

Flexibility with Accountability: An Experiment in Environmental Governance

by

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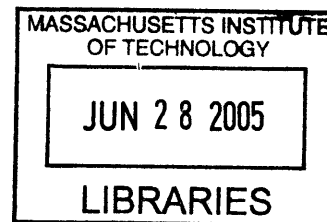
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Abstract

Command and control environmental regulation has been under attack from all sides for some time. In Wisconsin, the Department of Natural Resources is experimenting with an alternative form of environmental governance. This new program uses cooperative agreements to provide flexibility to firms in exchange for “superior environmental performance.” The program attempts to change norms of adversarial and rule driven regulation, to norms of cooperative and flexible regulation. To maintain democratic accountability, firms that take part in the program are required to create a group of interested community participants. This thesis explores regulatory relationships within this program and under command and control through three case studies. These case studies reveal that flexibility can provide opportunity for greater environmental performance and that bottom up participation can provide a measure of democratic accountability. However, this democratic accountability was compromised by lack of access to expertise among participants, lack of clarity in roles, and difficulty handling conflict. The difficulties faced in this program highlight the need for the state to take a proactive role even when moving away from command and control. Nevertheless, these cases show potential for a shift towards cooperation in regulation through opening spaces for firms, regulators, and communities, to engage in deliberation.

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Chapter 1: Introduction

This thesis is an exploration of an experiment in environmental regulation. I start off from the premise that there are problems with hierarchical forms of public administration based on scientific implementation of rules—in other words Weberian bureaucracy. The rules of bureaucracy have proven too rigid for effective application in complex settings, such as environmental regulation. However, bureaucracies create an elegant solution to problems of legitimacy and accountability in democratic states. The myth that bureaucrats merely execute the rules of a popularly elected legislature is easy to understand and, on the surface, very attractive. Nevertheless, it is a myth. Bureaucrats have tremendous discretion, which is essential for them to do their job, and is not readily linked back to mechanisms for consent from the public. Moreover, bureaucracies are seen as inefficient, ineffective, and at worst sometimes perverse, in their implementation of public policies—this is largely attributed to the stringency of rules. Efforts to reform administration, however, do not share the myth of democratic legitimacy. This makes reform difficult, especially in adversarial policy areas that are characterized by a high level of distrust. New institutions have to find new ways of building democratic legitimacy.

Efforts aimed at reforming the administrative state appear to be promising. I am especially interested in two brands of deep reform. One is a move towards more collaborative, or cooperative governance. These reforms respond to the adversarial nature of practice in the hope that more collaboration will lead to more effective policy implementation. However, by changing the nature of practice, they are subject to criticisms of their legitimacy. The other reform that I am interested in is directly deliberative democracy—democratic arrangements in which reasoned debate help shape policies. Institutions that create a space for bottom up participation with a

deliberative character have the potential to build legitimacy and to increase the effectiveness of cooperative governance arrangements. This reform goes down into the roots of democracy, tying theoretical conceptions for building democratic legitimacy to tangible institutions in practice. These two responses are not mutually exclusive, indeed, they are often mutually supportive.

Much theoretical work has been done critiquing bureaucracy and proposing solutions for reform. However, there is a dearth of empirical research describing how reform actually looks in practice at the nexus of state and society. Motivated by the promise of theories of deliberative democracy and new institutional arrangements, I examine a reform that embodies many of the elements called for by theorists in practice. My hope is that by examining the details of practice, I can shed some light on the potential promise of the theory. The practice that I turn to is environmental regulation. I do so because I have a substantive and normative interest in environmental protection and because it is quite possible that environmental regulation has the greatest difficulties implementing new models of governance. In addition, I select environmental regulation because it is here that experiments are underway that may provide insight into some of the puzzles raised by theorists. These experiments do not necessarily originate from the theoretical discussion above—the particular change in practice I investigate came from practitioners and politicians. Nevertheless, they provide fertile ground for theoretical exploration combined with matters of substantial policy importance.

To unpack these ideas, it is useful to introduce the cases that drive my analysis. The first is a familiar story. It surrounds a factory, let's call it Acme Metals, in an urban area that does not get along with its neighbors. Acme Metals is located in a dense neighborhood, with homes nearly pressing against the factory walls. Although accounts differ, all sides say the problems between Acme and the community really got bad in the early 1990's. Even though the firm had been in the

same place for 100 years, some combination of a change in their activities and the composition of the neighborhood set off explosive relations. At the time of the study, local community groups did not trust the company, and many wanted Acme out of their neighborhood no matter what. Nor did many in the community trust the regulators, who appeared inept in protecting their health and safety. On the other side of the fence, the company resented the community and saw it as an “emotional” and irrational nuisance that was bad for business and for protecting the environment. Even if they wanted to move to a cleaner process, community protest would make any changes to their environmental permits difficult. The regulators were stuck in the middle. They sympathized with the community’s complaints, but their hands were tied by law. Discretion only allowed them to go so far. They wanted the company to be a good actor, but did not want to appear to be giving them free consultancy in the politically heated environment. No one was happy—ways to protect the environment were stifled, public confidence was shot, government resources were wasted, and business suffered.

However, this is not wholly a bad story. The company has, it seems, attempted to make environmental improvements. While it is difficult to gauge the reasons for this, it is clearly a departure from past practice. Also, the intensity of conflict has made many in the community more aware of the pollution in their backyards. However, the amount of resources spent by the company, the community, and the government to achieve small gains is tremendous. Lawsuits, challenges, and in-depth health studies are costly and time consuming to all. This story is emblematic of the perceived failures of bureaucratic public administration. It is rife with examples of high costs at achieving modest environmental protection, a lack of accountability in the regulatory regime, and the inability of networks of actors to work together to solve problems.

The second story highlights the difficulties and promises of reform. Through a program in Wisconsin, commonly called Green Tier, a polymer manufacturer called Cook Composites and Polymers, entered into a cooperative agreement with Wisconsin's Department of Natural Resources (DNR). By entering into a binding, but voluntary contract, Cook secured flexibility from permitting requirements and decreased response times from DNR on applications for changes. Further, DNR committed to work collaboratively with Cook to address problems. In return, Cook agreed to go beyond the minimum of compliance and exhibit 'superior environmental performance.' In addition, Cook convened a group of interested persons, made up mostly of neighbors and local officials, to discuss the cooperative agreement and provide input. With public involvement, reform became a bit more difficult. One neighbor, and former employee of Cook, complained that it was all a sham. He asserted that Cook had effectively ducked out of regulatory requirements without exhibiting superior environmental performance. The agreement, he asserted, would hurt the environment more than help it and he stopped participating. This neighbor, a member of the Sierra Club, complained to the head of his state chapter, and the Sierra Club publicly opposed the cooperative agreement. Perceptions of the ending of this persons participation differ dramatically. Some claim that he has given up after making irrational demands and that DNR made every effort insure that he continued to participate. Others feel that he was effectively marginalized by DNR and Cook after he tried to expose the flaws in the agreement. The agreement has gone on, and many in the community feel that the environment is cleaner, Cook is more responsive to their needs, and that DNR is doing an effective job. Reports from Cook indicate that they have significantly reduced some pollutants and have saved significant amounts of money in some parts of their operation. However, the difficulties involving the public continue. After years of meetings, participation is waning, and some participants are not sure how

much longer the interested persons group will be able to continue. The agreement has been lauded as a success, but many questions have arisen about the nature of the participation and the actual gains to the environment and economy.

The third story highlights other problems and successes of reform. Madison Gas and Electric (MGE), a utility in Madison Wisconsin, also entered into a cooperative agreement. Through this agreement, MGE was able to gain regulatory flexibility, allowing it burn "paper derived fuel" (PDF), a substitute for coal, at a higher level than would have been allowed without significant administrative costs. This is reported to have significant environmental benefits by reducing air pollution overall, preventing materials from being land filled, and offsetting coal use. In addition, both MGE and DNR have developed a better working relationship, saving time, and therefore, money. Also, unlike the Cook case, there is near consensus from an active stakeholder group that this agreement has been beneficial. Participants are not complacent, they subject MGE and DNR to tough questions. Further, none of the participants are quitting participation in protest. However, this story is not without challenges. Difficulties in evaluating the performance of the agreement have led to questions about its value. This difficulty in evaluating gains from the agreement should not be underestimated. It has the potential to derail the entire process, even though to date this has not happened. The future looks promising for this agreement, and it has accomplished much along the way, but challenges in addition to the ones listed above need to be overcome.

These are just brief sketches of three cases that will be explored in this thesis. They will be described in much more detail below, and will drive the analysis of theory. Nevertheless, these short narratives illustrate some of the problems that reforms are trying to solve and some of the problems that need to be overcome. Is there a way to get past the problems of prescribed

adversarial regulation and still maintain accountability and legitimacy? This, and other puzzles of reform will be raised in the next section.

1.1 *The Puzzles*

The main puzzles of this thesis are separated into two overlapping problems: performance accountability trade-offs in alternatives to bureaucratic forms of public administration and challenges of changing the character of interactions among actors to make them more legitimate and effective. Each of these overlapping puzzles will be dealt with in turn.

The first puzzle was introduced in the opening paragraph. The bureaucratic and hierarchical model of public administration is out of favor (Kelly 2004, Freeman J 1997). This is especially the case in the regulatory arena, in which the phrase “command and control” has almost become pejorative. There is a renewed notion that bureaucratic institutions do not perform well in highly complex settings. This near consensus will be formally addressed in the next chapter, but for now it is only important to recognize that critiques of bureaucratic forms of administration provide an opening for new institutional forms of public administration. These come in various shapes and sizes, and are usually accompanied with buzz words such as collaboration, innovation, and performance, which are seen to some as common sense improvements. It is hard to take a position against innovation. The question that remains is how innovative, collaborative, and performance based governance institutions work in practice. Citing a recent effort at collaborative governance, Melissa Scanlon the director and founder of Midwest Environmental Advocates describes what she perceives as a gap between theory and practice, and some of its problems:

“The foundries got together with the DNR to talk about innovative solutions, environmental management systems, and ways to create these continual feedback

loops for reducing pollution, which sound really great in theory. But once you get into the nuts and bolts of how this plays out, which most people don't do because it takes time and you have to be there, you see that the theory does not match the reality...I'm not optimistic about people who are working for the DNR being disciplined enough to actually protect public health and public air and water resources to make sure that these companies are going beyond the standards, that we are not lowering the bar."

As governance systems move toward new practices that attempt to respond to some of the problems of the process and rules centered administration, there are inevitable problems of accountability and legitimacy that emerge. The puzzle is: How to increase the flexibility and engender cooperation without losing accountability and legitimacy?

