public health	1.33 (0.594)	0.70* (0.775)
Strong liability scheme necessary to enforce cleanups	2.89 (0.758)	3.19 (0.834)
Responsible parties should be made to bear costs and risks of cleanup	3.28 (0.752)	3.22 (0.892)

N = 48

Note: 0 = SD to 4 = SA

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at p < .05

Both groups of officials share beliefs about the environmental issues addressed by the program. They both indicate a high level of agreement concerning the danger posed by abandoned hazardous waste sites. Regional officials only show a moderate level of support for the notion that the NPL is an accurate representation of the problem. The NPL is supposed to be a listing of the most dangerous hazardous waste sites in the nation, but there are several reasons for officials to doubt its validity. One of these is the ability of a state to designate a site to the NPL regardless of its HRS score. State governors can also block the listing of a site on the NPL (Probst et al. 2001). Another reason is the backlog of sites that could potentially make the NPL, but are still awaiting decision. It is not that these sites are not considered risks to human health and the environment, but they have either not been processed or states and regional offices disagree about who has jurisdiction (GAO 1999a; 1999c).

Highly and Low-Moderately Cooperative regional officials tend to agree concerning regulatory approaches, but not so much on the technical aspects of the program. Both groups of officials support the use of a strong liability scheme to enforce cleanups and recover costs from PRPs. They also agree that PRPs should be made to bear as much of the costs and risks of cleanup as possible. However, Highly Cooperative regional officials are much less likely to believe that cleanup standards based on future commercial purposes will pose a long-term threat to either public health or the environment than their Low-Moderately Cooperative counterparts.

EXAMINING THE MODEL IN A DYNAMIC SETTING

The previous section examined the relationship between the levels of cooperation and each of the factors in the Model of Cooperative Working Relationships. This section

will investigate the dynamic interplay of these factors with one another, as well as their impact on the level of cooperation perceived by regional office officials. As in Chapter Four, unidimensional scaling techniques are used to create the measures used in the multivariate analysis of the Model.¹⁰ Logistic regression is applied to these constructed measures in order to determine which of them differentiate Highly Cooperative regional officials from Low-Moderately Cooperative regional officials. The findings of this analysis are presented in Table 5.12.

Table 5.12. Logistic Regression Estimates for EPA Regional Office Officials

Variables	Unstd LR Coeff (b)	Std LR Coeff	Std Error of b	Sig.	Exp(B)
Trust	.982	.395	.474	.038	2.669
Involvement	-.142	-.054	.335	.671	.867
Relationship with EPA HQ	-.033	-.002	1.822	.986	.968
State Capacity	-.473	-.291	.271	.081	.623
Regional Capacity	.672	.161	.684	.326	1.958
State Political Context	1.378	.422	.670	.040	3.967
National Political Context	.216	.068	.395	.585	1.241
Nature of the Problem	2.039	.140	1.744	.242	7.684

N = 42

-2LL: 22.15

Model Chi-Square: 33.67 (.000)

Goodness of Fit: 3.78 (.876)

Cox & Snell R-Square: .551

Nagelkerke: .750

An examination of the measures of model adequacy in Table 5.12 suggests the model provides a statistically significant explanation of the level of cooperation for EPA regional officials. The Model Chi-Square is significant, while the Goodness of Fit measure, which measures how poorly the model fits the data, is not significant (see the presentation of the logistic regression estimates for state officials in Chapter Four for a more detailed discussion on the interpretation of these and other measures related to the interpretation of logistic regression). Both the Cox & Snell and Nagelkerke statistics, which are “pseudo” r-square measures, suggest the model provides a moderate to strong

explanation of the level of cooperation (High or Low-Moderate) for EPA regional office officials.

According to Table 5.12, both strategic and structural factors have a significant impact on whether a regional official is a member of the Highly Cooperative group or not. Trust is the strategic variable. It exhibits a positive influence on the level of cooperation expressed by regional officials. A one-unit increase in the Trust measure increases the likelihood of a regional respondent being in the Highly Cooperative group by over 2.5 times (2.669).

Both of the structural variables that provide a statistically significant explanation are state-level variables. Though State Program Capacity and State Political Context differentiate between levels of cooperation, they do so in opposite ways. A one-unit increase in the State Political Context measure indicates a regional respondent is almost four times (3.967) as likely to be a member of the Highly Cooperative group. On the other hand, a one-unit increase on the measure of State Program Capacity makes a respondent thirty-seven percent less likely to be in the Highly Cooperative group.

Regional office officials who have a more positive view of the support provided to the Superfund program by state-level political actors are more likely to be cooperative with their state counterparts. The finding concerning State Program Capacity runs counter to expectations. However, there are several possible explanations for this. First, regional officials may view a state program as having the capacity to take on added responsibility, but still have concerns about granting it more authority. This can create a more hostile atmosphere as a state requests, but does not receive added responsibility. It creates an environment characterized by competition and “going it alone” (see GAO

1997a). Second, regional officials may judge a state to have strong program capacity and because of this increase their expectations concerning the program's continuing capabilities, commitment, and the results they produce. When a state does not meet these expectations or starts to diminish the resources expended at (financial and personnel) and commitments to NPL sites, regional officials can react in a less cooperative manner.¹¹ This situation could arise where states are diminishing their overall effort or simply shifting their emphasis to non-NPL sites where they have almost sole responsibility for cleanup. Whatever, the reason a diminishing effort at NPL sites can make a regional office official less cooperative.

A look at the standardized logistic regression coefficients reveals the relative strength of influence each of the independent variables has on the level of cooperation. State Political Context (.422) demonstrates the strongest impact on the level of cooperation compared to the other variables in the model. Trust (.395), the only strategic variable that is significant, has a comparable level of influence. State Program Capacity (-.291) shows the least impact of these three significant variables. This supports the contention that both strategic and structural variables play an important role in explaining the level of cooperation regional officials perceive in their working relationships with their state counterparts.¹²

CONCLUSION

The findings of this study concerning the responses of regional office officials offer several interesting insights with respect to intergovernmental relations in the Superfund program. First, regional office officials have a very positive view of the quality of the EPA-State working relationship. Overall, regional officials perceive a high

level of cooperation in their relationship with state management personnel. Regional officials reported a more cooperative relationship than did state respondents (20.46 to 16.81, respectively).¹³ Typical responses from regional officials are that the EPA-State relationship is “very healthy” and has “very little friction.” However, they also expressed a continual need to improve, “[There needs to be] more cooperative relationships on both sides.”

Another interesting finding is the balance of strategic and structural factors in differentiating among regional office respondents with respect to the levels of cooperation. Trust, State Program Capacity, and State Political Context have significant impacts in explaining membership in the different levels of cooperation. When compared to state agency officials, structural variables carry relatively more weight than does the lone strategic variable. Trust and Involvement were comparatively stronger than structural variables in differentiating among state agency officials, while State Political Context has the largest impact for regional respondents.

Both of the structural variables represent state-level phenomena. This has important implications for the role of regional office officials as middleman. Since regional officials are the primary contact for states, they need to take seriously the impact these state-level variables can have on their relationships with state agencies, as well as the overall success of NPL cleanups. Some regional office officials have recognized the need to adjust their approach to enforcing federal standards on states in light of variations in site conditions, community concerns, politics, and program capacity. Variation in the application of federal standards fits well with the perceptions shared by both groups of officials concerning the role of EPA headquarters in the program.

Generally speaking, regional officials expressed the belief they were more sensitive to states' perspectives, more committed to the implementation of Superfund, and that EPA headquarters was not the primary source of policy innovation and leadership in the program. All of this suggests that regional officials see themselves as more than just simply administrative extensions of headquarters. Instead, it suggests these officials view themselves as important decision-makers and implementers of policy at NPL sites.

It is also important to note the way these structural variables impact perceptions of cooperation among regional officials. State Political Context has a positive influence on the level of perceived cooperation, while State Program Capacity had a negative effect. The analysis in Chapter Four revealed just the opposite impact of these same variables on the perceptions of state officials (e.g., State Political Context [negative]; State Program Capacity [positive]). When regional and state officials perceive a higher level of state political support, they are likely to act in different ways. Regional officials are more likely to cooperate when they feel state agencies are supported at the state level. They do not want to get caught in a situation where state political actors undermine their decisions. One regional official noted the need to, "Get politics out of decision making...Democratic administrations with Republican state [legislatures] or vice versa can be problematic." However, state officials are less likely to cooperate with regions when their program is supported at the state level.

State capacity operates in a similar fashion. Regional officials, who do not have a very high view of State Program Capacity in general, are less likely to view their encounters with strong capacity states as cooperative. State officials, on the other hand, are more likely to feel the process is cooperative when they perceive themselves to be a

strong program. At least some of this has to do with the issue of where states are applying their capacity (e.g., NPL sites versus non-NPL sites). Regional officials expressed the concern that states with strong programs are attempting to divest themselves of responsibility at NPL sites so they can concentrate their efforts more fully on non-NPL sites, where they are likely to have sole jurisdiction.

These divergent views on state-level structural variables could have detrimental effects concerning issues of program capability, commitment to program, cleanup efforts, and ultimately the quality of EPA-State relations in the Superfund program. Regions may be less likely to undertake capacity building activities if they think states are going to defect from NPL sites and apply their newly acquired capacity to non-Superfund sites.

And for their part, states seem less likely to cooperate if they are already getting support (financial and otherwise) at the state level. There may be no need to compromise their prerogatives in order to obtain program-related resources and assistance. All of this can lead to questioning the others' commitment to Superfund and a relationship that is built more on avoidance than compromise.

It will be the job of both regional and state officials in the Superfund program to overcome these very different perceptions concerning state-level impacts. One way to do this will be to utilize the framework provided by NEPPS to maintain and build on the cooperative aspects of the EPA-State working relationship. Trust has a positive influence on the perceived level of cooperation for both regional and state officials. The building of such things as mutual databases and shared prerogatives (e.g., program objectives and priorities) can lead to more cooperative relationships (Smith and Silver 1998; EPA 1994a).

ENDNOTES FOR CHAPTER 5

1. See the discussion concerning program resources in Chapter Three for a more detailed look at the mechanics and limitations of the Superfund program funding process. In particular, one should note the constraints that Advice of Allowance (AOA) budget structures place on regional officials with respect to shifting funds between different types of Superfund activities.
2. The focus of this section is the role of EPA headquarters. The bulk of the analysis in this chapter emphasizes the relationship between the states and EPA regional offices.
3. In many respects, the evaluation of the EPA regional office of the EPA-State relationship is a self-assessment of how they administer such things as negotiations with states concerning program capacity and delegation of responsibility at NPL sites. This is especially true of Trust, which is for the most part, an assessment of their conduct during EPA-State contacts and interactions. This is due in large part to the regional offices formal powers in this process (e.g., make decisions concerning responsibility at NPL sites, provider of resources to states, direct role in cleaning up NPL sites). These powers allow them to formally structure the decision making process in which negotiations takes place. It should be noted, however, that while states may lack this power, they could impact the negotiations through both formal grants of power as in SARA 1986 (e.g., guaranteeing states a 'meaningful and substantial' role in the program) and informal means of influence (see Ingram 1977; Stoker 1991; Pressman 1975).
4. The Cooperation Index constructed for regional office officials contains the same seven items as the index constructed for state officials.
5. Regional office respondents were divided into the same two groups (e.g., Low/Moderately Cooperative and Highly Cooperative) using the same criteria (e.g., Low/Moderately Cooperative [0-20] and Highly Cooperative [21-28]) and rationale as that applied to state officials in Chapter 4.
6. For a more complete discussion of Trust and Involvement see Chapter Two.
7. EPA is responsible for ninety percent of the cost of a remedy at NPL sites, while states' cost share is ten percent. This can lead to competing ideas of what is an acceptable remedy. Some regional officials express the opinion that states tend to push for overly expensive remedies. Given the ability of states to concur or non-concur with selected remedies, some regional officials feel increasing the involvement of states would simply delay the process.

8. This can help promote a more cooperative relationship between EPA regional offices and state agencies because many times regions act as the conduits or channels for this support from headquarters. Thus, when EPA headquarters utilizes their regional counterparts to help transmit and clarify technical information, there is a potential for an increase in beneficial interaction.

9. Indices were created for the following measures: Trust, Involvement, State Program Capacity, Regional Office Program Capacity, State Political Context, National Political Context. Relationship with EPA Headquarters and Nature of the Problem are operationalized as dichotomous variables (items for these concepts could not be scaled). See Appendix B for more detail on the development of these variables.

10. See the discussion of the findings in Table 5.9 – State Program Capacity. One regional official commented on a state with a reputation for being a strong program and compared to many states still has a strong program. This official sees the program as diminishing its effort. This diminishing or lessening of effort tends to create, at least for this official, a less cooperative atmosphere in the working relationship.

11. The findings concerning regional office and state agency officials are different with respect to the relative weights of strategic and structural variables. Regional officials were categorized more via structural factors, while the categorization of state agency officials relied (comparatively) more on strategic factors. However, it should be noted that both sets of variables had strong impacts on both types (state and regional) of officials. This supports the contention of the model that both types of factors are important in explaining the level of cooperation actors perceive in their working relationships.

Chapter 6: EPA Regional and State Agency Officials: Two Sides of the Same Coin?

INTRODUCTION

The two previous chapters (Chapter Four and Chapter Five) examined the perceptions of both State Agency and EPA Regional officials concerning the nature of and factors that impact their working relationship. Highly Cooperative state officials were more likely to perceive higher levels of Trust and State Program Capacity, a more positive view of federal involvement, and less support from both national- and state-level political actors. On the other hand, Highly Cooperative EPA regional officials are more likely to perceive higher levels of Trust and State-level Political Context, but tend to be more skeptical of State Program Capacity. Both of these analyses suggest that while state and regional officials share some views concerning the nature of their relationship and the factors impacting it, there is also the potential for very different perspectives concerning their working relationship.

It is the purpose of this chapter to investigate the potential similarities and differences between the perspectives of state and regional officials involved in the implementation of the Superfund program. First, there will be a discussion of views concerning the degree of correspondence between the perceptions of state and federal officials implementing intergovernmental programs. The rest of the chapter will focus the analysis of state cleanup and EPA regional officials' perceptions. Specifically, it will compare the perceptions of state and regional officials have about cooperation in their

working relationship. After this, the analysis will shift to a comparison of state and regional views of each of the elements in the Model of Cooperative Working Relationships (e.g., factors that impact the quality of the working relationship). Finally, there will be an examination of what differentiates, if anything, state and regional officials with respect to their perceptions of the factors impacting the level of Cooperation in their working relationship.

The Case for Similar Perceptions

Peterson et al. (1986) point out a means of achieving cooperative interaction among levels of government. They propose that policy professionals operating in specific policy domains at the different levels of government form a basis for intergovernmental cooperation. In doing so, Peterson et al. provide an explanation for why state and federal officials may have corresponding perceptions of their situation even though they operate at different levels of government. Within their specific policy domains or areas of expertise, “policy professionals help create a cohesiveness necessary for conjoint intergovernmental action” (Peterson et al. 1986, 160). Peterson et al. (1986, 160-161) suggest this cohesiveness is created:

by virtue of similar values and orientations, similar educational experiences, common expectations of pursuing a career within a policy domain (at various levels of government or in related agencies in the private sector), reinforcement of ties and values at meetings of professional associations, reading professional journals, and participating in career training programs.

These linkages create a professional that is less concerned about the potential conflict of interest between federal and state (or local) requirements. Instead, the administrator is more likely to become a program advocate and “be as strongly identified with federal

rules as is any Washington bureaucrat...” (Peterson et al. 1986, 190). The end result of this is federal policy that is implemented successfully.¹

The Special Case of Agency Influence

A recurring theme in the studies of working relationships has been the different perceptions of regional officials and their counterparts in state agencies (see Gormley 1987; Hedge et al. 1988; Bowman and Lester 1993; Scheberle 1993; 1997; Wood 1992; Stoker 1991; and GAO 1997a). This should not be surprising given the inherent tensions in the roles played by each of these sets of actors in the intergovernmental system. Scheberle (1998) noted that federal agencies focus more on providing policy leadership, while states actually run most of the day-to-day operations. Wood (1992) and Hedge et al. (1988) also note that each set of actors is responsive to a different set of stakeholders. While the role of the federal regional office is slightly different in the Superfund program, tension can arise around the issue of granting states increased responsibility at NPL sites (GAO 1997a). All in all, there is widespread documentation of perceptual differences between regional and state officials attempting to implement the same environmental program.

Many of the studies on working relationships have focused on the impact that these differences in perceptions can have on the quality of a working relationship. Scheberle (1993) reported a lack of vertical alignment between Office of Surface Mining (OSM) field office and state mining officials on such issues as agency performance, nature of the problem and target group, and nature of the working relationship. She found that these different perceptions indicated a problematic working relationship (e.g., high levels of dissatisfaction and a lack of consensus). Gormley (1987) also found that

low levels of agreement (difference in perceptions) between regional EPA and state officials could be an indicator of intergovernmental conflict. Scheberle (1997) compared the nature of working relationships in different environmental programs. In this study, Scheberle (1997, 191) concluded that the radon program is an example of a relationship that is “pulling together,” while relations in the surface mining program are “coming apart and contentious.” State radon officials showed a much higher level of agreement with statements that positively evaluate the federal EPA program. She found this is in part the result of a shared consensus on policy goals and high levels of information sharing between regional and state actors (Scheberle 1997, 119). The surface mining program showed just the opposite tendencies (e.g., negative evaluations of field office officials and the federal program). State officials felt their program would be better run without federal involvement (Scheberle 1997, 152). All of these studies indicated the important role that similar perceptions of important policy issues have on the quality of the working relationship.

If the difference in perceptions is serious enough, regional and state officials could be operating in separate policy configurations.² Termeer and Koppenjan (1997, 84) argue that “Joint problem solving requires a minimum of consensus and therefore a mutual adjustment of the perceptions of representatives from different configurations” (e.g., regional and state officials). If there is no mutual adjustment, the conflicting perceptions can result in policy controversies or less than cooperative working relationships (Termeer and Koppenjan 1997). In essence, they would be talking past each other with their very different perceptions of the situation, as well as hindering any joint effort at environmental protection. The result would be a blockage in the interactive

process. Bowman and Lester (1993) note this in their study of RCRA officials. They found that federal officials felt that state capacity was the main problem in state implementation, while state officials viewed their poor working relationship with federal officials to be the main obstacle. Hedge et al. (1988, 333) found agencies can “indirectly influence subordinate behavior by shaping attitudes of their personnel.” This supports Hjerm and Porter’s (1981) contention that individual actors carry the frames of their organization with them when they interact within an implementation structure. Thus, agency differences can have an important impact on the EPA-State working relationship.³

PERCEPTIONS OF COOPERATION IN THE SUPERFUND PROGRAM

Previous analyses have focused on the perceptions that state and regional officials have concerning the level of Cooperation in their working relationship. However, these analyses have not compared the views of these different officials. Table 6.1 compares the perceptions of state and EPA regional officials concerning such issues as limits on opportunistic behavior, inclusiveness, fairness, and mutual development present in their interactions.

Table 6.1. Superfund Officials’ Perceptions of Cooperation within the EPA-State Working Relationship

	State	Regional Office
EPA is accountable	2.06 (1.298)	2.88* (1.003)
EPA seeks meaningful input	2.32 (1.021)	2.94* (0.870)
EPA acts as full partner	2.30 (1.160)	2.85* (1.031)
EPA fairly assesses State readiness	2.60 (0.782)	3.00* (0.799)
EPA does not use authority to take advantage of States	2.14 (1.028)	3.16* (0.921)
EPA-State relationship fosters mutual understanding	2.67 (0.873)	2.98* (0.924)
EPA-State relationship integrates all parties interests	2.36 (1.060)	2.98* (0.854)
EPA-State relationship is flexible	2.45 (0.909)	2.90* (0.653)

N = 150 to 154

Note: 0 = SD to 4 = SA

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at p < .05

The responses of state and regional officials in Table 6.1 show that EPA regional officials have a higher evaluation of the quality of the working relationship than do state officials. EPA regional officials were more likely to make positive comments concerning their working relationship with state officials. Some regional officials went so far as to suggest that increasing the feeling of cooperation and partnership is a priority. However, other regional officials did not think the term 'full partner' is useful in describing the EPA-State relationship. According to one regional official, "We work closely with states but we each have our own requirements that need to be met." This suggests that while there may be a strong perception of cooperation, there are some grounds to suggest regional and state officials are operating on different and independently developed goals and standards.

The perceptions of state officials did not match their regional counterparts in any of the questionnaire items. They were less likely than regional officials to see the working relationship as highly inclusive. Many state officials expressed concern that their input concerning standards (e.g., ARARs) were not taken seriously. They also felt regional officials were not very willing to compromise with them concerning decisions made at NPL sites. State officials also see less mutual development and fairness in the process. Many felt that EPA regional officials' goals and objectives were not determined by genuine negotiation, but by 'bean counts' needed to satisfy headquarters and Congress. There was also a concern that EPA remedial project managers (RPMs) were less likely to view state agencies as worthy partners in the program.

Thus, while EPA regional officials tended to view the quality of the relationship as very cooperative, state officials were more likely to suggest that regional officials

needed to have a better understanding of what cooperation and ‘true’ partnership are. One of the things that can account for these very different evaluations are the perceived impact of the latest efforts to ‘reinvent’ the Superfund program.⁴ According to the National Academy of Public Administration [NAPA] (2000, 165) “...[Superfund] reinvention reforms had a significant impact (on EPA’s own management of the program)...regional officials took reinvention seriously, and made major changes in Superfund.” Some of the changes made in the program have given EPA regional officials more flexibility and discretion in managing the Superfund program (NAPA 2000; Nakamura and Church 2000). However, from the view of state officials, “it did not significantly improve the working relationships between EPA and the states...state officials...knew little about Superfund reinvention” (NAPA 2000, 167). Furthermore, the NAPA reports that “the state and local officials who complained to researchers for this study repeated comments about EPA inflexibility and unreasonableness that their predecessors had made years ago” (2000, 167).

PERCEPTIONS OF SUPERFUND OFFICIALS

Strategic Factors

As discussed in Chapter Two, the Model of Cooperative Working Relationships consists of both strategic and structural factors. Trust and Involvement are the strategic factors in the model. EPA regional and state cleanup officials were asked to evaluate the level of Trust in their working relationship. They also assessed the current roles and potential delegations of authority (Involvement) in the Superfund program.⁵ Table 6.2 and 6.3 report the responses of both sets of officials concerning these strategic factors.

Table 6.2. Superfund Officials' Perceptions of Trust within the EPA-State Working Relationship

	State	Regional Office
States consistently apply own cleanup standards	3.36 (0.972)	1.50* (1.011)
EPA more interested in cleaning sites than enforcing regulations	2.53 (0.951)	3.60* (0.536)
EPA committed to developing State programs	2.34 (0.917)	3.02* (0.878)
EPA exercises good judgment in decision making	2.55 (0.974)	3.57* (0.577)
EPA clearly communicates guidance	2.25 (0.959)	2.96* (0.865)
EPA encourages open dialogue	2.77 (0.819)	3.31* (0.619)
EPA possesses high degree of expertise	2.73 (0.912)	3.59* (0.497)
EPA apply federal requirements in predictable manner	2.26 (1.047)	3.20* (0.577)

N = 151 to 154

Note: 0 = SD to 4 = SA

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

The above responses indicate that EPA regional officials perceive a higher level of Trust within their working relationships. EPA regional and state officials differ on all of the questionnaire items concerning Trust. Regional officials question the reliability of states applying their own cleanup standards consistently. In particular, they suggest that states apply less stringent standards at sites they are more likely to have lead-agency responsibility (e.g., non-NPL sites in voluntary cleanup and brownfield programs). State officials are more likely to see EPA applying federal requirements in an inconsistent manner. According to many state officials, much of this unwanted variation is due to EPA RPMs.

State officials held less positive perceptions of regional officials' concern, competence, and openness in the EPA-State working relationship. They felt that regional officials were more likely to be interested in pursuing their own prerogatives than cleaning up sites and developing state programs. Many state officials suggested that EPA

regional officials were interested in bean counting and serving the interests of EPA headquarters than getting results in the program. They also question the competence of regional officials with respect to important state and local conditions that can impact decisions made at NPL sites, as well as the decision making abilities of RPMs. State officials were also less likely than their regional counterparts to adequately communicate program guidance and encourage an open dialogue. Some state officials wanted more timely and frequent communication on issues (e.g., budget) that impact them.

The responses of Superfund officials concerning their perceptions of Involvement (e.g., programmatic roles and issues of decentralizing authority) are reported in Table 6.3.

Regional and state officials have divergent perceptions of both programmatic roles and the proper delegation of authority at NPL sites. For the most part, regional officials feel that the division of responsibility within the program is clear. On the other hand, state officials suggest that there is a need for a better delineation of cleanup responsibilities at both NPL and non-NPL sites. One state official commented on the need to better enforce existing SMOA's as a way to ensure clear divisions of responsibility. EPA regional officials feel that their roles at state-led sites should be more than simply providing resources. The general consensus among regional officials is that they have more to contribute at state-led sites than simply budgetary resources and that this view, held by state officials, gets in the way of more cooperative working relationships. State officials are concerned about regional officials overfilling at non-NPL sites and feel that they are capable of cleaning up sites if EPA provides the resources.

Table 6.3 Superfund Officials' Perceptions of Involvement in the EPA-State Working Relationship

	State	Regional Office
Clear division of responsibility	2.51 (1.057)	3.00* (0.851)
EPA willing to grant enhanced responsibility at NPL sites	2.27 (1.179)	2.92* (1.007)
States should have increased role in selecting remedy at NPL sites	3.44 (0.923)	2.42* (1.127)
States should be more involved in project planning	2.73 (0.983)	2.35* (0.924)
EPA oversight commensurate with State's capacity	2.20 (0.933)	2.32 (1.105)
EPA's primary role at State-lead sites should be more than simply providing resources	1.09 (0.880)	2.74* (1.031)

N = 149 to 153

Note: 0 = SD to 4 = SA

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

State cleanup officials felt that their status in the areas of remedy selection and project planning at NPL sites should be increased. However, regional officials were less likely to support an increase in either of these responsibilities. Many regional officials expressed the sentiment that states are already substantially involved in these areas. With respect to remedy selection, one regional official noted, "While states do not technically 'select' the remedy, their ability to concur or not concur with the selected remedy, gives them substantial weight in the remedy selection [process]." Regional officials were more likely to believe that they willingly grant enhanced responsibility to state programs when it is warranted than state officials. This is consistent with the principle of differential oversight as expressed in NEPPS. However, one state official commented that while NEPPS is good in theory, it less so in practice.