The second puzzle is related to a proposed solution to the preceding one. Democracy has been advocated by theorists as a potential way to improve both the legitimacy and the performance of institutions. In this use, democracy is a reform strategy in of itself (Fung and Wright 2003). The subset of forms of democratic institutions that I focus on is called deliberative democracy, which can be defined, at a general level, as "an association whose affairs are governed by the public deliberation of its members" (Cohen 1997, p 65). The hope is that decisions that are made after reasoned discussion will generate policies that more effectively achieve the desired ends of the participants. Also, the hope is that through deliberation, the legitimacy of these policies will be "thicker" (Hunold 2001). Deliberative democracy, therefore, has the potential to help solve the puzzle presented above. By increasing legitimacy and the democratic nature of administrative decision making, deliberative institutions can help flexible regimes create their own legitimacy. Further, by providing more reasoned policy decisions, deliberative institutions have the potential to better address policy problems in a highly uncertain world of risk. However, deliberative democracy is not without its own problems. Types of institutional arrangements that provide for deliberative democracy while satisfying demands for

broadly democratic decision making are still elusive. In addition, the technical nature of environmental governance provides an additional barrier to deliberative arrangements that involve the lay public. Therefore, the final puzzle is: How can institutional arrangements of deliberative democracy retain their benefits of more effective and more legitimate governance without resulting in exacerbated political inequalities and parochialism?

These brief sketches outline the puzzles that this thesis focuses on. My goal is not to provide answers to these questions, that would be well beyond the scope of my project. My goal is to see how attempts to solve these problems have worked in practice, how those involved in reform have responded to them, and through this to further refine proposed answers to these questions.

1.2 Green Tier

In this section, I provide a brief overview of Green Tier. This is meant to lay the foundation for further discussion and analysis of the cases, and will be further elaborated in the chapter on the politics of Green Tier. The Environmental Cooperation Pilot Program, which is a precursor the Green Tier law, is the focus of this thesis. In 1997, the program allowed DNR to enter into ten cooperative agreement with companies over a five year period. In the spring of 2004, Green Tier legislation was passed that extended this pilot by creating a similar full scale program. Due to the nascent nature of the Green Tier law, I focus on the Environmental Cooperation Pilot Program, and refer to the general effort of reform simply as 'Green Tier.'

First, Green Tier is exactly as its name suggests, a tier. In order to participate in Green Tier, companies must be 'good actors' with clean compliance histories. Although there can be a range of the types of actors that can be involved, the cases I explore involve companies that applied to DNR to participate in the program. Through this process, DNR and the company negotiate a

cooperative agreement that becomes a contract with DNR. Through these contracts DNR is allowed by law to provide flexibility to companies from regulatory burdens so long as they maintain environmental standards and require companies to achieve superior environmental performance. In addition, there is a legal requirement to allow for participation by ‘interested persons’ and reporting requirements for increased transparency.¹ This lays out the basics of Green Tier, more detail will be provided throughout, especially in discussion of the politics of Green Tier and the actual cases.

1.3 Methodology

This thesis uses detailed case studies to contribute to the development of theory. The case method allows me to add empirical richness to the understanding of public administration and deliberative democracy. I need to make one disclaimer up front to ensure that one limitation of my methodology is clear. The data collection that I undertook to develop my cases only provided a snapshot in time of the evolving practice of governance. Green Tier, however, is very much still developing. I could not chart this development overtime, because I had short period of time in which to collect data. Problems that I identify in Green Tier may, or may not, be due to growing pains of the program. Indeed, some difficulties exist because changes have been to some parts of regulatory system without complementary changes in other parts, or by other actors. The snapshots of the operation of the program at one particular point in development do provide clues about the direction of change. One should not be quick to judge the entirety of the reform effort

¹ This is one of the elements that has shifted from the pilot program to the law. The pilot program places more of an emphasis on participation than the Green Tier law does. However, this does not effect my analysis because I stay solely within the context of the pilot program.

on events that are either encouraging or discouraging in of themselves, but should use the cases as points along a curve that could go up or down as time progresses.

The three case studies were all selected within one institutional and geographic context: environmental regulation in Wisconsin. This context is important for a number of reasons. First, this is where experimentation is happening. By looking to the outer edges of experimentation, it is possible to glimpse into the promises and challenges of new forms of institutions. Green Tier provides such a glimpse. Second, the nature of environmental problems and politics in the U.S. make it exceedingly difficult for new forms of public administration and deliberation to work. Environmental regulation is full of distrust and adversarial relationships. Indeed, it is adversarial by design. On one hand, environmentalists have little faith that industry will safeguard public goods. On the other hand, industry reacts skeptically to environmentalists' demands and the (often disputed) science on which they are based. As a result, regulatory institutions are designed to prevent capture and have predictable outcomes—and in turn, are highly inflexible (Eisner 2004). This causes difficulty when implementing cooperative programs that need trust among participants to work well. Further, the technical aspect of environmental problems makes expertise extremely valuable. This puts a strain on deliberation by exacerbating the problems of inequalities due to the distribution of capabilities of parties to articulate their views. Moreover, the geographic scale of environmental problems is generally large and local at the same time. For example, power plants have a number of local impacts—noise, smog, to name two—that are local, as well as global impacts, such as contributing to global warming. Therefore, directly democratic institutions, which necessarily involve a subset of the population, are challenged to meet requirements for broad and representative public involvement. For these reasons, environmental regulation

provides a fruitful context to examine innovation under difficult circumstances. If it works here, it has a shot of working in many other contexts that are much less laden with challenges.

Within the context of regulation, three cases were selected to provide sufficient variation in experiences, while not over extending the number and thereby thinning out the description. It is in thick description of practice that I believe I will be able to contribute to the understanding of new institutional arrangements. The first case described in depth, Acme Metals, was selected because it is a rich case of command and control. Many criticisms of the “old” way of public administration treat adversarial and bureaucratized regulation as a straw man. I believe that this has two failings. One, it results in critiques that reify the a complex and varied set of institutions, commonly called command and control, sufficiently to make comparison between the old and the new impossible. Second, it obscures important features of the “old” way that one may want to retain as one advocates for reform. Acme Metals provides an example of what happens when one particular set of actors working in the command and control system are under tremendous stress. It provides a contrast, without reducing the complexity of the institutions, to the other two cases, which have many features that are not normally part of command and control.

The second case presented in detail is Cook Composites and Polymers. This case was selected because it is one of two (MGE being the other) cooperative agreements in the pilot program that had substantial participation from the community. Also, this case is touted as being an example of success by many in DNR. This provides an opportunity to understand what happens in practice when—in the view of some of the key actors—things go right, and to see challenges that remain. Moreover, this case is useful because of its context. Cook is located in a small town north of Milwaukee. The population around the town is described by participants in the agreement as “blue collar.” Finally, this case is important because of the types of participants

from the community, which consists of neighbors, officials from local government, and local businesspeople. This context differs substantially from the third case, offering variation and further extending the breadth of contexts to which I can make claims about the plausibility of the creation of this new type of institution.

The third case presented in detail provides a contextual contrast to the Cook case. Madison Gas and Electric is located in the heart of Madison, and is quite different than the community around Cook Composites. Madison is, relatively, more wealthy more cosmopolitan. Like Cook, this case had substantial community involvement, and therefore, provides a second example of a cooperative agreement with community involvement. One difference, however, is that the community involvement is structured in an associative fashion. Participants “represent” different interest groups in society through their secondary associations, providing a useful contrast to the Cook case.

The primary method of data collection for this thesis were semi-structured interviews. Interviews, ranging from a half hour to an hour and a half were conducted with 36 respondents. Most interviews were conducted in person, and the remainder were conducted over the phone. All but one of the interviews were recorded and transcribed. The one exception was to ensure the presence of a tape recorder would not impact the responses at this particularly sensitive interview. A list of interviews is provided in the appendix.

Respondent selection was based on a number of criteria. First, respondents in the cases were from the regulated companies, regulators, and the communities. This provided a view from the three major categories of actors in each agreement. Within these categories, I did not have a large group to choose from. For the two cases with cooperative agreements, I contacted the facilitating company to obtain contact information of the participants. The company

representatives sent an email to participants asking people if they would be willing to be contacted by me. For the MGE case, I interviewed all four participants that agreed to be contacted by me. In the Cook case, I attempted to interview all eight of the participants who indicated they were willing to talk with me, but in the end I was only able to interview five of them. From the community, it is possible that I spoke with an extreme set of voices, those who were highly opinionated one way or the other, and therefore, were willing to share their opinion with an outside researcher. Nothing about their responses, however, indicated that this was the case. For the Acme Metals case, community participants were selected based on consensus from a number of participants as to which community organizations were most involved in the controversies surrounding Acme Metals. This was confirmed by newspapers and other primary sources. I contacted two of the community groups, and interviewed representatives from each group.

For DNR, officials were selected that were most involved in each case, and available to meet. For the MGE and Cook cases, officials were selected who were the point person for the case, or had been for a long period of time. For the Acme Metals case, the officials in charge of Acme's air permit were interviewed because, according to managers at DNR, they had the most experience dealing with Acme Metals and the community.

Officials from each company were selected by discussing with other participants which officials were most involved in environmental regulation. For the MGE case, I interviewed the Senior Director Safety and Environmental Affairs. For the Cook case, interviews were conducted with the Plant Manager, the Director of Quality, Safety and Environment, the facilitator of the meetings, and the Director of Coatings Manufacturing. For the Acme case, I interviewed the Environmental Engineer and the head of Public Relations.

In order to understand the political context and history of Green Tier, I interviewed politicians, DNR officials, and representatives from NGO's that were not directly tied to a single case. Selection was initially based upon advice from DNR officials, and respondents were added as they were identified in interviews. I explicitly sought out differing opinions about the Green Tier and DNR. Due to time constraints, I was not able to interview all of the actors that have been involved in the politics of environmental regulation in Wisconsin. I did, however, manage to talk with a cross section of interest groups that provided a similar range of views as I was able to identify using other sources.

I triangulated the interviews using primary and secondary documentation. For each case, I used, among other things, minutes of meetings, reports, newspaper articles, and the text of the cooperative agreements. These data verified my sample of respondents, indicating which, if any, people or groups had been left out.

A note about confidentiality. At the request of the participants, Acme Metals case is identified by a false name. All participants in this case remain anonymous; I only use their type of institutional affiliation. Further, all respondents remain confidential unless they consented otherwise. Lastly, even if a respondent agreed to be quoted, if I felt the information was likely to cause harm to the respondent in any way, or if it was unnecessary to include the person's name, I did not include a name with the quote.

Chapter 2: Institutional Forms

In the introduction, I outlined two puzzles that are at the heart of this thesis. These puzzles relate to challenges that institutions face in maintaining democratic legitimacy and engendering deliberation. In this section, I will place these puzzles within the context of the literature. This will help define the ideas on which I base my analysis, and will help illustrate some of the relevant debates into which my work can, hopefully, contribute. It will also situate these larger problems in the context of environmental regulation.