Structural Factors

In addition to these strategic factors, the Model of Cooperative Working Relationships also examines the impact of different structural factors on the level of

Cooperation perceived by both state and regional Superfund officials in their working relationships. The first of these is the role of EPA headquarters in the Superfund program. The perceptions of state and regional officials concerning EPA headquarters in terms of its relations with both state agencies and regional offices, policy innovation and leadership, and resource provision are reported in Table 6.4. State and EPA regional officials have very different perceptions of the role and impact of EPA headquarters on the program. Regional officials were much more likely to see themselves as committed to program implementation and having a higher sensitivity to states' perspectives. This claim to higher sensitivity is in line with Scheberle's (1997) discussion of regional officials as being the middlemen in environmental federalism. They were also more likely than state officials to see policy innovation and leadership coming from places other than headquarters. Both NAPA (2000) and Barnett (1994) have noted the importance that regional officials attach to discretion in making decisions in the Superfund program. However, regional officials took a more positive view of EPA headquarters' efforts with respect to the communication of policy guidance and provision of technical support. State officials rely for the most part on regional officials to translate policy guidance, as well as acting as the major conduit for technical support (EPA 1998; Scheberle 1997). Thus, the nature of the direct relationship between state agencies and EPA headquarters tends to be characterized by a lack of frequent contact and communication (Tobin 1992). This combined with the complaint of state officials about the overall quality of policy guidance and general lack of technical support (e.g., the demand for technical support is not being met) leads to state officials' more negative view on these issues.

Table 6.4. Perceptions of the EPA Headquarters' Role among Superfund Officials

	State	Regional Office
Regional Office more sensitive to State perspective than EPA HQ	2.39 (0.956)	2.78* (0.798)
Regional Office more committed to the implementation of the program than EPA HQ	2.39 (0.938)	3.33* (0.591)
EPA HQ are not primary source of policy innovation	2.02 (0.920)	2.51* (0.960)
EPA HQ not effectively communicate policy guidance	1.98 (0.832)	1.29* (0.874)
EPA HQ not provide adequate technical support	1.69 (0.738)	1.37* (0.727)

N = 150 to 154

Note: 0 = SD to 4 = SA

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

The respective program capacities of both state agencies and regional offices is another important structural factor that impacts the quality of the EPA-State working relationship. The perceptions of both state and regional officials concerning Program Capacity is presented in Table 6.5. A very discernable pattern emerges from the responses of state and regional officials. Both state and regional officials have a much more positive view of their programs' capability, commitment, and outcomes than their respective counterpart. With respect to regional office capacity, state officials have a less positive view of regional cleanup standards, commitment, effort, and overall outcome. Several state officials suggested that one of the reasons for this is their problematic relationship with EPA RPMs at NPL sites. State officials expressed concerns about the quality of these personnel, their decision making abilities, and high level of turnover. There was also a concern that regional offices may be 'too political' and under the influence of headquarters and Congress. They are more committed to meeting bean-counts than really cleaning up sites.

Table 6.5. Perceptions of Program Capacity among Superfund Officials

	State	Regional Office
State Agency Program Capacity		
Statutory authority to enforce cleanups	2.62 (1.135)	1.71* (0.979)
Staff's training	2.84 (0.936)	2.27* (0.884)
Financial resources	1.79 (1.238)	1.24* (0.990)
Cleanup standards	2.87 (0.893)	2.57* (0.791)
Staff's commitment to program	3.36 (0.608)	2.76* (0.804)
Willingness to take on enhanced leadership at NPL sites	2.85 (0.805)	2.31* (0.803)
Track record of performance	3.09 (0.814)	1.60* (0.917)
Overall effectiveness	3.01 (0.806)	2.12* (0.857)
Regional Office Program Capacity		
Program funding	2.15 (1.113)	1.61* (0.996)
Cleanup standards	2.24 (0.955)	3.02* (0.483)
Staff's commitment to the program	2.75 (0.665)	3.53* (0.504)
Staff's level of effort	2.60 (0.842)	3.40* (0.494)
Track record of performance	2.46 (0.847)	3.35* (0.526)

N = 149 to 153

Note: 0 = Very Dissatisfied (VD) to 4 = Very Satisfied (VS)

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

Much like their state counterparts, EPA regional office officials were more satisfied with their Program Capacity and less so with their programmatic 'partner.' Overall, regional officials took a very dim view of the overall condition of state cleanup programs. A general lack of funding for state programs leads to a deterioration in the quality of necessary programmatic expertise and enforcement effort. Many regional officials expressed the concern that states are reducing their efforts at NPL sites and, instead, focusing on the less complex sites in their jurisdiction (e.g., brownfield and

voluntary cleanup program). This decline in capability and commitment to cleaning up NPL sites leads regional officials to report a lower level of satisfaction with the overall results produced by state programs.

The Political Context of the Superfund cleanup program at both the state and national level can have important implications for the quality of the EPA-State working relationship. Table 6.6 reports the perceptions of both state and regional officials concerning the political support the program receives from state- and national-level political actors. With respect to state-level political support, state and regional officials do not differ significantly in their views of different political actors. Both rated the state legislature as the least supportive among the different political actors/institutions listed. Several regional officials expressed concern about the financial limitations placed on state cleanup agencies by their own state legislatures and the potential impact this has on maintaining and developing state program capacity (see Chapter Five).

Table 6.6. Perceptions of Support in State and National Political Contexts among Superfund Officials

	State	Regional Office
State-Level Political Context		
State Legislature	2.53 (0.898)	2.28 (0.743)
State Citizenry	2.60 (0.824)	2.83 (0.702)
Local Government Officials	2.72 (0.851)	2.69 (0.776)
Environmental Interest Groups at the State Level	2.78 (0.684)	2.94 (0.665)
National-Level Political Context		
Congress	2.26 (0.703)	2.15 (0.859)
President	1.89 (0.691)	2.04 (0.651)
Environmental Interest Groups at the National Level	2.43 (0.538)	2.48 (0.684)
Federal Courts	2.41 (0.885)	2.75* (0.700)
General Public	2.71 (0.739)	3.02* (0.489)

N = 145 to 150

Note: 0 = Strongly Unsupportive (SU) to 4 = Strongly Supportive (SS)

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

An examination of the responses of state and regional officials concerning national-level political support reveals some divergence in views. Regional officials were more likely to positively assess the support of the federal courts and general public than their state counterparts. Another important finding is their corresponding assessments of the support the Superfund program receives from both Congress and the President. State and regional Superfund officials perceive only a low to moderate level of support. Both state and regional officials have expressed concern over the uncertainty of future funding for Superfund (see Probst et al. 2001 for a more detailed discussion of this). Many in Congress are hoping to ‘ramp-down’ the Superfund program over the next ten years. As a result, the taxes used to fund the Hazardous Substance Trust Fund (also known as ‘Superfund’) have not been reauthorized and, as a result, the fund will soon run out of money. In addition to this, several state officials suggested that it is pressure from Congress (and EPA headquarters) that forces regional officials from programmatic goals and oversight into ‘bean counting’ exercises. And both regional and state officials do not feel they have received much support from the Bush administration in pursuing their cleanup agenda.

Table 6.7 reports the responses of state and regional officials concerning their perceptions about the nature of problems (environmental, technical, and regulatory) they face in implementing the Superfund program. For the most part, state and regional officials share similar views about these programmatic issues. They share a concern that abandoned hazardous waste sites pose a serious threat to the environment. Both sets of officials register some doubt about whether the NPL really contains the most seriously contaminated sites in the United States. Several regional officials complained about the

‘politicization’ of the listing process (see Chapter Three for a discussion of the site listing process). In particular, state governors are required to certify a site before it can be listed (Probst et al. 2001). Given the controversy surrounding the listing, states are not overly willing to increase the number of sites in their jurisdiction (Hird 1994). One regional official commented, “Focus on NPL-caliber sites dilutes attention that should be given [to other aspects of the program].”⁶ Several GAO reports have also questioned the validity of the NPL as a listing of the most contaminated sites in the United States (GAO 1998d; 1999a).

Table 6.7. Perceptions of the Superfund Program among Superfund Officials

	State	Regional Office
Abandoned hazardous waste sites not a serious threat	3.41 (0.730)	3.17 (0.975)
NPL accurately represents the seriousness of the problem	2.16 (1.030)	2.23 (0.994)
Greater acceptance of containment remedies weakens program effectiveness	1.93 (1.120)	1.75 (0.934)
Greater willingness to consider future industrial use of site endangers environment and public health	2.64 (0.962)	0.96* (0.771)
Strong liability scheme necessary to enforce cleanups	3.08 (0.817)	3.10 (0.805)
Responsible parties should be made to bear costs and risks of cleanup	3.21 (0.675)	3.23 (0.831)

N = 153

Note: 0 = SD to 4 = SA

The first number is the mean score, the number in parentheses is standard deviation.

* Significant at $p < .05$

State and regional officials also both support the need for a strong regulatory approach in implementing the program. Both see the need to use a strong liability scheme, as well as making the responsible party pay for as much of the cleanup as possible. However, there is some divergence with respect to one of the technical issues. EPA regional officials are much more likely to believe that classifying sites as eligible for future industrial/commercial use will not endanger public health than state officials.⁷

This reflects a change in EPA's traditional stance. At the inception of the Superfund program, the more restrictive standards required to clean a site for future residential use has been the rule (GAO 1998e). However, the views of regional officials are in line with EPA headquarters' recent focus on linking cleanup to economic development and the Bush administration's emphasis on redeveloping contaminated sites for industrial use.⁸ The EPA's Economic Redevelopment Initiative and the recent passage of the Small Business Liability Relief and Brownfields Revitalization Act are examples of this change in focus concerning cleanup standards applied to sites.⁹ The divergence in views suggests that state officials have yet to adopt this change of cleanup standards in a wholesale fashion (although, GAO 1998e suggests that some states already engage in this practice).

EXAMING THE MODEL IN A DYNAMIC SETTING

The previous section examined the relationship between different types of officials (e.g., EPA regional and state agency officials) and each of the factors in the Model of Cooperative Working Relationships. This section will investigate the dynamic interplay of these factors with one another, as well as their ability to differentiate between EPA regional and state agency officials involved in administering the federal Superfund program. As in previous chapters, unidimensional scaling techniques are used to create the measures used in this analysis (see Appendix C). Logistic regression is applied to these measures to see which have the ability to differentiate between regional and state Superfund officials. The findings of this analysis are presented in Table 6.8.

Table 6.8. Logistic Regression Estimates for Superfund Program Officials

Variables	Unstd LR Coeff (b)	Std LR Coeff	Std Error of b	Sig.	Exp(B)
Trust	.243	.124	.143	.089	1.275
Involvement	.359	.112	.184	.051	1.432
Relationship with EPA HQ	1.002	.051	.802	.211	2.723
State Capacity	-.467	-.234	.137	.001	.627
Region Capacity	1.160	.380	.396	.003	3.190
State Political Context	.059	.015	.239	.805	1.061
National Political Context	-.069	-.013	.252	.785	.934
Nature of the Problem	1.160	.059	.916	.205	3.191

N = 128

-2LL: 57.76

Model Chi-Square: 104.25 (.000)

Goodness of Fit: 3.28 (.916)

Cox & Snell R-Square: .557

Nagelkerke: .776

An examination of the measures of model adequacy in Table 6.8 suggests the model provides a statistically significant explanation of the differences between EPA regional and state agency officials in the Superfund program. The model chi-square is significant, while the Goodness of Fit statistic, which measures how poorly the model fits the data, is not significant (see Chapters Two and Four for a more detailed discussion of the interpretation of these and other logistic regression statistics). Both of the pseudo r-square measures (Cox & Snell and Nagelkerke) suggest the model provides a moderate to strong explanation of the differences between regional and state officials.

According to Table 6.8, both the strategic and structural factors provide a significant explanation to the characteristics that differentiate between regional and state Superfund officials. EPA regional officials are differentiated by higher levels of Trust and Involvement.¹⁰ A one-unit increase in the Trust Index increases the likelihood of a respondent being a regional official by over twenty-seven percent ($\text{Exp}[B] = 1.275$). Regional officials are also more likely to perceive their involvement in the program in a

more positive light. A one-unit increase in the Involvement Index increases the odds of a particular respondent being a regional official by forty-three percent.

The structural variables that provide an explanation of the difference between regional and state officials are Regional and State Program Capacity. Those respondents who view Regional Program Capacity in a more positive light are over three times as likely to be regional officials ($\text{Exp}[B] = 3.190$). However, Superfund officials who view State Program Capacity in a more positive manner are thirty-seven percent less likely to be regional officials. This indicates that regional and state officials are more likely to view their own program capacities in positive way than they are their respective counterparts.

An examination of the standardized logistic regression coefficients show that both of the structural variables have more of an impact on distinguishing between types of Superfund officials than either of the strategic variables. Regional Program Capacity (.380) provides the strongest explanation of the differences between regional and state officials. State Program Capacity (-.234) has the second largest impact on whether the respondent is a regional or state official. Both strategic variables have a similar impact on the explanation of regional and state officials differences. Trust (.124) and Involvement (.112) have a significant, though weaker, ability to distinguish between regional and state Superfund officials.

CONCLUSION

Do EPA regional officials and state agency officials in the Superfund program agree about the nature of their working relationship and the factors that influence it or do they differ significantly in these perceptions? Peterson et al. (1986) suggest that officials

within the same program will share perceptions due to their background and training as policy professionals. Other scholars provide evidence that officials at different levels of government are subject to divergent political forces and have dissimilar institutional prerogatives with respect to the program (see Scheberle 1993; 1997; 1998; Gormley 1987; Hedge et al. 1988; Bowman and Lester 1993; Wood 1992).

An examination of the univariate analysis of the Cooperation Index and the factors in the Model of Cooperative Working Relationships shows a divergence in the perceptions of regional and state officials. With respect to the nature of the working relationship (e.g., Cooperation), regional officials have much more positive perceptions than state officials. This divergence carries over into the perceptions that Superfund officials have of the strategic factors in the model (e.g., Trust and Involvement). Again, EPA regional officials feel that there is more Trust in the relationship, as well taking a more positive view of their involvement in the program.

A potential explanation for these very different perceptions is the impact of the recent efforts by EPA headquarters to improve the overall implementation of the Superfund program. As both the NAPA (2000) and Nakamura and Church (2000) argue, the effort to reinvent Superfund had a profound impact at the regional level. The changes in the program were mostly aimed at changing EPA's managerial approach to the program. Regional officials were given wide-ranging discretion in helping to develop and implement these reforms. This, in turn, led to the successful implementation of many of these reforms at the regional level (Nakamura and Church 2000). However, this success did not translate to a change in the perceptions state officials had of their working relationship with the regional offices. Many of the reforms aimed at empowering state

programs (e.g., block funding, integrated site management, and remedy selection) are still in or have just completed pilot status and have yet to take widespread effect. As a result, state officials still complain of EPA's unreasonableness and redundancy of oversight.

The univariate results for the structural variables provides a more mixed view of whether or not regional and state officials share similar perceptions. Regional and state officials have different views of the relationship of EPA headquarters to the program, as well as to each of the Program Capacity variables. Regional officials tend to see themselves as being more attentive to the states and as an important conduit for headquarters' messages than do state officials. Each type of official tends to view their Program Capacity as better than that of their counterparts. On the other hand, both regional and state officials have very similar perceptions of their overall Political Context (both national and state). They also view the environmental, technical, and regulatory issues in the Superfund program in much the same way.

What all of this says is that there is a lot of disagreement about the nature of the relationship, as well as the strategic and structural factors that impact this interaction. But do these different factors actually work to distinguish regional from state officials when viewed in a dynamic setting? For the most part, the results of the multivariate analysis support the univariate findings. Regional and state officials share similar views of the role of EPA headquarters, the Nature of the Problem, and the entire (both national and state) Political Context in which they operate. They have different perceptions of Trust, Involvement, Regional Program Capacity, and State Program Capacity.

All of the perceptions that regional and state officials share are structural variables. Since regional officials are the primary contact for state agencies, it is not surprising that

they share similar views of many of these variables. Both regional and state officials ‘share’ the state political context in the sense that regional officials are charged with translating national directives into workable solutions at this level (Scheberle 1997). And since regional offices are the primary contact, they also act as the mediator of the states’ experience with many national level factors (e.g., National-level Political Context, views of EPA headquarters, and programmatic issues). All of this lends support to Peterson et al.’s argument that policy professionals within the same program will tend to have similar views or perceptions of important issues.

Equally important, though, are the findings that differentiate regional officials from their state counterparts. Both strategic variables, those that are more dynamic and manipulable by those in the working relationship, explain part of the divergence in perceptions between regional and state Superfund officials. As discussed earlier, the efforts to reinvent Superfund, the influence of NEPPS, and the impact of the *Plan to Enhance the Role of States and Tribes in the Superfund Program* have taken hold at the regional level and have yet to really impact the perspective states have of the EPA-State working relationship. Thus, regional officials have more positive perceptions of both Trust and Involvement concerning the EPA-State working relationship.

Regional and state officials also have very different views concerning the core issue in the Superfund program. The issue of program capacity is at the center of the debate about who should have what responsibility at NPL sites (GAO 1997a). Regional officials make the decision about what kinds of responsibilities state agencies can and should have at NPL sites. Since Superfund is not based on the primacy approach, these decisions are made on a site-by-site basis.¹¹ The findings here suggest that both regional

and state officials are more likely to view their own program capacities as better than their counterparts. This difference of opinion can lead to several different problems. The first is that regional officials are reticent to grant authority to states because they feel states simply are not up to the task (Markell 1993). This is also reflected in the feelings of 'ownership' that many regional officials have towards the remedy selection phase of the cleanup process (Markell 1993). The second problem is the uncertainty (and its consequences) created by a lack of clear readiness criteria (GAO 1997a). Many state officials have expressed the need to develop a clear and explicit standard concerning the division of responsibility at NPL sites. As noted by the GAO (1997a), when clear standards are not present, there is a tendency for the level of conflict in the working relationship to increase. While EPA and the states have sought to address this issue of readiness criteria, this effort has yet to produce any generally accepted standards of evaluation of state program capacity (EPA 1998).

So, are regional and state Superfund officials two sides of the same coin or two different coins? While they do share similar views concerning many of structural variables in the Model of Cooperative Working Relationships, they have different perceptions of several important factors. These include both strategic variables (Trust and Involvement), as well as Regional and State Program Capacity. Given the nature of the decision making scheme in the Superfund program (e.g., the centrality of the program capacity issue) and the impact of trust in building more cooperative relationships, these differences in perception are very important. It is in these important areas of concern that regional and state officials seem to be operating in separate policy configurations (Termeer and Koppenjan 1997)...as two separate coins. Thus, while the shared views of

many of the structural variables tend to bring the two sets of officials closer together, the divergent views of strategic factors and Program Capacity produce divergent views of the quality of the working relationship and present obstacles that need to be overcome if the EPA-state relationships are to be improved.¹²

ENDNOTES FOR CHAPTER 6

1. Sanford (1967) describes the above relationship as “picket-fence federalism.” The cooperative nature of the relationship is among policy professionals within a specific policy domain. Thus, the presence of policy professionals does not enhance the relationship between administrators and elected officials. Also, policy professionals do not help to integrate or coordinate overall federal policy (Peterson, et al. 1986, 160).
2. According to Termeer and Koppenjan (1997, 83), configurations refers to “groups of actors who can be characterized by their matching, relatively stable interaction patterns and shared perceptions.” Also see Weick (1979) on the subject of configurations.
3. Hedge et al. (1988, 327-28) suggest that, “the agency variable represents a constellation of recruitment, socialization, and control efforts and reflects a sharp contrast between federal and state officials” (Hedge et al. 1988, 328).
4. Superfund reform initiatives are administrative reforms aimed at improving the program in the following areas: cleanups, economic redevelopment, enforcement, innovative technology, public involvement/environmental justice, and state and tribal empowerment. Specific reforms in the state and tribal empowerment area are pilot remedy selection, voluntary cleanup program support, integrated site management, and block funding. Although not officially a part of the reinvention effort, EPA’s *Plan to Enhance the Role of States and Tribes in the Superfund Program* has also focused on improving the EPA-State relationship by developing readiness criteria and model agreements. See Chapter 3 for a more detailed discussion of these different efforts to improve the EPA-State relationship.
5. The Involvement Index for the combined dataset is coded so that higher scores indicate a more positive view of EPA regional official involvement in the Superfund program.
6. According to Probst et al. (2001, 40), an NPL-caliber or NPL equivalent site “as one at which responsible parties perform cleanup under EPA enforcement authority and with EPA oversight, but without being listed as final on the NPL.” The argument in favor of using this technique is reduced negotiation time and use of federal funds. However, Probst et al. (2001, 41) caution that cleanups may not be truly equivalent and may just be a way to shift the status of sites and keep them off the NPL.
7. Classifying sites using future land use as one criterion in determining cleanup standards has long been a consideration in the Superfund program (GAO 1998e).

Classifying a site as residential would require a more stringent cleanup standard than classifying a site as industrial/commercial.

8. EPA's interest in brownfields started in 1995 with their "Brownfields Action Agenda" in 1995. However, it was not until FY 1998 that the initiative's funding reached over \$50 million (GAO 2000b, 11). Funding for FY 1999 and FY 2000 was \$66.8 million and \$78.8 million, respectively.

9. See material on EPA's website, specifically, www.epa.gov/epahome/hi-brownfields.htm and www.epa.gov/epahome/headline_110802.htm. Material viewed on November 11, 2002.

10. In this analysis, higher scores on the Involvement Index indicate a more positive view of EPA regional officials role/delegation of authority in the Superfund program.

11. Regional officials are charged with making the decisions about whether or not states are ready to take on added responsibility at NPL sites. As of now, there is not a standard set of criteria applied in this decision making process (GAO 1997a). In many instances, these 'readiness' decisions are made on a site-by-site basis, there are instances in which a regional office will make these decisions for a group of sites within a state (EPA 1990a).

12. The mean score for state respondents on the Cooperation Index is 16.81, while the mean score for regional respondents is 20.46. The univariate analysis in this chapter reveals that regional respondents scored higher on every item used to measure cooperation in the questionnaire.

Chapter 7: Working Relationships in the Superfund Program and Beyond

INTRODUCTION

The focus of this research has been to examine the nature of the working relationship between EPA regional and state agency officials charged with administering the remedial aspect of the federal Superfund program. This research has built upon the work of both academic (see Scheberle 1997; 1998; Gormley 1987; 1992; Tobin 1992; Markell 1993) and government (GAO 1980; 1990; 1995; 1997a; 1999b and EPA 1982; 1990b; 1995a; 1998) researchers. As discussed in Chapter One, Scheberle's (1997) work has provided the most rigorous treatment of the topic to date. Her contribution is two-fold. The first is the discussion of the impact of Trust and Involvement on the nature of federal-state relations in different environmental programs (Scheberle 1997). The other is to examine the importance of state-level factors in facilitating implementation. Prior to this, there had simply been a listing of the various factors that were thought to impact EPA-State working relationships (see Chapter One).

The contribution of this research to the existing literature lies in two/three areas. The first is the evaluation of the nature of the working relationship in terms of cooperation. Up to this point, cooperation has been examined in terms of simple agreement/disagreement on particular programmatic issues (see Scheberle 1997; 1998; Tobin 1992). In this research, cooperation has been examined in terms of the mutual development, inclusiveness, fairness, and limits on opportunistic behavior (e.g.,

procedural safeguards) that exist in the interpersonal contact/process. Both regional and state officials were asked about their perceptions of these issues. These responses were used to create the Cooperation Index. This index, in turn, was used to categorize both sets of respondents into Highly and Low-Moderately Cooperative groups. These different groupings formed the basis for the analysis in Chapters Four and Five.

Another contribution of this study to the extant literature is the development of a Model of Cooperative Working Relationships. This model integrates both strategic and structural factors in the explanation of the level of Cooperation between EPA and state officials in the federal Superfund program. The strategic factors in the model are developed using Scheberle's concepts of trust and involvement. Measures for both of these concepts were developed in a manner similar to that used for the Cooperation Index (see Chapter Two for more detail on the development of measurements). Structural factors used in the model include: Relationship with EPA Headquarters, Political Context (national- and state-level), Program Capacity (regional and state), and Nature of the Problem. By examining the impact of both types of factors, the model merges interpersonal relations of implementers as well as the larger context (social, political, economic) of these relations. The underlying premise of this approach is that both of these (e.g., strategic and structural) factors can provide an important piece of the explanation about the level of Cooperation present in the federal Superfund program.

The approach of this research has also been different than what has come before. Some research has focused on one particular program, but done so in a case study fashion, which can limit the generalizability of the findings (see Gormley 1987; 1992; Scheberle 1993; Church and Nakamura 1993; GAO 1997a). Still other research has

focused on comparing EPA-State relations between different environmental programs (Scheberle 1997). In essence, this makes the program itself the unit of analysis and not the working relationship between federal and state implementers. This study was structured in order to examine the variation of nature of the working relationship within a particular program (e.g., the federal Superfund program). This makes the level of Cooperation between EPA regional and state officials the focus of the analysis. It also provides an element of generalizability for its findings by developing measures for such concepts as Cooperation, Trust, Involvement, and Program Capacity.