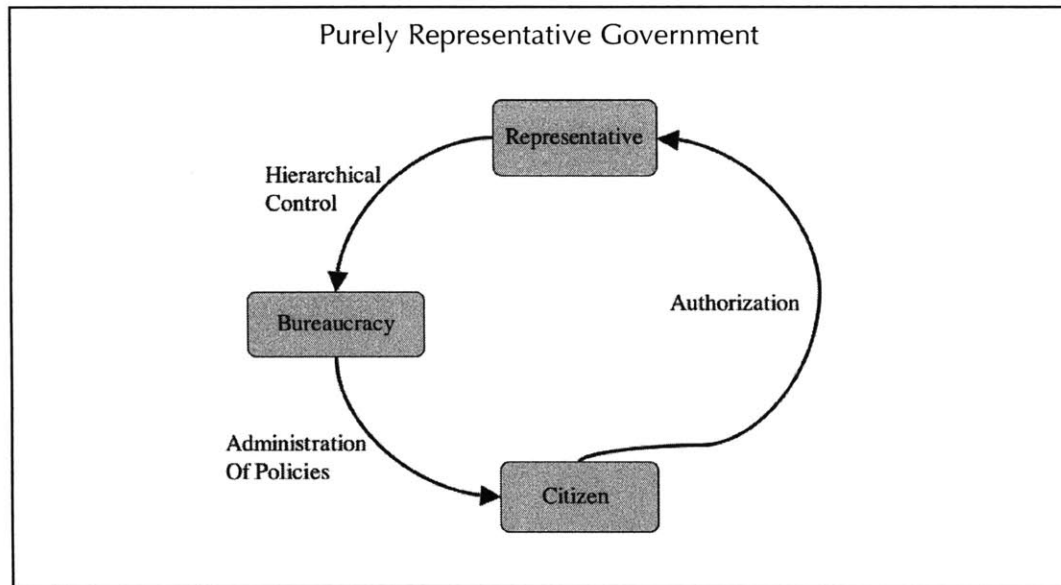
2.1 Administration and Regulation

This section outlines the shifts in organizational forms and democratic accountability which have occurred. My goal is to describe the bureaucratic organization in relation to environmental regulation, and to look at some salient critiques. Then, I will discuss new metaphors and institutional models to lay the foundation for a discussion of reform.

2.1.1 Bureaucracy and Hierarchical Accountability

The classic model for understanding administrative accountability in a representative democracy is bureaucracy. In the bureaucratic model, politicians sit on top of a hierarchy and create rules for specialized administrators to carry out. Weber describes the advantages of bureaucracy stating: "Precision, speed, unambiguity,...continuity, discretion, strict subordination, reduction of friction and of material and personal costs—these are raised to the optimal point in a strictly bureaucratic administration" (Weber 1958, p. 214). This is an essentially Fordist approach that stresses the importance of ignorant specialization with centralized intelligence (Ansell 2000). Representative democracy centralizes power and relies on hierarchy to implement policy on the

ground. Due largely to the way authorization is given to in representative democracy, accountability flows and authority flow down from the representative to the street level bureaucrat. One way of describing the design of this aspect of the institution is to examine it from the citizen's point of view. In representative democracy, the norm is that a citizen votes for her representative,



who then makes laws and rules. The representatives then appoint administrators who, in turn, hire bureaucrats to enforce the rules. Therefore, the citizen gives her consent through a vote to her representative and then is governed by a bureaucrat that is separated through the chain of hierarchy from the representative.

The democratic accountability under command and control rests in the consent that is given to political leaders who create the rules and manage the agents who enforce the rules. It is assumed in this model that discretion is constrained, that the bureaucracy is neutral and reactive, and that relationships with those outside the bureaucracy are adversarial (Freeman J, 1997). For the chain of command to work, there has to be strong hierarchical control from the representative at the top to the bureaucrat at the bottom. Therefore, hierarchy is a central aspect of the design of representative democratic organizations. It is through hierarchy that authority is transmitted to

bureaucrats and learning takes place. However, it is important to note that there are exceptional circumstances in which citizens intervene, such as through protest or lawsuits and there are limits to this system, such as civil liberties that are protected by an insulated constitution. Nevertheless, in the model described above, voting is the primary means of consent.

Environmental regulation in the U.S. embodies this institutional logic as a hierarchical “command and control” regime. Command and control regulation, which clearly fits within the bureaucratic model, at a general level is carried out in four steps. First, rules for each source of pollution are determined by legislators or bureaucrats controlled by elected officials. These rules can specify actions that must be taken by the sources of pollution, such as limits in the amount of chemical released, use of pollution control technologies, and measurement of the amount of a chemical released into the environment. The second step is to establish penalties for non-compliance. Third, is to monitor compliance with the rules. And fourth is to punish those who violate the rules (Freeman A, 1997). Fitting within the representative democratic system, democratic accountability is achieved through two means. One is the hierarchy of government agencies implementing laws, which is ultimately accountable to the executive. The second is the legislature that creates the laws. The laws may be outlines for procedures to create the actual rules of regulation, or may be the substance of the rules themselves. Of course this is a stylized view, but it provides a basic understanding of the baseline from which change is occurring.

The bureaucratic model is fraught with problems. It is subject to tremendous criticism, and even claims that the administrative state is ossified (Kelly 2004; Freeman J, 1997). It is not necessary to go into detail on all of the criticisms of bureaucracy and the administrative state that uses the bureaucratic model. The two that are most important for this analysis are the discretion of street level bureaucrats and inefficiencies of standardized rules. Street-level bureaucrats have

considerable discretion, especially when the rules of bureaucracy cannot specify all possible situations (Wilson 1978). This can undermine hierarchical control in the bureaucracy, and thereby, decrease accountability. However, if one standardizes rules for street level bureaucrats, performance decreases because the rules cannot dictate the proper response for all situations. As government grows larger, the chain of command from elected officials to agents on the ground grows longer, eroding legitimacy of government action even further (Behn 2001). In large-scale agencies, such as those that oversee environmental regulation in the U.S., there are limits to the accountability of bureaucracies.

For my analysis, I focus on regulatory agencies, for which command and control regulation is the embodiment of the bureaucratic form. In the 1990s, there was criticism that command and control regulation does not work. These criticisms included: the volume and complexity of regulation is overwhelming and costly, often the costs outweigh the benefits, regulations are inflexible, there is an irrational distribution of attention to meaningless issues, market forces are ignored, and there are not measurable results (Sparrow 2000). The environmental arena did not escape these criticisms. There is nearly a consensus that things need to be changed, the question is how (Durant 2004). There are four critiques of the “first generation” of environmental laws, which embody the command and control approach. First, they are inappropriate for addressing problems caused by diverse “non-point” sources and they engender media shifts. In other words, they only address large, easily identifiable sources of pollution, and at times cause pollution to be shifted from air to land, or land to water, and so on. The second critique is that they discourage innovation and collaboration. The third is that they are too adversarial and not deliberative, therefore, they do not engender social learning. Fourth, is that the one way flows of information and expertise cause civic capacity to atrophy (Durant 2004). This view is shared to some degree

on both sides of the issue. For environmentalists, command and control is seen as limiting potential improvements to environmental quality. For industry, command and control is not cost effective; by mandating certain technologies command and control does not allow firms to find innovative ways to comply with regulations at lower costs. In response to these criticisms, reforms attempt to build institutions that allow for flexibility when it can save costs without having adverse impacts on the environment, and to provide incentives for firms to go beyond the minimum compliance.

It is important to note, however, that there are benefits to command and control in terms of democratic accountability. The structured rules of command and control provide a clear way for those in civil society and above on the hierarchy of the regulatory bureaucracy, to hold regulators accountable. There are structured and clear access point for members of the public and civil society to have voice in the process of regulation. On the other end, there is a degree of legislative and executive oversight. Finally, the judicial system can be used as a tool to push regulators to follow the law. As the system is reformed, the game changes, and opportunities for environmental groups and senior managers in the bureaucracy to influence outcomes are lost. This can be good or bad, depending on the perspective one holds. For reform to work, it has to maintain some of the positive aspects of command and control while minimizing the negative aspects.

Also, command and control has much legitimacy as an organizational form. Legitimacy can come in three forms—pragmatic, moral, and cognitive (Suchman 1995). Pragmatic legitimacy is exchanged based—audiences see tangible benefits from an organization, and therefore, find it legitimate. Moral legitimacy rests on normative evaluations by an audience that an organization does the right thing. Cognitive legitimacy is based on the ability for audiences to understand an organization (Suchman 1995).

Using this typology, we are able to quickly describe how command and control can be seen as legitimate. From some perspectives, command and control leads to favorable outcomes. For example, to some environmental activists, command and control has rules that they can use to ensure that the government takes minimum steps to protect the environment. For this audience, command and control has pragmatic legitimacy. However, using pragmatic legitimacy, it is also possible to see that as command and control leads to outcomes that are perceived as negative for some audiences, its legitimacy will erode. Command and control also maintains moral legitimacy for those who see it as a system to penalize polluters for harming the environment. From this view, command and control does the right thing when it fines firms that break the law. Finally, command and control has cognitive legitimacy because it is easy to understand. As described above, it involves the creation and enforcement of rules within the structures of a representative democracy. Also, it is (relatively) easy to find out what the rules are, and how they should be enforced.

2.1.2 Shifting Metaphors: Governance and Networks

Not only are bureaucratic institutions limited, but the hierarchy as a model for describing accountability also has limitations. In modern public administration in the U.S., three non-bureaucratic types of accountability have been identified. One is legal accountability, in which parties are held accountable to laws through the court system. Another is political accountability, in which political pressure is put on parties from outside the hierarchy. A third is professional accountability, in which informal norms are imposed on professional government administrators by their peers (Romzek and Dubnick 1987). With a multiplicity of forms of democratic accountability, there is need for a more general model. One proposed model is “360 degree accountability,” in which all administrators (or people in any position) are accountable to those on

all sides of them— up and down hierarchies, and inside and outside formal organizations (Behn 2001). Building on this conception of accountability, I define accountability as a network of expectations, monitoring, and consequences. Using this model, actors have expectations of action for other actors. Each actor monitors compliance with the actions that they expect, and creates consequences for failure to comply with these expectations. Like the 360-degree model, accountability can move up, down, and across hierarchies. Further, the network model situates actors within multiple accountability relationships. Managers in firms are accountable to the shareholders, the state, the firm's neighbors, and so on. Members of the public hold the state accountable but are also held accountable by the state, which can expect the public participate in the production of public goods. The state, as always, is accountable to the public, but it can also ask the public to contribute to efforts.