EXAMINING THE MODEL OF COOPERATIVE WORKING RELATIONSHIPS

Univariate Findings

Chapter One posed several different sets of research questions concerning the nature of and factors that impact the EPA-State relationship in the federal Superfund program. The first set of questions look at the level of Cooperation that state and regional officials perceive in their working relationship. The findings in Chapter Four reveal that state officials view their relationship with EPA regional officials with some skepticism. In particular, they did not find their regional counterparts to be overly accountable or work with them as a full partner. And twenty-five percent reported they felt regional officials used their decision-making authority to take advantage of them at NPL sites. Overall, the average score on the Cooperation Index was 16.81 out of a possible twenty-eight. This suggests that state officials do not see the relationship as overly hostile, but it is also not a very positive view of things.

Regional officials, on the other hand, reported a much higher level of Cooperation in their relationship with state agency officials. The average score for regional officials

on the Cooperation Index was 20.46. The findings in Chapter Six show that regional officials scored significantly higher on every single item on the Cooperative Index than state officials. All of this suggests that regional and state officials have different views of the nature of their working relationship. There are several possible explanations for this. Regional officials are charged with administering the rules that govern the processes in which they and state officials interact. Thus, not only are they participants in the working relationship, they have the authority to make binding decisions concerning the delegation of cleanup authority to states.¹ Nakamura and Church (2000) also note that efforts to reinvent the Superfund program have had most of their impact on regional officials and have not yet ‘filtered’ down to state officials. They report many state officials were unaware of these efforts and as a result these officials have not really altered their views of their working relationship with EPA officials (Nakamura and Church 2000).

An examination of the univariate findings in Chapter Four indicate Highly Cooperative state officials differ from their Low-Moderately Cooperative counterparts on both strategic and structural issues. Highly Cooperative state officials were much more likely to perceive a high level of Trust in their relationship, as well as a more positive view of regional involvement in the Superfund program. This suggests the importance of interpersonal relations for state officials. While both types of officials held similar views concerning most of the structural variables, there were significant differences with respect to both State and Regional Program Capacity. Highly Cooperative state officials believe they have stronger state programs. They also indicated a more positive view of their regional office’s capacity to implement the Superfund program.

The univariate findings in Chapter Five suggest that there are not many differences between Highly Cooperative and Low-Moderately Cooperative regional officials. They only differed markedly on their perceptions of Trust in their working relationship. Highly Cooperative officials expressed a higher level of Trust than did their counterparts. In contrast to the responses of state officials, regional officials possessed similar views of both the states' and their Program Capacity, as well as the rest of the structural variables. Both types of regional officials perceived State Program Capacity to be rather weak, while they shared the view that Regional Program Capacity was faring much better.

Multivariate Findings and Implications

State and Regional Analyses

The results of the logistic regression analyses in Chapter Four and Five show the Model of Cooperative Working Relationships provides a statistically adequate explanation of the different levels of Cooperation perceived by state and regional officials. In both analyses, strategic and structural variables played an important role in differentiating Highly Cooperative officials from Low-Moderately Cooperative ones. This supports the notion that both interpersonal factors (e.g., strategic) and the context in which they exist are important explanations of the nature of working relationships. Trust had the strongest, and most positive, relative impact on the perceptions of state and regional officials. State Program Capacity and State Political Context, both structural variables, also had significant impacts on state and regional Superfund officials. However, these structural variables had different effects on these Superfund officials.

The strategic variable Trust has a positive impact on the level of Cooperation perceived by both state and regional officials. This means that officials have a more positive view of their working relationship based on their willingness to interact with their counterparts in the Superfund program. This willingness, in turn, is based on the assessment of their conduct, as well as that of their counterpart. The positive impact of Trust on both state and regional officials has important implications for efforts to improve the EPA-State working relationship.

Both Superfund reinvention efforts and NEPPS are, in part, attempts to improve the working relationships between EPA and the states.² An important tenet of NEPPS that has carried over to the Superfund program is the idea of differential oversight. One of the chief complaints from state officials is the redundancy of effort in the program (NAPA 2000). In particular, state agency officials engaged in cleanup activity at NPL sites feel their efforts are micromanaged by EPA officials. In principle, differential oversight would alleviate this problem by lessening the amount of oversight for more capable state programs. The findings in the analysis of state officials suggest this could have positive effects on the level of Cooperation they perceive in the relationship. State officials with more positive views of regional official involvement (Involvement) were more likely to be Highly Cooperative officials (see Chapter Four).

State Program Capacity and State Political Context impact the perceptions of state and regional officials concerning cooperation in different ways. State officials are more likely to be Highly Cooperative if they have more positive views of State Program Capacity, but are less cooperative if they perceive a higher level of political support at the state-level (State Political Context). These state-level structural variables have just the

opposite effect on EPA regional officials. These divergent views suggest the potential for problems concerning efforts to build state program capability. Overall, state officials have a very positive view of their program capacity (see Chapter Six). This perception is supported by ELI's 1998 report on state Superfund programs (ELI 1998). On the other hand, regional officials find state capacity to be lacking. However, the main issue seems to be exactly where states will apply their program's capacity. Many regional officials expressed the concern that states with comparatively better programs are ratcheting-down their efforts at NPL sites and focusing on non-NPL sites via their Brownfields and Voluntary Cleanup Programs. While both sets of officials have concerns about the funding state programs receive, the doubts of regional officials extend to other issues of capability (e.g., statutory authority, training), commitment, and overall performance (see Chapter Five).

State Political Context also has different impacts on the perceptions of state and regional officials. State officials are less likely to be characterized as Highly Cooperative if they perceive a supportive state political climate.³ This suggests they view political support as a resource for their agency. If the state political climate is less supportive, they are more likely to cooperate with their regional counterparts. Whichever political partner offers their program support is who state officials will 'partner' with in order to maintain their own prerogatives (Scheberle 1998). Regional officials, however, tend to view State Political Context as a necessary condition for cooperation. Regional officials who perceive a higher level of political support for the program at the state level are more likely to be Highly Cooperative. If this support is lacking, then regional officials may feel the state program will be undercut by their legislatures.⁴ The divergent views of both

State Political Context and State Program Capacity suggest state and regional officials are less likely to engage in picket fence federalism than to maintain their own program prerogatives (Peterson et al. 1986).

While state and regional officials have divergent views concerning these structural variables, it is also important to note that both of these variables are *state-level* variables.⁵ There are several explanations for this finding. The first is the nature of the program itself. The Superfund program deals with abandoned hazardous waste sites, which are a more localized problem than air and water pollution. Thus, the program does not contain interstate issues, which might require a larger focus on national level issues. In addition to this, EPA regional officials are portrayed as the ‘middle man’ in environmental federalism (Scheberle 1997). In the Superfund program, EPA regional officials are charged with delegating cleanup responsibility at NPL sites. This requires regional officials to understand state-level impacts and how they can impact state agency programs (Scheberle 1997). The findings of this study point to the idea that state agencies and regional offices share the state’s economic, social, political, and programmatic environment when attempting to implement this particular policy.

Comparing State and Regional Officials

The findings from the logistic regression analysis in Chapter Six point to both similarities and differences between EPA regional and state agency Superfund officials. Both sets of officials held similar views concerning several of the structural factors in the Model of Cooperative Working Relationships. These include: the role of EPA headquarters in the Superfund program, the Political Context (both national and state), and the Nature of the Problem facing those implementing the Superfund program. This

tends to support Peterson et al.'s (1986) argument about shared perceptions of those implementing the same government program.

However, the findings also identify important differences between regional and state officials. They differ on both of the strategic variables. Regional officials were associated with having more trust (Trust) and a more positive view of their involvement (Involvement) in the Superfund program. Specifically, regional officials believe they conduct themselves well during their interactions with state officials (see Chapter Five). They also see themselves as being very instrumental in the administration of the program and feel their current level of involvement should either be maintained or increased. Nakamura and Church (2000) reported similar findings in their evaluation of the Superfund reinvention initiatives. They found that state officials still viewed regional officials with some distrust and felt their involvement in the program was redundant at times (Nakamura and Church 2000; NAPA 2000).

Regional and state officials also differed on their views of both Regional and State Program Capacity. Regional officials were more likely to view their program capacity as strong, while viewing state capacity in a less favorable light. These divergent views on program capacity are important in the Superfund program for a number of reasons. For one, the issue of what makes a state program 'capable' is still undecided. Several studies have documented attempts to develop readiness criteria that can be used to make decisions about what kinds of activities a state cleanup program can undertake at NPL sites (Markell 1993; GAO 1997a; EPA 1998). However, there has been no final decision on what these are and how they should be applied.

Another reason is increasing uncertainty surrounding one of the funding mechanisms for the federal Superfund program itself. According to Probst et al. (2001, xix), one of the main questions facing the program is whether or not there is enough money in the Trust Fund to continue paying for the program. The taxes on the oil and chemical industry used to finance the Trust Fund were allowed to expire in 1995. And President Bush's administration has decided not to reauthorize the taxes (Seeyle 2002a). According to Katharine Seeyle (2002a), "the trust fund will dwindle from a high of \$3.8 billion in 1996 to a projected \$28 million next year [by September 30, 2003]." The consequences of this lack of funding have already been felt. In the last two years, the EPA has reduced the number of overall sites designated for cleanup and completed cleanup at fewer sites than it selected (Seeyle 2002a). In addition to this, several regional offices received less money than they requested to undertake cleanup activities at NPL sites (Cushman, Jr. 2002a). According to Nikki Tinsley, Inspector General of the U.S. EPA, "When sufficient funds are not provided, the risk presented by the site is not fully addressed" (Seeyle 2002b). All of this can lead to an overall decline in the effectiveness of the program.

Both regional and state officials expressed concerns about the financial resources available for the program at both the federal and state levels. This situation has already led to a very unique arrangement between EPA's Region Four office and Florida's state cleanup program. In a very rare move, the State of Florida will pay for work at a toxic site that would normally have been handled by the federal government. They will

provide approximately \$1.4 million, a relatively small project by Superfund standards, to clean the drinking water in a part of Port Salerno (Cushman, Jr. 2002b).

This example illustrates several things about the continuing impact of program capacity, as well as other structural variables, on the quality of working relationships between regional offices and the states. The strain of limited budgets, while having the potential to limit program capacity, could lead to a pooling of resources not usually seen in the Superfund program. The creation of a more flexible transfer of funds between federal and state officials has been the focus of both NEPPS and Superfund reinvention initiatives. The tenuous nature of the budget suggests the importance of knowing one's level of political support (e.g., Political Context) at both levels of government. And given how the funding is handled between EPA headquarters and their regional offices, it is important to acknowledge the potential impacts of headquarters' role in the Superfund program in the near future. Finally, the ability of both EPA and state programs to address potentially hazardous sites may change how they view the Nature of the Problem in terms of prioritizing sites (environmental) and enforcing regulations (technical and regulatory).

EXAMINING EFFORTS TO IMPROVE WORKING RELATIONSHIPS

The EPA-State relationship has been the focus of much research over the past twenty years (see Chapter One). However, there has been an increased effort to improve relations in environmental federalism, generally, and the Superfund program, specifically. These more recent efforts include NEPPS, the Superfund reinvention initiatives, and the *Plan*. Figure 7.1 shows the principal components of these reform efforts as they pertain to intergovernmental relations. It is the purpose of this section to

examine how each of these contributes to the development of a more cooperative working relationship between EPA regional and state officials.

NEPPS	Superfund Reinvention	Plan
- Use of environmental indicators	- Enhanced remedy selection	- Develop readiness criteria
- Increased role for states in program assessment	- Integrated site management	- Develop model agreements
- Environmental performance agreements	- Guidance/support for VCPs	
- Differential oversight	- Block grant funding	
- Performance leadership programs		
- Public outreach and involvement		
- Joint system evaluation		

Figure 7.1. Intergovernmental aspects of current reform efforts.

Taken together, these reform efforts attempt to structure a working relationship that is more inclusive, fair, and promotes the mutual development of important programmatic criteria. In doing so, they create the ‘tools’ for regional and officials to use in order to deal with contentious issues in a more cooperative fashion. Have Superfund officials learned to use these tools to construct more cooperative relationships or have these tools been allowed to gather dust?⁶ In order to answer this question, the reform efforts need to be examined in light of two factors: (1) whether or not the four different norms or rules of cooperation, as defined in Chapter Two, exist in the Superfund program; and (2) the different strategic and structural variables in the Model of Cooperative Working Relationships to identify factors that promote or inhibit cooperation.

All of the findings in this study point to a need to deal with both strategic and structural aspects in order to improve working relationships between EPA regional offices and state agencies implementing the Superfund program. The analyses of both state and regional officials found that strategic and structural variables had a role to play

in determining the level of perceived cooperation. The comparison of state and regional officials also point to both strategic and structural factors as explanations for the differences between them.

Out of the three reform efforts, NEPPS is the most far-reaching in terms of organizational change. It requires the EPA to change from its current command-and-control approach to one centered on partnering. Parties would be held accountable for results/outcomes and not simply by the number of activities they undertake in a certain period of time. EPA would also need to shift from a media-specific to a broader, more encompassing view of environmental problems. Those managing the program would need to be more flexible in the oversight process. The concept of differential oversight exemplifies this new approach to managing environmental programs. The process under NEPPS would also be more inclusive of the views of state officials in the areas of program assessment and system evaluation.