In the network model, the democratic aspect of democratic accountability comes through actors who are given power directly through a democratic process. These can be elected officials, or citizen participants in public processes. In environmental regulation, the path of democratic accountability in the network is through the hierarchy of the bureaucracies to elected officials. Using a network model of accountability, it is possible to also tie the democratic aspect of accountability to other nodes.

In addition to the shift to a network model from a hierarchical model, there is a shift from government to governance. Governance breaks down the state and society dichotomy; it involves cooperation across the state and society, and across territorial jurisdictional and hierarchical boundaries within the state (Papadopoulos 2003). It demands of unlearning some of the assumptions that underlay the bureaucratic rationality discussed above (Hajer and Wagenaar 2003). Just as the network model muddies the waters within the administrative state, the

governance model places these organizations within a complex set of other actors and relationships. In environmental regulation, the shift to governance can be marked by “second generation” policies, that lead to more collaborative relationships between the state and both civil society and industry. Examples include Project XL, the Toxics Release Inventory, and management systems with third party auditors (Fiorino 2004). In these policy initiatives, to a varying degree, the government agency is not seen as insulated, adversarial, and solely responsible for outcomes. It is a partner with other non-governmental and cross jurisdictional actors which together are responsible for outcomes. Similarly, Green Tier, the central focus of this study, is a second generation approach. It fits into this family of governance policies that blur state society boundaries

Similar to the issues raised by the network model above, in the governance model, democratic accountability is less clear. Returning to the typology of organizational legitimacy described above, we can quickly analyze the broad description of environmental governance. With coproduction, and a lack of strict lines separating the state and society, it is not obvious what the role of the state is in providing democratic legitimacy. This erodes cognitive legitimacy, it becomes much harder to understand the organizations themselves, and therefore, they become less legitimate. Also, without the rules of the bureaucracy, it becomes less clear which groups will tangibly benefit from the new institutional forms—this erodes pragmatic legitimacy among some audiences. However, with these challenges to legitimacy, other means of building legitimacy open up.

2.2 Alternatives

2.2.1 New Institutional Design

There have been many proposals to change regulatory arrangements to address the criticisms and shifts outlined above. Some of these changes often involve a turn to the market in the form of tradable pollution limits. I focus on one family of responses that have similar design features as Green Tier. One such proposed set of design principles what Sabel calls a “rolling rule regime” (2000, 2004). A simple definition of a rolling rule regime is an effort to meet, and continuously improve upon a broad goal through benchmarking organized by a public authority (Sabel 2004). This approach is experimentalist—the institution itself is constantly being reevaluated and reassessed to find a better way. It is democratized through broad and direct participation in this evaluation. These are general characteristics, the idea is to create a regime that does not feign to be omniscient, but can adjust to exigencies. And to do it in a way that ties actors together in a common goal, without a clear distinction between the principal and the agent. This clearly fits within the broad paradigm of governance by breaking down barriers. Habitat conservation plans (HCP) provide examples of rolling rule regimes (Sabel 2000, Thomas 2001). HCPs provide flexibility to enforcement of the Endangered Species Act and allow stakeholders to develop a plan that protects species without following the letter of the law. Those who receive the waiver have to create a plan showing the impact of their actions, propose a way to measure and mitigate the impacts, fund this mitigation, assess alternative actions, and report on their action (Thomas 2001). This brief description of HCPs further illustrates a rolling rule regime: it is adaptive, it uses benchmarking, and it involves the state and civil society.

There appear, in theory, to be a number of benefits to rolling rule arrangements. It is useful to revisit the critiques of command and control. First, rolling rule regimes are flexible, thereby avoiding the difficulties with the strict rules of command and control. Second, they do not claim to be omniscient, and therefore can adapt as they go (Sabel 2000). Third, they are collaborative; thereby avoiding the high transactions costs and low information flow that result in adversarial arrangements. Finally, because they are experimental and adaptive, accountability comes through reason giving, which allows entities to be held accountable for broad goals as opposed to jumping through piecemeal measurable hoops. There are, of course, problems with this model. It is questionable how democratic these regimes are. This is not clear at a general level, because the outline of a rolling rule regime maintains a level of abstraction that makes it impossible to pin down the precise rolls key actors (such as the public) play. Empirical studies of HCPs have found them questionably democratic due to large variation in the depth and breath of participation (Thomas 2001). This can be due to the nature of rolling rule regimes generally, but it is hard to tell. Individual manifestations of rolling rule like regimes, such as HCPs, may owe their own democratic problems due to idiosyncratic aspects of their institutional design. However, the ability for these regimes to sustain broad and deep participation is something that needs to be explored and I will spend considerable time describing this problem in Green Tier. This loose design also raises questions of cognitive legitimacy—if one cannot understand an amorphous organization, it is difficult for it to obtain legitimacy.

One requirement of this new brand of institution is cooperation. To enter into an arrangement that is loose and formed over time, one has to have some degree of confidence that the other actors are not going to take advantage of the looseness. In other words, cooperative agreements, it can be argued, benefit from a degree of trust. There is much discussion of exactly

what the role of trust is in the public life, too much, for me to discuss it all here. I adopt a fairly simple definition of trust as “the mutual confidence that no party to an exchange will exploit the other’s vulnerability” (Sabel 1993 p 1133). The difficult thing with trust is that it is hard to move from a vicious cycle of distrust, in which actors do not trust one another and therefore do not provide opportunities for others to demonstrate their trustworthiness, to a virtuous cycle of trust, in which actors trust each other and provide opportunities for others to show their trustworthiness. At some point actors have to take a chance and give others the opportunity to show that they will not take advantage. There is still debate in the literature about whether trust can actually be built, but for my purposes I am resting on the optimistic assumption that trust can be built (Locke 2001). Putting this idea of trust and cooperation in the context of rolling rule type regimes, and the cooperative agreements that are part of Green Tier, we can identify a potential barrier to entering into, and maintaining, commitments towards a commonly defined goal. In the context of Green Tier, firms have to be open and have to be willing to take the chance that DNR will not press advantage on their openness and DNR has to be willing to loosen some of the rules of the firm with the confidence that the firm will not take advantage. Finally, in Green Tier the participants from the community must agree to be part of the advisory group without DNR or the firm exploiting their lack of expertise. The process of building trust is still much debated, one useful idea, which provides a frame by which to look at the cooperative agreements, is that trust is built when actors redefine their history and create a new collective identity, a process through which they can have the “amnesia” necessary to forget old wrong doings and take a chance to allow others to show their good faith (Sabel 1993).

Once a trusting relationship is instigated and the first mover barrier is overcome, the relationship must be sustained. Here, there are two types trusting relationships that are important

to distinguish. One is blind trust, in which actors have faith that others will not exploit them and, therefore, do not monitor them. The other is a more “studied trust” in which actors trust one another and jointly study problems to find the course of action (Sabel 1993). This type of trust has more transparency as a part of the process—here monitoring and trust are not mutually exclusive. In addition, this type of trust can better withstand breakdowns when some do not live up to their commitments. Returning to rolling rule regimes that are described above, the constant shifting of the institutional arrangements creates opportunities for the actors to work together and build common conceptions of problems. Through this process trust is sustained. Both types of trust, blind and studied, function to keep cooperation moving along, but studied trust is more democratic because it is open to critique and continuing consent of those involved. Further, studied trust is more robust, because when there is a breach, the reasons for the breakdown are clear and the system can better repair itself. However, studied trust requires more effort and capacity among the actors—they actually have to act to monitor together and cannot just depend on others to live up to their commitments.

The experimentalist, polycentric, regimes that adapt to exigencies through cooperation of a set of actors, provide a institutional model that is a significant break from Weberian bureaucracy. This model is not without its critics, including some who claim that it will do more to hurt the environment than help it (Lowi 2000). Nevertheless, it is an enticing model. But it does not answer questions of democratic accountability any better than it raises them. Therefore, next I turn to proposals that have the potential to democratize these new forms of institutions.

2.2.2 Bottom Up Accountability

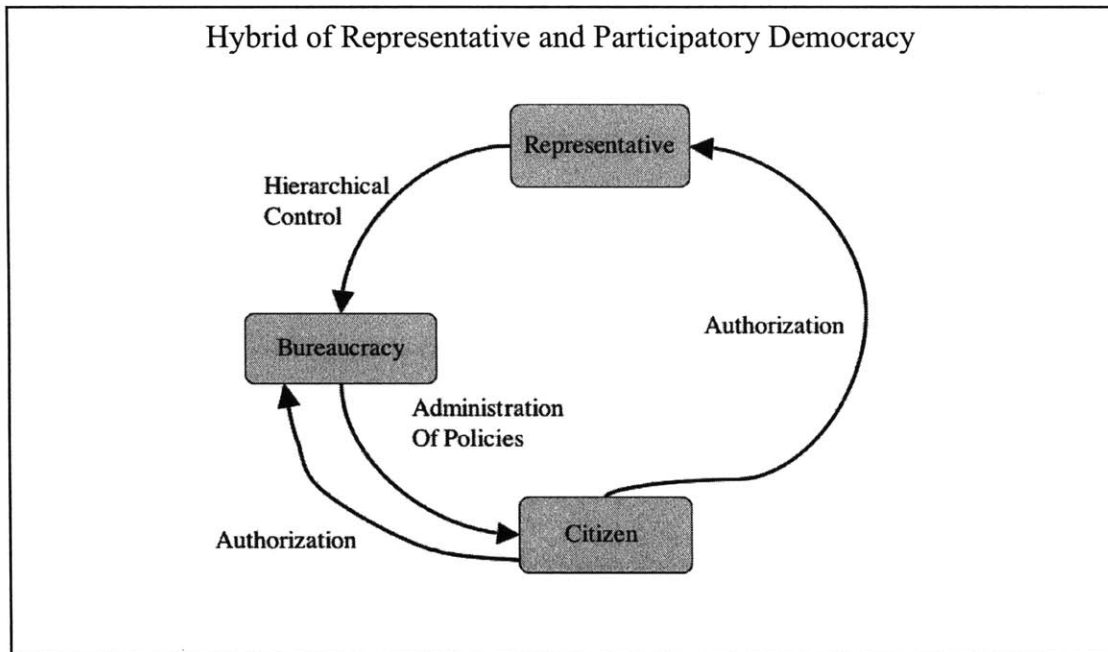
One response to the problems of democratic accountability is participatory democracy. This approach reconnects citizens to the bottom of the hierarchical chain—or using governance

and experimentalist models, includes citizens in the coproduction of governance. Theories of participatory democracy have their roots in work-place democracy (Pateman 1970). Also, public participation at a number of levels has existed in environmental policy for some time (Fiorino 1990). These mechanisms, which include public hearings, surveys, and citizen review panels, have been limited in the depth and breadth of participation. More recently, participatory democrats have offered institutional prescriptions for other areas of governance, including regulation, which have been part of the “deliberative turn” in democratic theory (Dryzek 2000). In parallel, the literature on “civic environmentalism” has also addressed public participation in environmental governance as part of a broader shift of republicanism. These two concepts provide anchors to which I can base my analysis of the puzzles I raised in the introduction.