The other two reform efforts deal with important areas of decision-making and program capacity within the Superfund program. Two of the issues dealt with in the Superfund reinvention are integrating site management and an enhanced role of remedy selection. In demonstration pilots, state officials are allowed to manage at NPL-caliber sites and in certain instances make important decisions concerning the cleanup remedy for a particular site (EPA 2000a). Both the Superfund reinvention and the *Plan* contain elements that can be used for the purpose of developing state program capacity. In particular, there are reinvention initiatives that focus on building more effective state VCPs and the acquisition of federal funds easier for states by using a block grant funding mechanism. The *Plan* attempts to develop readiness criteria for deciding when states are

capable of taking the lead at federal Superfund sites (Markell 1993; GAO 1997a; EPA 1998).

While these reforms create the necessary infrastructure to build a cooperative process (e.g., promote inclusion and flexibility in the process, capacity-building, and the development of readiness criteria), the effort seems to fall short in promoting a program-wide perception of cooperation. Termeer and Koppenjan (1997) point out the need for a mutual adjustment of the perceptions of representatives from different policy configurations (e.g., regional and state officials). The findings in Chapter Six suggest that this is not occurring systematically in the Superfund program. An examination of Table 6.1 indicates that while regional officials find the relationship to be ‘governed’ by a cooperative set of rules, state officials are not as convinced. This lack of a state ‘buy-in’ in terms of the quality of the EPA-State working relationship in the Superfund program is supported by others who have researched intergovernmental relations in the area of environmental policy (EPA 2000b; Gormley 2000; Nakamura and Church 2000; NAPA 2000).

Regional and state officials also have different perceptions concerning the strategic side of their relationship. With respect to Trust, regional officials have a more positive view of their conduct in contacts with state officials than state officials have of regional officials’ conduct. Table 6.2 shows that regional and state officials differ on all of the different aspects of Trust (see Chapter Two). Some state officials also expressed concern about being second-guessed concerning technical matters, as well as a lack of timely communication. This lack of timely communication plays a part in limiting state officials acceptance of the more cooperative aspects of the reforms. For their part,

regional officials did not trust states to consistently apply their own cleanup standards. Overall, problems in communication (openness) and reliability in performing programmatic responsibilities work against the adoption of more cooperative norms in the EPA-State relationship.

State and regional officials also differ on how they view the involvement of regional officials (Involvement) in the program. The overarching structure governing the different roles and responsibilities in the Superfund program is the lead-support agency dichotomy (Markell 1993). This way of dividing up responsibility in the program has led both state and regional officials to cite redundancy of effort at NPL sites as a major flaw in the program (Markell). Another major issue among many state officials was the belief that the roles of EPA and the state programs are less than clear. Even when state agencies have the lead at NPL sites, state officials believe that oversight tended to take the form of bean counting (e.g., counting activities versus a focus on programmatic results). In addition to this, state officials expressed an interest in becoming more involved in the selection of remedies. All of this indicates that states would like to increase their involvement in the program relative to the regional office. Regional offices, on the other hand, feel their current presence in the program needs to be maintained or even increased.

These issues have acted as barriers not only in the Superfund program, but also in the integration of NEPPS as an approach to implementing environmental policy. Nakamura and Church note the lack of impact Superfund reinvention has had on the perceptions of state officials concerning issues of trust and regional oversight of their programs (Nakamura and Church 2000). These are the same type of issues that also have

slowed the integration of NEPPS by EPA and state officials alike. According to the Office of the Inspector General (EPA 2000b), there has been a lack of commitment to the new approach on the part of the leadership from EPA headquarters. Some regional officials have expressed a lack of trust in not only the mechanisms of the new approach, but in those who would be implementing the programs at the state-level. Many of the advantages of the new approach have also not been adequately communicated to those who would be administering this new approach at the regional and state-level. One state official in the Superfund program expressed the view that NEPPS was good in theory, but did not measure up in practice.

State and EPA regional officials in the Superfund program have very different views of their counterparts' Program Capacity. Regional officials view their capacity as superior, while state officials see theirs as relatively better. While EPA and state officials have engaged in many capacity-building exercises, there is still much doubt on the part of regional officials that state programs have the capability and commitment to successfully manage large and complex cleanups at NPL sites (GAO 1997a; EPA 1998; Markell 1993).⁷ Regional Superfund officials express concern that state programs are not receiving adequate political support from their political sovereigns (see Chapter Five). And even those states seen as having strong programs are viewed with skepticism by regional officials. Their program is either seen as declining or applying most of its effort (commitment) to non-NPL sites, thereby diminishing their efforts at Superfund sites (see Chapter Five).

This continues the controversy over the development of readiness criteria documented by both Markell (1993) and the GAO (1997a). According to Markell, some

EPA regional officials were reticent to grant states authority at NPL sites because of their inability to enforce cleanup standards. The GAO noted that EPA and the states still had not agreed upon the criteria to determine when a state program was capable to lead cleanup activities at NPL sites. Furthermore, the states of Texas and New Hampshire had less cooperative relationships with their respective regional offices due in part to a disagreement over the issue of state program capacity (GAO 1997a). On the other hand, states such as Washington, Minnesota, and Wisconsin have built cooperative relationships with their regions based on their well-developed program capacity (GAO 1997a; Chapter Four).

While regional and state officials share perceptions concerning many of the structural variables in the Model of Cooperative Working Relationships, there are important differences concerning both strategic variables (Trust, Involvement) and program capacity. These differing perceptions have worked to inhibit the policy learning of both state and regional Superfund officials concerning ideas such as differential oversight, joint assessment and evaluation, the continued emphasis on capacity building, as well as the development of readiness criteria (see Figure 7.1). Failure to learn how to use these mechanisms results from the inability of these officials to step beyond their separate policy configurations and promote more cooperative interaction.

While the findings indicate lack of agreement concerning the existence of program-wide cooperation, there are states that have developed more cooperative relationships. Participants in these working relationships have been able to make the mutual adjustments of their perceptions, along with their regional counterparts, necessary to collaborate in the administration of the Superfund program (Termeer and Koppenjan

1997). Both the GAO (1997a) and Silver and Smith (1998) offer some insights as to how states and regional offices can work towards a more cooperative relationship. Of the states studied by the GAO, those that reported a more positive working relationship were able to clarify the roles that each (state and regional office) will play at NPL sites. The states of Washington and Minnesota have written agreements with their regional offices that document the division of responsibility for each of these parties at NPL sites. This helps the regional offices and state programs to step beyond the lead agency-support agency dichotomy that currently exists in the Superfund program (Markell 1993). In turn this leads to an increased sense that the outcomes of the program are shared and there is less competition over who should take credit for program accomplishments. In addition to this, the State of Washington and EPA's Region Ten office have developed a mutual database of sites within their jurisdiction that need to be addressed (Silver and Smith 1998). All of these efforts to build better interpersonal relations have led to increased trust, a more positive view of programmatic involvement by all parties (e.g., differential oversight), and in the end a more cooperative working relationship.

DIRECTIONS FOR FUTURE RESEARCH

This study developed and applied the Model of Cooperative Working Relationships to the examination of the working relationship between EPA regional and state officials charged with implementing the federal Superfund program. However, the approach used here can be used to examine other important relationships beyond the Superfund program and environmental policy. This section will discuss how the Model can be extended in terms of other working relationships, as well as different approaches to the study of public policy in general.

The research into working relationships can be usefully extended beyond the examination of regional and state administrators to other policy actors in the Superfund program. There is no doubt that EPA headquarters has an important impact on how the Superfund program is implemented. Scheberle (1997) notes the different types of roles that headquarters and regional officials play in implementing environmental policy. Given EPA's attempts to reform both Superfund and other environmental policies, it would prove useful to examine how cooperative relationships are between these different types of federal officials.

The implementation of the Superfund program also requires EPA to interact with other federal agencies, as well as private parties (e.g., potentially responsible parties and contractors). Each of these working relationships can be examined in terms of its level of Cooperation and what factors might impact this. As part of the Superfund law, polluting parties are held responsible for either paying for cleanup or performing it themselves. By necessity, EPA must interact with these parties in order to accomplish cleanup. Many times it is the search for these parties and negotiations over cleanup that result in longer cleanup times. Given the complexity and number of cleanups currently underway, EPA contracts with firms in order to accomplish their mandated cleanups (Kettl 1993). Given the litigious nature of the program, the EPA will many times refer enforcement actions to the Department of Justice (Church and Nakamura 1993). EPA also relies on the U.S. Army Corps of Engineers to manage a sizable amount of its contractor spending at NPL sites (GAO 1998f).⁸ All of these different working relationships provide unique insights into how the program functions, which has implications for how successful implementation of the program will be (Cline 2000).

Many state officials in this study commented on the impact that remedial project managers (RPMs) have on their working relationship with their regional counterparts (Chapter Four). RPMs are charged with making important decisions on-site. Many state officials commented on the autonomy of these actors, lack of consistent quality, and their high rate of turnover. State officials differentiated these officials from other regional officials. Examining the quality of interaction between state officials and RPMs could yield another level of insight into working relationships in the Superfund program.

The examination of working relationships between other levels of government can shed light on issues that promote or inhibit cooperation, and thus, implementation success. State and local government relations are one type of relationship that would benefit from more analysis. The growing use of institutional controls as part of selected remedies at Superfund sites reflects the increasing role that local government plays in implementing environmental policy (John 1994; Hersh et al. 1997; Ellison 2001). These institutional controls include such land use regulations as deed restrictions, drinking water permits, and zoning restrictions. These controls are under the jurisdiction of local officials, so with their increasing use, the state-local partnership becomes an important one to focus on to get a complete picture of the implementation of the Superfund program.

Local-local government partnerships are also important in the successful implementation of environmental policy. Ellison (2001) discusses the implementation of the federal Superfund program concerning an NPL site in Jasper County, Missouri. Given the important consequences of this cleanup for economic development, many local governments were involved in the Superfund process.⁹ The Environmental Task Force of

Jasper and Newton Counties was eventually created to deal with all of the inter-jurisdictional issues created by the attempt to implement the remedy at this site (Ellison 2001, 138). According to Ellison (2001, 139):

the environmental task force has developed a planning process that local governments can use to protect public health and the environment within the context of ongoing economic development...the broad goal of the environmental task force is to provide a regional orientation to environmental protection and to significantly improve *intergovernmental coordination and cooperation on this issue* (emphasis added).

Analyzing cooperation among local government actors using the Model of Cooperative Working Relationships could be used to provide insights into the impact that economic development has on the implementation of environmental policy.¹⁰

While it is important to look at different working relationships in the Superfund program and in different policy areas (e.g., economic development), the idea of cooperative working relationships can be used as an explanatory factor for policy results or outcomes (Ringquist 1993a; Bartlett 1994; Behn 1999; EPA 1995a). Bartlett (1994) notes that policy can be evaluated in terms of both process and outcome. In addition to this, Gormley (1987) argues that cooperative relationships are necessary, but not sufficient for 'successful' implementation. One of the principle components of the NEPPS is to shift environmental policy from a focus on simply carrying out activities (agency outputs) and producing a cleaner environment (EPA 1995a; Scheberle 1997). Do cooperative working relationships produce 'better' environmental results (e.g., cleaner air, cleaner water, etc.) or can positive environmental results be achieved by working relationships that are more conflictual in nature? While there are some indications that cooperative relations will produce better results, this still remains an open question, which deserves more attention.

This study of EPA regional and state working relationships has focused on analyzing the level of Cooperation within the Superfund program. However, others have focused their attention on particular regional office – state agency relationships (see Gormley 1992; GAO 1997a; Silver and Smith 1998). While these case studies have produced useful results, they have not focused on the issues raised by the Model of Cooperative Working Relationships (e.g., the impact of both strategic and structural factors on the cooperative nature of intergovernmental relations). By applying the lessons learned in a more systematic fashion to a particular case (e.g., working relationship between a particular regional office and state agency), one can gain a further contextual richness that does not exist at the more general level. This has the potential to allow for a refinement or development of the concepts used in the Model of Cooperative Working Relationships. And in the case of Superfund, one can tighten the focus even more and examine relationships at a particular NPL site. Thus, applying the lessons learned in this study to particular cases can help to further research in the areas of working relationships, environmental federalism, policy implementation, and the development of concepts like Cooperation, Trust and Involvement.

CONCLUSION

No matter how the concept of Cooperation (as developed in this study) and the Model of Cooperative Working Relationships are applied (e.g., different types of working relationships, different policies, as an explanatory variable, or used in case studies), the task of examining the quality of working relationships will remain important. As pointed out by Cline (2000), Stoker (1991), and Gormley (1987), cooperation is the main problem facing those implementing policy today. It is essential for getting beyond the basic

interpersonal conflicts that can disrupt any effort to carry out collective policy action. In order to explain how cooperation can be achieved in light of the conflict of interests that exist in our federal system, it is also important to examine how both strategic (interpersonal and interactive) and structural factors affect these relationships (Stoker 1991). It is only by focusing on cooperation in both its strategic and structural contexts, what Giddens (1984) would call structuration, that beneficial policy outcomes will result from the implementation process.

ENDNOTES FOR CHAPTER 7

1. The argument made in this study follows that of Stoker (1991), Pressman (1975), and Ingram (1977). Even though the states may lack many of the formal powers possessed by the regional offices in negotiations over delegation of authority at NPL sites, they can still be seen as relative equals given formal powers in other statutes, the structure of the intergovernmental system, as well as the necessity of their resources in accomplishing the ends of the program (Stoker 1991). See Endnote #3 in Chapter Five for a fuller discussion of this issue.
2. While Superfund is not formally a part of NEPPS, many of its principle components (e.g., differential oversight and focus on performance/results) have influenced participants in the program. NEPPS has also influenced current initiatives that are specific to the Superfund program (e.g., Superfund reinvention initiatives and the *Plan*).
3. State officials were also influenced by National Political Context in the same manner as they were by State Political Context (less likely to be Highly Cooperative). Thus, one could argue that state officials view political support at the national-level as a resource, which allows state officials to be less cooperative with their regional counterparts. National Political Context did not have a statistically significant impact on the perceptions of regional officials.
4. Several regional officials expressed the sentiment that state legislatures have not supported the activities of their state cleanup programs. This impact has been direct in terms of appropriations for programmatic activities. However, as one regional official pointed out, there have been 'less visible' impacts in terms of rules concerning travel expenditures and acceptance of EPA grants. See Chapter Five for a further discussion of this issue.
5. See Endnote #3.
6. Scheberle (1997) discusses the idea of policy learning. Here she discusses it in the context of "scientific uncertainties about the extent of risk, the best technologies, necessary regulatory structures..." surrounding environmental policies (25). This idea can be applied to intergovernmental relations. Each of the reform efforts is an attempt to respond to changes in the environmental, programmatic, and political realities surrounding the Superfund program. In doing so, they create a new set of rules, tools, and processes for both regional and state officials to 'learn' and utilize. Given the impact these reforms can have on Superfund officials (e.g., changing the way they interact with one another and implement the program), it is important to see how well these reforms

have been integrated, as well as what factors promote/inhibit this integration (Scheberle 1997).

7. Capacity building is an important component of these reforms. Efforts in this area include: performance leadership programs, integrated site management, guidance/support for VCPs, and block grant funding.

8. In FY 1996 and 1997, the U.S. Army Corps of Engineers managed 65 percent of the contractor spending for the Superfund program (GAO 1998f). This makes the Corps the single largest manager of contractor spending for EPA.

9. The governments involved in this process included: Jasper and Newton Counties, City of Joplin, City of Neosho, Webb City, and the City of Carthage (Ellison 2001).

10. One needs look no further than the relationship between the Superfund, Brownfield programs, and voluntary cleanup programs to see the impact of economic development (incentives) on cleanup activities. Both EPA and the states offer financial incentives to those who would cleanup these former industrial sites and put them to economic use. States also use economic incentives to encourage the cleanup of non-NPL sites that qualify for this program (GAO 1997b; 2000b).

APPENDIX A: STATE AGENCY OFFICIALS

As an official responsible for your State's hazardous waste cleanup efforts, part of your duties involve work with Environmental Protection Agency officials. The questions asked should increase our understanding of how the federal and state governments work to clean up hazardous waste sites. This is not a test. There are no wrong answers. All that is wanted is your open and honest assessment of these issues. Your cooperation is greatly appreciated.

An important part of our understanding of hazardous waste cleanups has to do with activities that Agencies undertake. We would like to ask about how these cleanups proceed. (Please circle your response)

- (1) There is a clear division of responsibility for cleanup at NPL sites between your State and the Region Office [Involvement – Roles]
- (2) Your Region Office is reluctant to grant States enhanced responsibility at NPL sites [Involvement – Decentralization]
- (3) Your State should not have an increased role in selecting the remedy to be used at NPL sites [Involvement – Decentralization]
- (4) Your State should be more involved in the project- planning phase of site cleanup efforts [Involvement – Decentralization]
- (5) Your State inconsistently apply their own cleanup standards at hazardous waste sites [Trust – Reliability]
- (6) The current level of EPA oversight is not commensurate your State's capabilities [Involvement – Roles]
- (7) Your Region Office is accountable to your State for the decisions they make at NPL sites [Cooperation – Limits on Opportunistic Behavior]
- (8) Your Region Office seeks meaningful input from you in establishing criteria to assess the readiness for increased cleanup responsibility at NPL sites [Cooperation – Inclusiveness]
- (9) Your Region Office is more interested in enforcing federal regulations than cleaning up sites [Trust – Concern]

(10) When States lead cleanup efforts at NPL sites, EPA's primary role should be to provide resources [Involvement – Roles]

Next, we ask about the decision-making activities that guide the cleanup process. (Please circle your response).

(11) Your State works as a full partner with Region Office officials [Cooperation – Fairness]

(12) Your Region Office is committed to helping you develop a more effective state cleanup program [Trust – Concern]

(13) The EPA has unfairly assessed your State's readiness to assume additional responsibilities at NPL sites [Cooperation – Fairness]

(14) Your Region Office does not use its decision making power to take advantage of your State Agency [Cooperation – Limits on Opportunistic Behavior]

(15) Your Region Office fails to exercise good judgment in making program-related decisions [Trust – Competence]

(16) Your Region Office does not clearly communicate changes in policy guidance to your State Agency [Trust – Openness]

(17) Your Region Office encourages an open dialogue with you about program-related issues [Trust – Openness]

(18) Your Region staff possesses a high degree of program-related expertise [Trust – Competence]

(19) Your Region Office can be depended on to apply federal Superfund program requirements in a predictable manner [Trust – Reliability]

(20) The EPA-State relationship does not foster a mutual understanding of program-related issues [Cooperation – Mutual Development]

(21) The EPA-State relationship fails to integrate national, regional, and state interests into hazardous waste policy [Cooperation – Mutual Development]

(22) The EPA-State relationship is sufficiently flexible to accommodate different perspectives about program-related issues [Cooperation – Inclusiveness]

Personnel at EPA Headquarters also affect how cleanups proceed. Please evaluate your experiences with EPA Headquarters' staff. (Please circle your response).

(23) Your Region Office's staff is more sensitive to the States' perspective than headquarters staff [Relationship with EPA HQ – HQ/Region Competency]

(24) EPA headquarters' staff is more committed than you to the implementation of Superfund [Relationship with EPA HQ – HQ/Region Competency]

(25) EPA headquarters' staff is the primary source of policy innovation in the Superfund program [Relationship with EPA HQ – Policy initiation and leadership]

(26) EPA headquarters' staff does not effectively communicate policy guidance, limiting its leadership capacity [Relationship with EPA HQ – Policy initiation and leadership]

(27) EPA headquarters does not provide adequate technical support to administer the program [Relationship with EPA HQ – Federal resources]

Another important part of the study is the efforts that your State Agency and Region Office make in cleaning up hazardous waste sites. Please indicate your level of satisfaction with the following. (Please circle your response).

(28) Your State program's statutory authority to enforce cleanup decisions at hazardous waste sites [State Agency Program Capacity – Capability]

(29) Your State staff's to run the program [State Agency Program Capacity – Capability]

(30) Availability of State financial resources to run the cleanup program [State Agency Program Capacity – Capability]

(31) Stringency of your State's cleanup standards [State Agency Program Capacity – Capability]

(32) Your State staff's commitment to running the program [State Agency Program Capacity- Commitment]

(33) Your State Agency's willingness to take on additional responsibility at NPL sites [State Agency Program Capacity – Commitment]

(34) Your State program's track record of performance at complex and extensively contaminated sites [State Agency Program Capacity – Outcome]

(35) Your State program's effectiveness [State Agency Program Capacity – Outcome]

Next, we would like to ask about your level of satisfaction with the efforts of your Region Office. How satisfied are you with the following? (Please circle your response).

(36) Funding for your Region Office's Superfund program [Region Office Program Capacity – Capability]

(37) Stringency of cleanup standards applied by your Region staff at sites in your State [Region Office Program Capacity – Capability]

(38) Your Region staff's commitment to implementing the program [Region Office Program Capacity – Commitment]

(39) Your Region staff's efforts at cleaning up hazardous waste sites [Region Office Program Capacity – Outcome]

(40) Your Region staff's track record of performance at complex and extensively contaminated sites [Region Office Program Capacity – Outcome]

The working relationship between State Agency and Region Office personnel does not take place independently of larger political forces. What level of political support for cleaning up hazardous waste sites do you receive from each of the following? (Please circle your response).

(41) The state legislature [State Political Context]

(42) Local government officials [State Political Context]

(43) Environmental groups at the state level [State Political Context]

(44) State citizens [State Political Context]

(45) Congress [National Political Context]

(46) President [National Political Context]

(47) Federal Courts [National Political Context]

(48) Environmental interest groups at the national level [National Political Context]

(49) The general public [National Political Context]

Next, we would like to ask about the problems you encounter cleaning up hazardous waste sites. (Please circle your response).

(50) Abandoned hazardous waste sites do not pose a serious threat to the environment [Nature of the Problem – Environmental...seriousness of the problem]

(51) The NPL is perceived to be an accurate representation of the seriousness of the hazardous waste site problem [Nature of the Problem – Environmental...seriousness of the problem]

(52) A greater acceptance of containment remedies tends to weaken the long-term effectiveness of the site remediation program [Nature of the Problem – Technical]

(53) A greater willingness to consider that sites will be used for future commercial purposes endangers the long-term protection of the environment and public health [Nature of the Problem – Technical]

(54) A strong liability scheme (i.e., strict, joint and several) is needed to enforce private party cleanups [Nature of the Problem – Regulatory/Enforcement style]

(55) Responsible parties should be made to bear as much of the costs and risks associated with cleanup as possible [Nature of the Problem – Regulatory/Enforcement style]

Finally, we would like to ask you a few questions about yourself and your program to help interpret results.

(56) Please provide the name of the agency where you work. [Personal/Socio demographic]

(57) How long have you worked in this agency? [Personal/Socio demographic]

(58) What is the highest level of education you completed? [Personal/Socio demographic]

(59) If you attended college or trade school, what was your field of specialization? [Personal/Socio demographic]

(60) How many non-NPL sites are currently being addressed in your State? [Personal/Socio demographic]

(61) At how many NPL sites does your State agency take lead-agency responsibility? [Personal/Socio demographic]

(62) When cleaning up hazardous waste sites, what is your Region Office's most important priority (goal)? [Personal/Socio demographic]

- Limiting the cost of cleanup
- Timeliness (speed) of cleanup
- Appropriateness of remedy
- Increasing citizen participation
- Other (please specify)

(63) If you could change one thing about your relationship with State Agencies, what would it be? [Personal/Socio demographic]

(64) Would you be willing to talk with us over the phone about issues covered in this questionnaire? [Personal/Socio demographic]

Variable Development

Cooperation Index: Q7, Q8, Q11, Q13, Q20, Q21, Q22. Range: 0-28. Alpha: 0.87.

Low-Moderately Cooperative: Cooperation Index = 0 – 20.

Highly Cooperative: Cooperation Index = 21 – 28.

Trust Index: Q9, Q15, Q16, Q17, Q18, Q19. Range: 0-28. Alpha: 0.87.

Involvement Index: Q2, Q6, Q10. Range: 0-12. Alpha: 0.68.

Relationship with EPA HQ: Q23, Q25, Q26, Q27. Range: 0-16. Alpha: 0.56.

State Agency Program Capacity Index: Q28, Q29, Q31, Q32, Q33, Q34, Q35.
Range: 0-28. Alpha: 0.82.

Region Office Program Capacity Index: Q37, Q38, Q39, Q40. Range: 0-16.
Alpha: 0.86.

State Political Context Index: Q41, Q42, Q43, Q44. Range: 0-16. Alpha: 0.80.

National Political Context (Summed index using the following items to construct a dichotomous variable): Q45, Q46, Q47, Q49. Low (0-10) = 0; High (11-16) = 1.

Nature of the Problem: Q52, Q53, Q54, Q55. Range: 0-16. Alpha: 0.60.

Cover Letter to State Agency Officials

Date

Inside Address
of Respondent

A growing consensus has emerged in recent years among many in Congress, the Environmental Protection Agency (EPA), and state governments that collaborative EPA-State relationships are critical to improving cleanups at abandoned hazardous waste sites. It is the purpose of this study, *The Environmental Protection Agency and the States: Working Relationships in Environmental Federalism*, to examine the factors that impact the quality of these relationships and suggest possible ways to improve them.

These questionnaires are being sent to State officials involved with hazardous waste cleanup programs in all fifty states. As a State official responsible for managing hazardous waste cleanup efforts, you are in a unique position to provide information relevant to the study. You are able to assess the strength and capacity of your State's hazardous waste cleanup effort. You are also able to evaluate the character of your interaction with federal officials. It is important that each questionnaire be returned. This will provide the study with a more complete and representative view of the issues. All of this makes your participation in this study very important.

While your participation is important, it is completely voluntary. It should only take approximately 20-25 minutes to complete the questionnaire. If you consent, there is the possibility of a follow-up telephone interview. While there is a risk of violating confidentiality, you may rest assured that every effort will be made to minimize this risk. The questionnaire has an identification number for administrative purposes only. This is so we may check your name off of the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire or mentioned in the study.