Participatory democracy has a much shorter distance between authorization and administration than representative democracy. Since participatory democracy cannot easily exist on its own, I describe a hybrid organizational form with representative democracy. The norm in participatory democracy is that citizens directly authorize the bureaucrats who implement policy within the bounds set by the representatives. This cannot occur in all cases, of course, because there will be some policies that cannot be directly monitored by citizens. Generally, however, at the local level the citizens are involved in the policy implementation closing the loop of authorization. Another norm is that, where possible, there is a two way flow of information during policy implementation. In other words, because the authorization is happening directly through representatives to bureaucrats, it is the norm that the bureaucrats listen to the citizens who are authorizing them, and vice-versa. This is illustrated in the diagram above. In a hybrid system, there is generally centralized coordination of the local participatory organizations by the bureaucracy. This institutional framework depends on the central authority of representative

governance to provide the coordination needed for the lower level participatory units. This model, of course, relies on substantially more involvement from ordinary citizens than the representative model of democracy.

Civic environmentalism provides a way of understanding what this significantly deeper citizen participation may look like. In a civic model, local environmental problems are solved through broad and deep participation of citizens with state agencies (John 1994, 2004). To make this happen, decisions are devolved to the local level. One case that exemplifies this model is a



the development of a transit-oriented neighborhood in Oakland. Working together, community groups and students of the University of California, Berkeley opposed the building of a parking garage at public transit stop that would have damaged the fabric and environment of the community. What is important in making this an example of civic environmentalism is that these groups worked with government to solve this problem—developing a transit-oriented community that increased public transit usage and supports community life (Shutkin 2000). John distinguishes

this from what he calls populist environmentalism, which often involves NIMBY protest and thin participation, from interest group zero-sum battles between environment and economy, and rational governance of technocratic solutions (2004). The importance of civic environmentalism in the context of the puzzles explored in Green Tier is that it provides a way of thinking about the type of citizen engagement that could potentially democratize experimental polycentric government.

Of course, there are problems and difficulties with civic environmentalism. One can question the democratic nature of having a small group of active people exercising tremendous influence over state action without having consent of the larger public. This is a problem in any participatory democratic model—not everyone will want to, or even be able due to practical limitations, participate. Studies have shown that the socioeconomic make-up of participants is significantly different than the make up of their communities, engendering problems of political equality when relying on direct participation (Scholzman et. al. 1999). Further, there are empirical critiques of civic environmentalism. One is that even when decisions are devolved to the local level, and opportunities are created for civic participation, the type of participation emblematic of the story above rarely occurs. One such study that surveyed programs which devolve power to include citizens found that in the majority of cases citizens were not influential in the decision making (Abel and Stephan 2000). While civic environmentalism provides an interesting model, with some hopeful empirical examples, difficulties of broad and deep participation exist nonetheless.

Another model that is similar to civic environmentalism is community driven regulation. Community-driven regulation has three steps: communities directly identify pollution problems, alert authorities, and monitor the enforcement (O'Rourke 2004). Empirical accounts of this model

show that communities have been able to bring about change in the behavior of industrial facilities, even with weak local institutions (O'Rourke 2004). There are two limitations to community monitoring. One is technical capability to measure pollutants. Capacity development has been shown, however, to overcome this problem (O'Rourke and Macey 2003). However, it is necessary to have strong outside support to develop this capacity. Another limitation is the ability for members of the community to organize to make their voices heard by the regulators. Nevertheless, this model is another institutional arrangement that potentially solves accountability problems raised by the shifts away from bureaucratic models of government to polycentric governance.

One final model that I will address is associative democracy, as outlined by Cohen and Rogers, which is important because it directly addresses some of the problems of direct public participation (1992). In the associative model the states foster community action by opening up a space for participation by secondary associations. In this role, the state can ensure that the participation is encompassing, which can minimize the potential for a faction to use the participatory process to further its own interests at the expense of other groups (Cohen and Rogers 1992). Theoretically, capacity building and state centered participation can overcome problems in the community-driven regulation model. Secondary associations can develop the capacity to be more meaningfully engaged in regulation than individuals. Importantly, associative democracy requires some action from the state to encourage associations that meet normative criteria.

2.2.3 Deliberative Democracy

Deliberative democracy offers a proposal for a specific form that bottom up participation can take. As stated above, deliberative democracy is defined as "an association whose affairs are governed by the public deliberation of its members" (Cohen 1997, p 65). Deliberative democracy

does not categorically involve direct participation, there can be deliberation among representatives. For my purposes, however, I focus mainly on the direct model. Deliberation contrasts with other possible ways of governing affairs, such as bargaining among self-interested actors and aggregating preferences by voting (Gutmann and Thompson 1996, Young 2000). Reasons are meant to be public regarding, not self interested bargaining (Cohen 1997, Gutmann and Thompson 1996, Dryzek 2000, Fung and Wright 2003). In other words, when deliberating, we put forth proposals that we can expect others can reasonably accept, not as a show of power or bargaining.

Theorists claim that deliberative democracy can lead to better, more legitimate decisions (Fung and Wright 2003, Cohen 1997). One institutional model for directly deliberative democracy is called “accountable autonomy”, in which a centralized authority oversees local processes and outcomes (Fung 2004). In this model, power is devolved to the local level, but oversight by a centralized power remains. It attaches democratic accountability to two points in the network—above on the hierarchy and below to the people. This creates a tension in which power must be given to local decision-making bodies, but at same time power must be retained by the centralized authorities to decrease parochialism and capture by factions. The accountable autonomy model has been demonstrated empirically in a number of settings, including participatory budgeting in Brazil and community policing in Chicago (Fung and Wright 2003).

Deliberative democracy, however, is not without its critics. In deliberative democracy, decisions are made, in part, through reasoned debate. Therefore, there must be equality in capacity for people to articulate their views in order for there to be political equality (Knight and Johnson 1997). Sanders uses examples of empirical studies of jury deliberations to show that some groups are disadvantaged in their capacity to participate because of, among other things, gender,

race, or personality type (1997, 363-9). Young describes “activist” challenges to deliberative democracy on the grounds that deliberation does not address structural inequalities and that participating in deliberation can confer legitimacy to inherently unequal institutions (2001). In addition, people of lower social status, new comers to a group, and those who want to avoid conflict may not participate equally in deliberations (Mansbridge, 1980). Finally, in deliberation, a focus on other regarding arguments can result in group think or continued oppression of groups that culturally are more likely to suppress their self-interest (Mansbridge 1999). People may make suggestions because they think this is what others would like, even though they may not necessarily feel it is the best for themselves. This could create the appearance of consensus when real differences remain under the surface (Mansbridge 2003). These potential complications with deliberative democracy have to be addressed in order to achieve democratic accountability through accountable autonomy institutions.

Returning to the two main problems of this section—accountability and legitimacy—we find that bottom up deliberation offers an attractive institutional alternative. The direct consent of citizens to bureaucrats democratizes discretion. Further, deliberation may help build legitimacy in these new institutional forms. Recall that new institutional forms, such as rolling rule regimes, do not share the pragmatic, and cognitive legitimacy that has already been established command and control. Deliberation can help these institutions gain in cognitive legitimacy by providing reasons for action. In addition, by making policies that are more effective, deliberation may help new institutions garner more pragmatic legitimacy.

2.3 Conclusion

In summary, the literature raises several questions about the functioning of participatory means of democratic accountability. First, is the problem of participation. In order for

participatory democracy to work, the community must mobilize. Second, is technical capacity. For community members to monitor compliance with rules, they must have the technical ability to do so. Third, is political equality. For accountability to truly be democratic accountability, there cannot be disparities in political power among groups. The literature provides a foundation for understanding under what conditions direct democratic accountability mechanisms over flexible regulatory arrangements work better. The literature hints that it will be in conditions in which community mobilization, monitoring capacity, and political equality can be fostered.

Chapter 3: Acme Metals

This is a story of command and control regulation under significant stress. The goals of this case are to provide empirical substance to the criticisms of command and control, and to have a baseline from which to contrast the other two cases. My motivations for selecting this case were described in the methodology, but it is also prudent to mention that the extremity of the problems that arise in this case should not make one think that I am providing a straw man, which unfairly makes the Green Tier cases look like major improvements. I do not claim that this case is indicative of the way things usually work in the command and control system. I do believe, however, that this case exhibits many of the problems of command and control even when there is not great conflict; this case is useful because the conflict brings these problems into relief. One final warning, in this story when I refer to the community, I am specifically referring to those who are opposed to Acme. There are mixed feelings in the community about Acme, but for simplicity, I refer to the most significant portion of the people who are participating—the one that is fighting Acme.

3.1 The Story

Acme Metals produces metal parts for car manufacturers. It has been located in a medium sized city in Wisconsin for nearly 100 years. The neighborhood it is located in is mostly working class, but there has been shifting recently with an influx of professionals. The neighborhood is fairly dense, and there is almost no buffer between Acme Metals and its neighbors. Houses are literally feet away from the factory in some places. There is consensus among those involved with this case that prior to the mid 1990's, there were few problems overt between Acme and the community. There were two events that precipitated the conflict that I discuss in this case.

According to DNR, Acme changed their process from bringing in molten aluminum, to melting the aluminum on site. As part of this new process, they would inject chlorine into their furnace in order to remove impurities. There were some problems with this process because, according to a DNR official, "Once in a while their equipment would break, because they didn't know what they were doing, and they weren't controlling it properly. So you got this neighborhood that was blasted with this chlorine compound." This incident prompted about 100 complaints from the community to DNR, many about odors from Acme. People were extremely upset, and according to some, it is likely that they were exposed to a cloud of noxious gas.

According to Acme, the troubles with the community started when Acme was undergoing construction on the factory. During the construction, the masons went on strike, leaving a factory wall incomplete. This exposed the community to many more noises and odors than they had been the case in the past. This version of the story differs from the perception of DNR and the members of the community that I interviewed. There is agreement, nonetheless, that there was an increase of burden on the community that engendered the strained relationship between the community and Acme.

Prior to the incident with the chlorine, Acme was not on DNR's radar screen at all. There was no big smokestack, nor indication from the outside that Acme had any impact on the environment. Acme never came forward and applied for a permit, so it was essentially unregulated. Acme attributed this to receiving bad advice from a consultant, and claimed that the Clean Air Act had not been around for a very long time (this was in the 1990's). Others thought it was a deliberate part of their business strategy to avoid regulation. After this incident, Acme applied for a permit for activities that they were already undertaking, which, according to DNR, is illegal. DNR staff found Acme in violation, and referred the violation to DNR's central office of to

see if Acme should be fined for the violation. The central office reported back that there was not a good case against Acme and DNR did not take any further action. One DNR official that I spoke with speculated that they may have gotten a \$1,000 fine and had on the record that Acme was in violation. The lack of action frustrated the community, for whom it was clear that Acme had broken the law. This is an important feature of this story, showing the extent to which there is room to move within a command and control system. In this case, bureaucrats did have discretion, although not the street level bureaucrats who were dealing directly with Acme and the community, but mid-level managers in the central office.

From this point on, there was extreme conflict between Acme and the community. At a public hearing for the initial permit, hundreds of people came to protest. Nevertheless, the permit was issued because Acme met the requirements in the law. The emissions did not exceed the standards, and DNR staff did not have the discretion to deny the permit based on the community protest. This enraged many in the community who thought that the Acme should not have been issued a permit after their previous violations.

In response, DNR went beyond the minimum required for public participation. They held additional hearings, staff attended meetings of the neighborhood association, and they followed the letter of the law "to the T" to ensure that they were doing everything they could to appease the community. Meanwhile, approximately 300 people from the community wrote letters opposing the permit. In response, DNR conducted a survey of the community to determine how many people in the community felt that there was an odor problem coming from Acme. According to DNR officials, this was one way that DNR could find Acme in violation of the law. After an extensive survey, the findings determined that the percentage of people in the community who had a problem with the odors emanating from Acme was too small to issue a violation. This

further enraged many in the community, who refused to accept the results. In addition, DNR worked with the city health department. The city's epidemiologist conducted a large health study of the area to identify any health effects that could be attributed to Acme. This study found none, and was criticized by some in the community. Some felt that the study design had been changed as a result of political pressure from Acme.

In response to all of this controversy, Acme took a removed stance. They did not attend the first public hearings, and did not meet with the community members who were protesting. The attitude among the officials from Acme was that they were following the law, and that the "emotional" response from "activists," many whom Acme felt were not even from the community, was unwarranted. Over time, this stance both hardened and softened. It softened in that Acme eventually hired a public relations firm to help deal with the community, and did attempt to have some dialogue with certain segments of the community that Acme felt were not too radical. In addition, Acme took steps to improve their environmental performance beyond what they considered to be required by law. They now respond to complaints in within 72 hours, which they claim is faster than what is required by law. On the other hand, it hardened as Acme felt that no matter what they did, the community was going to fight against them. With this perception, Acme saw no reason to undertake a seemingly futile attempt to placate the intractable portion of the community.

Over time, the conflict grew more entrenched. DNR officials describe community members calling them while wearing gas masks extremely worried about the emissions from the plant. Members of the community organized a group with a the singular focus of fighting Acme. After losing confidence in DNR, the group chose to go above the DNR and file complaints with the EPA and to sue DNR for not following the law. At the time of this writing, there was an

environmental justice complaint, a lawsuit against DNR and Acme, and a Title V citizens petition. EPA has not yet responded to the Title V citizens petition, and there has been no closure on the environmental justice complaint. The lawsuit is pending, and about to be heard by the court.

Further aggravating the situation, in their initial permit application, Acme requested an emissions limit below the amount of emissions allowed by law. However, due to increased production they had to increase their permitted limit. The new limit is within the range of what they are allowed, but many in the community saw it as a large increase in emissions. According to DNR: "The citizens just went wild...So where does that put us? The citizens say, 'You are letting them increase their emissions and we can't even breathe in our backyard, and our children are asthmatic!'" Meanwhile, the DNR officials again felt that they did not have the discretion not to issue the permit, because the application was for emissions was within the limits of the law.

The controversy continued when Acme applied for a permit to test the use of a new process. Acme claims that this process has the potential to decrease the odors in the community and decrease emissions. To test this process, however, Acme needs to get a permit from DNR. People in the community are fighting this permit, regardless of the potential benefits, because they do not believe that Acme is really trying to work for the common good.

There have been a number of attempts to change the character of the interaction among the groups. To date, all of these have failed. The mayor of the city was able to get Acme to meet with some members of the community, but not the most mobilized (or radical depending on one's perception). Also, Acme attempted to generate "white papers" on their chlorine use with the community, which would provide information that was endorsed by both Acme and some members of the community, but this failed.

This overview of the story, up until January 2005 when I completed my field research, provides the basics of the case. In the next section, I discuss salient features of this story that are important for my analysis in depth.

3.2 Salient Features of the Acme Story

Why did things turn out so bad? DNR issues hundreds of permits to companies every year to pollute (often more than Acme is) in similar neighborhoods. This certainly isn't the first time that a company has violated environmental laws. Of course, there are idiosyncrasies of each case—many were convinced that Acme is truly inept in dealing with the public. However, this case brings out some attributes of the command and control regulation that created the conditions for this controversy—which has not been good for any party—to grow and thrive.

3.2.1 Communication and Perception

All sides on this story agree that communication breakdowns, and people's perception of one another are two of the largest factors that perpetuated the controversy. This is not to say that perception is everything, and that the community reaction is unwarranted. But all sides agree that whatever the real risk from Acme is, perception and miscommunication undoubtedly amplifies the problems that it causes.

There are a few hints that indicate that the actual risk that Acme poses to the community is not materially greater than the risk from other companies in the area, which none in the community are battling. This is not to say that the community groups that are fighting Acme are irrational—perhaps they should be fighting other companies as well. But it shows that what is driving their fight is not only the magnitude of environmental impact. This is the view that was shared by representatives of DNR that I interviewed—one of whom described Acme as a “nothing”

source of pollution. Some in the community agree with this—in one community leader’s opinion, Acme’s communication to its neighbors was responsible for not all, but a large part of the problem.

The following table shows a comparison in emissions between Acme and an industrial facility that is in the same neighborhood. I selected this power plant because many people I spoke with in the community felt that this power plant is a “good actor.” I selected chemicals that are common concerns, or look scary (and therefore, may influence perception).

Table 1: Comparison of Emissions Between Acme Metals and a Nearby Industrial Facility (1999)²	
<i>Pollutant</i>	<i>Emissions Industrial Facility Expressed As Multiples of Acme’s Emissions</i>
Particulate Matter	58 x Acme
Particulate Matter (10)	57 x Acme
Sulfur Dioxide	22,223 x Acme
Carbon Monoxide	135 x Acme
Arsenic	221,600 x Acme
Cobalt	79,200 x Acme

While this is not a comprehensive comparison, because both facilities emit chemicals that the other does not, it shows that many of the emissions of the nearby industrial facility are orders of magnitude higher than those from Acme. The relatively positive perception of the industrial facility, and the tremendous difference between the emissions, support the argument that the reaction of the community is attributed to the perception more than a disproportionate risk.

Some in the community that fight against Acme see it as a privately owned company that does not care about the community or the environment. For example, in Acme’s neighborhood it

² Source: WIDNR Fact System, April 7, 2005. All emissions to the air, and all units are in pounds. 1999 was the most recent data available for both facilities. The emissions are expressed as multiples of Acme’s emissions. For example, if Acme emitted 10 pounds of chemical X, and the industrial facility emitted 1,000 pounds of that same chemical, the table would read 100. Emissions are expressed this way to help ensure anonymity.

is customary for local businesses to talk with the neighborhood association about relatively small issues, such as creating parking places. The owner of Acme has never spoken directly with the neighborhood association. This refusal to “talk and listen” is seen as a sign that, according to one community leader, “Maybe [the owner] thinks he is too good to mess with people like [us].”

When officials from Acme and members of the community have met, the attitude of the company is seen by the community as dismissive to their concerns. More than a few people characterize Acme’s communication as completely inept, and even Acme admits that they could have done a better job emphasizing the contributions that they made to the community. These include funding local businesses, and helping change an adult movie theater into a concert hall. One community leader describes Acme’s communication:

“So you go to these public meetings, and first of all it is two jokers, with all due respect, the director of human relations, and, I don't know what his title is, he seemed to be the main substance guy. But it wasn't [the owner] and it wasn't the president, it was two 'just regular guys.' That was the first problem. Then when people talked with them, it was 'Oh, that's OK, that's not a problem, everything's OK, because we [meet] all of the standards, and everything is OK.' *YOU DON'T SAY THAT!* Come on! It is not just my personal preference, it is not doing your job.”

In this quote, Acme is portrayed as providing low level staff to calm the public, but not to respectfully entertain any of its concerns. This engendered a feeling that Acme had contempt for the community, despite any efforts that Acme has made to help the community. Indeed, this same respondent recognized that Acme has donated money to the community in the past, but nevertheless saw the company as disrespectful to the community. In addition, there was a sense among some that Acme withheld important information from the public. A weekly newspaper describes one incident.

“Of all these stories, perhaps the most disturbing occurred on August 9, 2000. A chlorine injection furnace began to leak around 1:00 AM, spilling molten metal

onto the ground. "The air was just so waxy smelling," [A neighbor] said, "the workers were all evacuated; they stayed out for three days until they got the place cleaned up. They had to scrape the slag off the blacktop." [The neighbor] said that Acme never told the neighbors what was going on. "I found out from one of my friends who was listening to her police scanner." [A second neighbor] heard of the fire from [the neighbor quoted above]. "There was no warning, there was no sign, there was no loud alarm system going off." [The second neighbor] said the only account of the fire was a small article buried in the newspaper the next day."³

Stories such as this inflamed any tensions that existed from the beginning between Acme and the community.

During one public hearing Acme reported its emission limits to be one hundredth of the standard that they were allowed to emit. However, DNR reported that Acme was just below the standard. This difference, and its consequences, provides another example of the communication problems. The difference was due to Acme using a different method to estimate emissions than DNR. Acme estimated its emissions based on what they actually emit, and DNR estimated emissions based on Acme's maximum capacity to emit. DNR's methodology reflects a standard in the permitting process—facilities are permitted to their potential emissions, not what they actually emit. Acme asserted that their maximum capacity to emit was not important, and put out a report contradicting DNR. This contradictory information did not help build public confidence in Acme or DNR. In the end, some members of the community see Acme as a lying organization.

Problems with communication also existed between DNR and the community. The origins of this problem are traceable back to the limited discretion and information that DNR officials have in the permitting process. One DNR official explains the limits to his power and the community reaction:

³ Reported in a small weekly newspaper that will remain anonymous to protect the anonymity Acme and the respondents.

"I got 300 people hot as pistols showing up at a hearing and I've got to go in front of that. I look like I'm defending this company and all I'm doing is saying 'No, they can go to [this level] with the emission limits, they can go to [this level] with the air quality standards. Our documents show they have, we're not defending them, but we are going to give them a permit.' But the community says: 'How can you do that?'"