When completed, the research will be made available to interested professionals and academics. If you would like a research summary, just indicate your interest and print your name and address on the back of the envelope. It is hoped that this research will provide you with the benefit of a different, but important, perspective on issues relating to the Superfund program.

Thank you for your cooperation. If you have any questions about the project or the questionnaire, please contact me via e-mail at kcline@lamar.colostate.edu or call me at (970) 493-3196. You may also contact my advisor Professor Charles Davis at (970) 491-6803. Questions about participants' rights may be directed to Celia S. Walker at (970) 491-1563.

Sincerely,

Kurt Cline
PhD Candidate
Department of Political Science
Colorado State University
Fort Collins, CO 80523-1782

APPENDIX B: REGIONAL OFFICE OFFICIALS

As a Regional EPA official responsible hazardous waste cleanup efforts, part of your duties involve work with State environmental officials. The questions asked should increase our understanding of how the federal and state governments work to clean up hazardous waste sites. This is not a test. There are no wrong answers. All that is wanted is your open and honest assessment of these issues. Your cooperation is greatly appreciated.

An important part of our understanding of hazardous waste cleanups has to do with activities that Agencies undertake. We would like to ask about how these cleanups proceed. (Please circle your response)

- (1) There is a clear division of responsibility for cleanup at NPL sites between your Region Office and the States [Involvement – Roles]
- (2) Your Region Office is reluctant to grant States enhanced responsibility at NPL sites [Involvement – Decentralization]
- (3) States should not have an increased role in selecting the remedy to be used at NPL sites [Involvement – Decentralization]
- (4) States should be more involved in the project- planning phase of site cleanup efforts [Involvement – Decentralization]
- (5) States inconsistently apply their own cleanup standards at hazardous waste sites [Trust – Reliability]
- (6) The current level of EPA oversight is not commensurate with States' capabilities [Involvement – Roles]
- (7) Your Region Office is accountable to States for the decisions you make at NPL sites [Cooperation – Limits on Opportunistic Behavior]
- (8) Your Region Office seeks meaningful input from States in establishing criteria to assess the readiness for increased cleanup responsibility at NPL sites [Cooperation – Inclusiveness]
- (9) Your Region Office is more interested in enforcing federal regulations than cleaning up sites [Trust – Concern]

(10) When States lead cleanup efforts at NPL sites, EPA's primary role should be to provide resources [Involvement – Roles]

Next, we ask about the decision-making activities that guide the cleanup process. (Please circle your response).

(11) Your Region Office works as a full partner with State officials [Cooperation – Fairness]

(12) Your Region Office is committed to developing more effective State cleanup programs [Trust – Concern]

(13) The EPA has unfairly assessed the readiness of States to assume additional responsibilities at NPL sites [Cooperation – Fairness]

(14) Your Region Office does not use its decision making power to take advantage of State officials [Cooperation – Limits on Opportunistic Behavior]

(15) Your Region Office fails to exercise good judgment in making program-related decisions [Trust – Competence]

(16) Your Region Office does not clearly communicate changes in policy guidance to state agencies [Trust – Openness]

(17) Your Region Office encourages an open dialogue with State Officials about program-related issues [Trust – Openness]

(18) Your Region staff possesses a high degree of program-related expertise [Trust – Competence]

(19) Your Region Office can be depended on to apply federal Superfund program requirements in a predictable manner [Trust – Reliability]

(20) The EPA-State relationship does not foster a mutual understanding of program-related issues [Cooperation – Mutual Development]

(21) The EPA-State relationship fails to integrate national, regional, and state interests into hazardous waste policy [Cooperation – Mutual Development]

(22) The EPA-State relationship is sufficiently flexible to accommodate different perspectives about program-related issues [Cooperation – Inclusiveness]

Personnel at EPA Headquarters also affect how cleanups proceed. Please evaluate your experiences with EPA Headquarters' staff. (Please circle your response).

(23) Your Region Office's staff is more sensitive to the States' perspective than headquarters staff [Relationship with EPA HQ – HQ/Region Competency]

(24) EPA headquarters' staff is more committed than you to the implementation of Superfund [Relationship with EPA HQ – HQ/Region Competency]

(25) EPA headquarters' staff is the primary source of policy innovation in the Superfund program [Relationship with EPA HQ – Policy initiation and leadership]

(26) EPA headquarters' does not effectively communicate policy guidance, limiting its leadership capacity [Relationship with EPA HQ – Policy initiation and leadership]

(27) EPA headquarters' staff does not provide adequate technical support to administer the program [Relationship with EPA HQ – Federal resources]

Another important part of the study is the efforts that your Region Office and State Agencies make in cleaning up hazardous waste sites. Please indicate your level of satisfaction with the following. (Please circle your response).

(28) Funding for your Region Office's Superfund program [Region Office Program Capacity – Capability]

(29) Stringency of cleanup standards applied by your Region staff at sites in the States [Region Office Program Capacity – Capability]

(30) Your Region staff's commitment to implementing the program [Region Office Program Capacity – Commitment]

(31) Your Region staff's efforts at cleaning up hazardous waste sites [Region Office Program Capacity – Outcome]

(32) Your Region staff's track record of performance at complex and extensively contaminated sites [Region Office Program Capacity – Outcome]

Next, we would like to ask about your level of satisfaction with the efforts of State Agencies. How satisfied are you with the following? (Please circle your response).

(33) Statutory authority of State Agencies to enforce cleanup decisions at hazardous waste sites [State Agency Program Capacity – Capability]

(34) Training of State staff to run the program [State Agency Program Capacity – Capability]

(35) Availability of State financial resources to run the cleanup program [State Agency Program Capacity – Capability]

(36) Stringency of State cleanup standards [State Agency Program Capacity – Capability]

(37) Commitment of State staff to running the program [State Agency Program Capacity-Commitment]

(38) Willingness of State Agencies to take on additional responsibility at NPL sites [State Agency Program Capacity – Commitment]

(39) The track record of State Agency performance at complex and extensively contaminated sites [State Agency Program Capacity – Outcome]

(40) Effectiveness of State programs [State Agency Program Capacity – Outcome]

The working relationship between State Agency and Region Office personnel does not take place independently of larger political forces. What level of political support for cleaning up hazardous waste sites do you receive from each of the following? (Please circle your response).

(41) The state legislature [State Political Context]

(42) Local government officials [State Political Context]

(43) Environmental groups at the state level [State Political Context]

(44) State citizens [State Political Context]

(45) Congress [National Political Context]

(46) President [National Political Context]

(47) Federal Courts [National Political Context]

(48) Environmental interest groups at the national level [National Political Context]

(49) The general public [National Political Context]

Next, we would like to ask about the problems you encounter cleaning up hazardous waste sites. (Please circle your response).

(50) Abandoned hazardous waste sites do not pose a serious threat to the environment [Nature of the Problem – Environmental...seriousness of the problem]

(51) The NPL is perceived to be an accurate representation of the seriousness of the hazardous waste site problem [Nature of the Problem – Environmental...seriousness of the problem]

(52) A greater acceptance of containment remedies tends to weaken the long-term effectiveness of the site remediation program [Nature of the Problem – Technical]

(53) A greater willingness to consider that sites will be used for future commercial purposes endangers the long-term protection of the environment and public health [Nature of the Problem – Technical]

(54) A strong liability scheme (i.e., strict, joint and several) is needed to enforce private party cleanups [Nature of the Problem – Regulatory/Enforcement style]

(55) Responsible parties should be made to bear as much of the costs and risks associated with cleanup as possible [Nature of the Problem – Regulatory/Enforcement style]

Finally, we would like to ask you a few questions about yourself and your program to help interpret results.

(56) Please provide the name of the agency where you work. [Personal/Socio demographic]

(57) How long have you worked in this agency? [Personal/Socio demographic]

(58) What is the highest level of education you completed? [Personal/Socio demographic]

(59) If you attended college or trade school, what was your field of specialization? [Personal/Socio demographic]

(60) Do you work primarily with any State(s) in your Region? [Personal/Socio demographic]

(61) If so, which one(s)? [Personal/Socio demographic]

(62) When cleaning up hazardous waste sites, what is your Region Office's most important priority (goal)? [Personal/Socio demographic]

- Limiting the cost of cleanup
- Timeliness (speed) of cleanup
- Appropriateness of remedy
- Increasing citizen participation
- Other (please specify)

(63) If you could change one thing about your relationship with State Agencies, what would it be? [Personal/Socio demographic]

(64) Would you be willing to talk with us over the phone about issues covered in this questionnaire? [Personal/Socio demographic]

Variable Development

Cooperation Index: Q7, Q8, Q11, Q13, Q20, Q21, Q22. Range: 0-28. Alpha: 0.82.

Low-Moderately Cooperative: Cooperation Index = 0 – 20.

Highly Cooperative: Cooperation Index = 21 – 28.

Trust Index: Q9, Q15, Q16, Q17, Q18, Q19. Range: 0-28. Alpha: 0.76.

Involvement Index: Q3, Q4, Q10. Range: 0-12. Alpha: 0.70.

Relationship with EPA HQ (Summed index using the following items to construct a dichotomous variable): Q23, Q25, Q26, Q27. Low (0-8) = 0; High (9-16) = 1.

Region Office Program Capacity Index: Q29, Q30, Q31, Q32. Range: 0-12. Alpha: 0.76.

State Agency Program Capacity Index: Q33, Q34, Q36, Q37, Q38, Q39, Q40. Range: 0-28. Alpha: 0.79.

State Political Context Index: Q41, Q42, Q43, Q44. Range: 0-16. Alpha: 0.68.

National Political Context Index: Q45, Q46, Q47, Q49. Range: 0-16. Alpha: 0.77.

Nature of the Problem (Summed index using the following items to construct a dichotomous variable): Q52, Q53, Q54, Q55. Low (0-12) = 0; High (13-16) = 1.

Cover Letter for Regional Office Officials

Date

Inside Address
of Respondent

A growing consensus has emerged in recent years among many in Congress, the Environmental Protection Agency (EPA), and state governments that collaborative EPA-State relationships are critical to improving cleanups at abandoned hazardous waste sites. It is the purpose of this study, *The Environmental Protection Agency and the States: Working Relationships in Environmental Federalism*, to examine the factors that impact the quality of these relationships and suggest possible ways to improve them.

These questionnaires are being sent to EPA Region officials involved in the federal Superfund program in all ten federal regions. As a Region official responsible for administering hazardous waste cleanup efforts, you are in a unique position to provide information relevant to this study. You are able to evaluate the character of your interaction with state officials. You are also able to assess the strength and capacity of your Region's cleanup effort. It is important that each questionnaire be returned. This will provide the study with a more complete and representative view of the issues. All of this makes your participation in this study very important.

While your participation is important, it is completely voluntary. It should only take approximately 20-25 minutes to complete the questionnaire. If you consent, there is the possibility of a follow-up telephone interview. While there is a risk of violating confidentiality, you may rest assured that every effort will be made to minimize this risk. The questionnaire has an identification number for administrative purposes only. This is so we may check your name off of the mailing list when your questionnaire is returned. Your name will never be placed on the questionnaire or mentioned in the study.

When completed, the research will be made available to interested professionals and academics. If you would like a research summary, just indicate your interest and print your name and address on the back of the envelope. It is hoped that this research will provide you with the benefit of a different, but important, perspective on issues relating to the Superfund program.

Thank you for your cooperation. If you have any questions about the project or the questionnaire, please contact me via e-mail at kcline@lamar.colostate.edu or call me at (970) 493-3196. You may also contact my advisor Professor Charles Davis at (970) 491-6803. Questions about participants' rights may be directed to Celia S. Walker at (970) 491-1563.

Sincerely,

Kurt Cline
PhD Candidate
Department of Political Science
Colorado State University
Fort Collins, CO 80523-1782

APPENDIX C: Scale/Variable Development for the Combined REGIONAL/STATE Dataset

* Refer to the numbering system for questionnaires items from Appendix B (Regional Office Dataset).

Variable Development

Cooperation Index: Q7, Q8, Q11, Q13, Q20, Q21, Q22. Range: 0-28. Alpha: 0.87.

Trust Index: Q9, Q15, Q16, Q17, Q18, Q19. Range: 0-28. Alpha: 0.89.

Involvement Index: Q2, Q4, Q6, Q10. Range: 0-16. Alpha: 0.60.

Relationship with EPA HQ (Summed index using the following items to construct a dichotomous variable): Q23, Q25, Q26, Q27. Low (0-8) = 0; High (9-16) = 1.

Region Office Program Capacity Index: Q29, Q30, Q31, Q32. Range: 0-16. Alpha: 0.89.

State Agency Program Capacity Index: Q33, Q34, Q36, Q37, Q38, Q39, Q40. Range: 0-28. Alpha: 0.85.

State Political Context Index: Q41, Q42, Q43, Q44. Range: 0-16. Alpha: 0.76.

National Political Context Index: Q45, Q46, Q47, Q49. Range: 0-16. Alpha: 0.61.

Nature of the Problem (Summed index using the following items to construct a dichotomous variable): Q52, Q53, Q54, Q55. Low (0-11) = 0; High (12-16) = 1.

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