From the perspective of DNR, there is nothing more that they can do. Also, this role is extremely difficult for them personally. DNR officials report being called "idiots" by local professors, and people claiming that DNR is inept, or even colluding with Acme. For DNR officials whose professional identity is tied to their role of protecting the environment, these are very piercing accusations. From some in the community's perspective, DNR staff may just be doing their jobs, but it is inadequate. One community leader said that people who attended the public meetings "Would feel that [the DNR staffer], bless his heart, was a mindless soulless robot. They wanted to hear some spark of human concern." The limitations of the role of DNR staffers restricts their ability to communicate their true impressions of the situation to the public. DNR's reaction was to do what DNR does, only more of it. One official explained their strategy:

"We tried several different methods...we put ourselves on the front line...we go right down there and explain everything that is going on. Full disclosure, letting people know what we can and can't do. Lots of public information meetings. A number that we didn't have to go to, or we sponsored. Let's put this thing on and let people know what is happening. Maybe in the long term it will have a positive effect, [its] certainly frustrating with the workload and effort that people put into this thing. Up until this time we haven't seen the real positive results that we would like to see."

Constrained by the limits of what is accepted as practice, DNR was not able to build a rapport with the community, and communication remained a significant barrier.

3.2.2 Lack of Trust and Adversarial Relationships

From the beginning of this story trust between all three groups (DNR, the community, and Acme) was strained. All of the respondents interviewed for this case indicated that there is generally an atmosphere of distrust that pervades all interactions. This atmosphere can be parsed into relationships between actors, which exhibit differing levels of distrust.

A section of the community did not trust Acme at all. For example, when Acme attempted to change its process in a way it hoped would reduce its environmental impact, one community group did not trust its test results. In describing his impression of Acme, one community member said:

“[Acme has] hired lawyers and they've hired PR firms, and their fact sheets, there are lies in it that we know aren't true. It would be better I think if they just were more honest, and were meeting with people.”

In this sense, members of the community view Acme as outright liars. In addition, some in the community do not trust Acme to do anything that is not required by law. They claim that Acme leaves the doors and windows open and they don't know what kinds of pollutants come out.

Another community member states:

“Even if they had a great story to tell about what is coming out of the stacks, what is coming out of the windows that are open and so on, I don't think they would be able to tell it. Nobody would trust them.”

This lack of trust is substantial—some in the community see Acme not only as inept in protecting the environment, but as deceitful.

Not surprisingly the feeling of Acme is mutual. It sees the community as a bunch of NIMBY rabble rousers who fight everything from drive through banks to airport noise. Acme's lack of trust is evidenced by its refusal to disclose any information to the public that it does not

have to. From Acme's perspective, anything that it says will be misconstrued by a public that will refuse to see the "truth." This relationship is so adversarial that one member of the community group reported that the owner of Acme yelled at the owner of a nearby restaurant for hosting a fund raising event for the community group opposing Acme. In short, from Acme's point of view every action that it takes will be used by the community to chase it out of town.

Somewhat surprisingly, Acme reports that its relationship with DNR is "B+/A-" and that it does not find working with DNR very difficult. Staff from Acme find it easy to schedule meetings with DNR, to meet with them, and share ideas with them. However, Acme does not trust DNR enough to be open with DNR. Acme does not have the feeling that DNR "wants to slam" them, but Acme is aware the community will be upset if DNR and Acme appear too close. However, DNR does not see Acme's behavior reflective of being trusting. When DNR has offered assistance, Acme has sometimes refused. An official from DNR speculated: "[Acme] chose not to work with us for a reason, they must not trust us."

While DNR does not completely trust Acme, distrust was not the strongest feature of the way DNR staff characterized the relationship. DNR views Acme as somewhat inept in their ability to deal with the public and to run their factory. Further, DNR views Acme as taking a condescending attitude at times, which has been frustrating and difficult to work with. There is still a degree of mistrust, one DNR official explains:

"No one here is in the mood to consult for them though, because if we're caught by the public giving them advice and consulting for them we would probably lose our job. We are just not going to do that with them. It's not a public enough process, [and] we don't have enough trust with a neighborhood to do that."

One important aspect of this statement is that the community would not allow DNR to take any action that would be based upon DNR trusting Acme. This intense adversarial environment

almost renders DNR's trust of Acme moot—even if DNR wanted to trust Acme they could not act as though they did because the pressure from the community is too intense.

This brings us to the final relationship in the permutations among the groups of actors—the community's trust in DNR. This is perhaps the least trusting of any of the relationships, and probably causes the most difficulties to the regulatory processes. These two statements from two community members illustrate the level of distrust the community has for DNR:

“To your question, does anyone trust DNR. I don't think even the neighbors who would say ‘Acme does good things in the neighborhood, give them the benefit of the doubt.’ I don't even think they would trust DNR.”

“Well, we wouldn't have a lawsuit if we trusted [DNR].”

The roots of this distrust are undoubtedly many, but there are hints of some specific roots that help describe its origins. One aspect is that the community, to date, has been unable exercise any change on the regulatory permits that have been issued to Acme, apart from getting DNR and the city to study the effects of Acme. The studies, however, have not been consistent with the community's experiences. Some complained that there was political pressure from Acme that distorted the studies by the city. One community member describes the results of one study:

“It started out with the right intent, and the last mayor agreed to have it done. There was Acme involvement, they brought in an epidemiologist. I'm not sure what the political pressure was, but it went one hundred degrees in the other direction...Many people were angry. Especially people who had sat in all of the meetings, developing how are they going to do this health study. Including people who are in graduate school in environmental toxicology, spending time figuring out how they are going to solve this problem, then it turned out totally differently.”

In this case, the coproduction of the study exacerbated the feelings of betrayal, and further eroded trust in government generally by the community; DNR did not conduct this study. However, similar sentiments were expressed about the DNR studies, including methods to model air pollution in the area. Over time, the relationship between DNR and the community eroded, and

there is a perception among some that DNR, having grown tired of hearing complaints from the community, has stopped listening. Moreover, with the transparency that the controversy created, the community became much more aware of the extent to which DNR actually monitors Acme. This eroded some of the confidence the community had that DNR was protecting the environment. One community leader explains:

“I don't know if this is really physically even realistic, but I think neighbors had this idea that things are being monitored on an almost daily basis, or a weekly basis. At least weekly....The data was literally laughable...[The DNR staff in a meeting in 2001] would say, 'In 1995' [was the last time that they had monitored Acme.] People would literally scream out laughing...literally they would laugh at him. That's part of why we wanted to leave the room. It was spontaneous, people thought that was literally laughable.”

In summary, there is extreme distrust among some in the community of DNR, and this perhaps has caused the most difficulties in the regulatory process to date.

When one combines the relationships between these three sets of actors, it becomes apparent that the lack of trust from the community in Acme and DNR, and the lack of trust that Acme has in the community, has driven the overall atmosphere of distrust. This is somewhat in contradiction with the critiques of command and control, which focus on the adversarial relationship between regulators and firms. In this case, any adversarial aspect of this relationship seems to be due to the tensions with the community. DNR tried to reach out to Acme and help Acme solve its problems from the start. Acme was not responsive, but over time began to see DNR more as a resource. But this was bounded by the community's constant pressure—which prevented DNR from taking actions that could be perceived as being “consultants” for Acme. This supports, to a degree, the critique that the command and control regulatory process is too adversarial over all, but it does not support the view that this is because of government action, or the rules of the bureaucracy—at least not directly. The difficulties arise when command and

control loses its legitimacy. I will return to this later, but for now, I want to stress that the origin of the problems does not seem to be in an overly strict enforcement of the rules by DNR, which is one of the primary critiques of command and control.

The lack of trust prevents the any groups from entering into an agreement in which the others can exploit them. Therefore, there is not way of moving from the vicious to the virtuous cycle without some sort of intervention. Moreover, institutional environment reinforced this by providing no opportunities for the community or Acme to show their trustworthiness. On the contrary, opportunities were provided to exploit others, such as Acme not taking action when it is not required even though if it would make life better in the community and, to be fair, the community lawsuit against Acme forcing it to spend considerable sums of money on legal fees.

3.2.3 Negative Consequences

The relationships between the actors in this story have been severely detrimental to the functioning of this institution. In this section, I describe the difficulties from the point of view of DNR, Acme, and those in the community who have been fighting Acme. To be fair, things have not been all bad, so in the following section I will describe some of the benefits of these relationships.

For DNR the costs of dealing with a controversy of this magnitude are substantial. As stated above, the staff at DNR finds working in an environment where they are trying to balance the community's requests—which are impossible for DNR to fulfill—with their role as a protector of the environment, extremely frustrating and demeaning. This should not be underestimated, it is significant that the staff feels demoralized. In addition, there are more tangible costs. For example, due to the controversial nature of the permitting process, a permit writer who would normally write ten permits a year, spent an entire year working on the Acme permit. The time it

takes for DNR staff to respond to over three hundred letters of complaint is also significant. On top of that, multiple DNR staff worked full time for over one month on the odor survey. And the pending lawsuit burdens the DNR staff even more with the disposition, trial preparation, and testifying at the trial. There also are the costs of the attorneys defending DNR. Not only is this a time consuming and costly, but it is extremely distracting and worrying. One DNR official asserted that if regulatory relationships like Acme were a common occurrence “the permit process would come to a screeching halt.” The distrust that the community has for DNR forces DNR to play exactly by the books, and in order to appear not to have “an agenda”, staff cannot help Acme overcome environmental problems that may help DNR do its job well.

For Acme, most of the costs are due to increased transactions costs. The largest costs are probably the lawsuit, in which they have to spend considerable money defending their actions and have to cope with the uncertainty of future operations. Also, a significant difficulty is that if Acme wants to change their process and apply for a new permit, they will be subject to intense criticism. This squashes innovation, even if it is beneficial to the environment. Staff at Acme indicated that even if they could change their process and cut emissions in half, they would not do it because they would have to go through a gauntlet of a permitting process. Again, this is not because DNR would make it exceedingly difficult for them, but because the community would. There are a number of more intangible costs to Acme as well. For example, staff reported that the negative image hurts the companies recruitment of new employees. However, one cost that may effect other companies with local clients, a boycott, does not impact Acme. Acme’s clients are large auto manufacturers that are nationally based, the community could not put market pressure on Acme.

For the community, the defensive posture that Acme has taken is a significant barrier to transparency and compromise. The community has been unsuccessful to date in exercising change in Acme's activities. There have been some changes from Acme, but these have been small in the spectrum of the demands that a portion of the community has made. Many members of the community have devoted time, and to some extent money, to attempt to make their community more livable, but they have been unable to bring about change. They have hired lawyers and secured their own expertise. The lawsuit may bring about change, but its results are uncertain. People are living under conditions that they perceive as dangerous to their health, and they are unable to do anything about it.

3.2.4 Positive Consequences

This story is not all bad. For one, there have been some changes in Acme's behavior due to DNR's regulation and community mobilization. Acme is attempting to reduce emissions, and some speculate some of the reductions may actually be voluntary. On balance, it is difficult to say how much improvement in the environment there has been, but it is likely that there has been some as opposed to none. Nevertheless, Acme is paying significant attention to its environmental impact. Acme knows that if it takes a misstep, the community groups will attack, and DNR will have to strictly follow the rules. Compared to the situation before the controversy, Acme can no longer act with disregard for the environment without consequences.

Further, the controversy has mobilized a significant portion of the community, which has used their own human capital to better understand what is going on in their backyard. One engineer that is a member of one of the community groups has 24 years of experience working on regulatory issues. They have the expertise to understand the regulatory issues, and engage in the debate. Also, community mobilization is no small feat, as will be shown in the Cook case in

which it was difficult to identify more than a handful of community members who were willing participate in shaping regulation. Although in this case the nature of the mobilization has caused many difficulties, mobilization intrinsically may have some benefits. Combining mobilization and expertise levels the playing field, to a degree, between the community and Acme. If one compares this with the scores of other communities which are home to industrial firms with significant environmental impacts, one would find that in most cases the communities are unorganized and have not secured expertise. In these communities, the power inequalities between the local firms and the communities may often be significantly greater than they are in the Acme case.

Stemming from the community mobilization, there is more transparency of both the regulatory process, in general, and the regulation of Acme, specifically. With all of the pressure, DNR was sure to be thorough and transparent. The community learned that DNR does not keep data on emissions on a weekly, or even monthly basis. It also learned the extent of pollution allowed by environmental laws. One of the community groups stated that it was too small to exercise change of state policy, but a number of community members now have the knowledge they need to assess whether they support state policy.

3.3 Conclusions

This case raises a number of salient aspects of practice that inform a broader analysis of accountability, legitimacy, and performance in environmental regulation. First, at the most extreme levels of distrust, implementation of policy has almost no deliberation between groups. Second, without cooperation there is an inability of the regulations to solve problems that go beyond the letter of the law, and therefore, it is more difficult for DNR to effectively fulfill its mission. Third, the regulatory system has suffered from an erosion of legitimacy under stress. Fourth, there has been, to some degree, democratic accountability, but it has been limited.

Finally, some of the requests of actors to improve the process coincide with the changes in norms that are advocated by some of those who call for reform. I will address each of these in turn.

3.3.1 Deliberation

Due to the nature of the permitting process and the highly adversarial relationships in this case, decisions were made through bargaining and exercising power, not through reason giving. Even when DNR provided reasons for Acme to change their actions in a way that would be good for Acme and build a better relationship with the community, Acme refused to be persuaded. Further, Acme felt it could not provide reasons to the community, because they would be categorically rejected because they came from Acme. This is precisely the opposite of a deliberative form of governance. In deliberation, opposing sides have to respect the reasons provided by others—they may not agree with them, but they cannot categorically discount them.

When members of the community voiced a desire, to “talk and be listened to,” to be treated with respect, they were asking for what theorist would consider a more deliberative discourse. The barriers to this type of communication include Acme’s lack of willingness to meet with some members of the community, but they also include a lack of institutional mechanisms for communication. To date, there has been no safe forum whereby open dialogue can occur and both sides can listen to one another’s concerns. Public hearings and court rooms do not suffice. Attempts were made to establish this type of forum, especially out of the city government’s office, but they have been unsuccessful. Respectful consideration of one another’s ideas has not occurred.

The results of this case coincide with those that we expect would occur without deliberation—policy implementation is less effective, and suffers from a loss of legitimacy. In this setting, the “force of the better argument” has almost not power. Almost all communication is

strategic—it is a way of building sympathy with the media, protecting interests, and minimizing risk of retribution. For this to be changed, spaces have to be opened for deliberation, and new norms established.

3.3.2 Non-Regulated Issues

Without cooperation between Acme and DNR, it is very difficult for DNR to solve problems that go beyond the letter of the law. The tension between Acme and the community has increased importance in the face of a city-wide effort for infill development. To combat sprawl, the city has been advocating for mixed use neighborhoods in which industry and residential uses are in close proximity to one another. In order to meet this larger goal, the nuisance issues associated with Acme have to be addressed. DNR has attempted to reduce noise and odor coming out of Acme, but is limited to the extent to which Acme is willing to cooperate because it has limited regulatory authority over these issues. Acme claims they would have the same emissions regulations if they were in an industrial park or the middle of the city. Further, with the attitude that Acme has taken—“we comply, why should we do more”—the task of addressing land use concerns is daunting. In order to actively address this issue, Acme must go beyond the letter of the law towards a large and diffuse goal of mixed use communities. One of the critiques of command and control regulation, described above, is the inability to tackle non-regulated issues, like non-point sources of pollution. This case supports this critique, and places it in the context of one of the more pressing environmental issues in the U.S. today, sprawl.

3.3.3 Legitimacy

In this case, command and control suffers from eroding legitimacy. Returning to the typology of legitimacy—pragmatic, moral and cognitive—it is possible to better understand how

this controversy erodes the legitimacy of DNR in the eyes of the community. Command and control in this case retains cognitive legitimacy. DNR can easily call upon the rules, that were created by legislatures or rule making processes, on which it is basing its decisions in regulating Acme. However, comprehensibility of a regulatory system is not enough. DNR does not have pragmatic legitimacy in the eyes of the community, because DNR does not help the community in its self-interested pursuit to have a clean environment. Since having a clean environment can also be seen as 'doing the right thing,' DNR also loses moral legitimacy. By distinguishing between these three types of legitimacy, it is possible to see some of the strengths and weaknesses of the command and control system. It is easy to understand the rules, but sometimes the rules are not good enough to allow DNR to 'do the right thing' in the eyes of some, or to generate outcomes that enhance the well being of either the community or Acme. These strengths and weaknesses will become important as we explore alternatives, which often lack the cognitive legitimacy, but bolster the pragmatic and moral legitimacy of environmental regulation.

3.3.4 Democratic Accountability

In the earlier chapters, I problematized democratic accountability in flexible systems. This implicitly presents command and control as the more accountable system. The Acme Metals case does not completely support this assertion. In some ways, there is accountability of DNR through the hierarchical bureaucratic mechanisms presented above. With a few exceptions, notably the decision not to fine Acme after their first infraction, DNR has made every attempt to follow the rules created through democratic processes. This view is not shared by many in the community who feel that DNR has not followed its own rules in implementing the law, out of either incompetence or due to political pressure. However, locals have not been able to hold DNR accountable in this regard. These citizens have tried every means possible to affect change, but

have been unable to do so thus far. Further, the groups of citizens that have mobilized do not have the capacity to change state or national laws.

It is questionable whether locals should be able to change DNR's actions, and hold DNR accountable for, what locals but not people up the chain of command in DNR, believe are digressions from following the rules. Nevertheless, it is important to note the locus of power, which is in central government representing a broad geographic area. This is a different kind of accountability than local control, it is not necessarily more or less accountability.

3.3.5 Calls For Improvements

Finally, the desires that the actors had for improving the process coincide with critiques of command and control, and proposals for reform. One DNR official put it this way:

“Will Acme and the neighborhood get together so there is a good working relationship where you got the community, you got the business, and you got the regulatory folks all sitting there working together planning and talking? We hope so. Honestly, that's our goal, get them beyond compliance, get them so the lines of communication are going.”

Acme on the other hand, just wants to be seen as the good corporate citizen that they believe they are. Acme sees itself as an organization that provides jobs, supports the community through giving, and struggles to remain competitive. The community wants to get information about what is going on in their backyard, wants to be listened to, and wants to have a safe place to live. DNR wants to form a situation in which there are good and open relationships. A situation in which Acme is cooperating with the community to go beyond compliance. Given these goals, is there a better institutional way of achieving them?

Chapter 4: The Politics of Green Tier

In the previous chapter, I presented a case that demonstrated some of the difficulties with command and control regulation. The Acme story illustrates how command and control regulations can be inadequate in addressing the concerns of the public, dampen innovation, and be extremely costly. There was a desire among the participants for something different. Something that will open up communication channels in a more deliberative fashion, give the locals a degree of power in shaping their community, and that will break down barriers to innovation that improves the environment and economy. Green Tier has the potential to provide all of these things through a new institutional design for regulation.

In this chapter, I describe Green Tier in more detail. Then I describe three views regulation and reform. My goal in this section is to bring out some salient features of Green Tier as seen through the lens of different critiques of regulation. This provides a context for the cases, and an account of practice that identifies potential difficulties with this new model of governance.

4.1 *Green Tier*

Green Tier is an attempt to change environmental regulation in Wisconsin.⁴ It is a shift from government—standards based rules are promulgated and enforced—to governance, which includes state and non-state actors in the pursuit of environmental performance. Of course, this is not how everyone sees it, which will be addressed in the sections below, but for now it is important that this is how it is conceived by some of the main actors in the creation and implementation of this change.

⁴ I will not directly address the history of Green Tier. For this see: *Reframing Regulation - changing forms of law and practice in U.S. environmental policy* by David Laws and Ian Finlayson, forthcoming.

The following two case studies are within the Environmental Cooperation Pilot Program. This program, defined under Wisconsin law, allowed DNR to enter into ten cooperative agreements. The firms are supposed to be “good actors” that have clean records of environmental compliance. The agreements initially last for five years, and then can be renewed and adjusted over time. They can come in many shapes and sizes, but for the purposes of my thesis, I focus on contracts between DNR and firms regarding a single facility—which are types of agreements entered in the two cases. In these contracts, firms agree to undertake steps towards “superior environmental performance,” and DNR provides flexibilities to regulatory rules that allow the firm to save money, and find innovative ways to protect the environment. In addition, participating companies are given deferred enforcement for a subset of potential violations. However, the deferred enforcement is only offered if the company discloses the violation and remedies the problem in a timely manner. Suzanne Bangert of DNR provides a simple illustration of how a contract might work:

“We’ve got a facility up in the western part of the state that is interested in a Green Tier arrangement...They treat hazardous waste solvents to reuse and recover them. [Now] they have to take their spent liquids out of state to a hazardous waste disposal facility. The disposal facility that [the company is] going to is a waste water treatment system that can handle it, [but] there is a local municipal waste water treatment facility that is very similar to the one [the treatment company is] going to...But because of what [the waste from the treatment company] is classified as, [the treatment company has] to currently take it out of state. The Green Tier we are trying to explore with that one is to be able to take [the waste] locally, rather than shipping it out of state. [This would] avoid all of the administrative constraints of the hazardous waste program to accomplish the same treatment process....[Now] the federal law would require that [the local] sewage plant become a hazardous waste facility,...they would have a lot of permitting administrative requirements that a municipal wastewater treatment plant just doesn't want...It just doesn't make sense. What we would see...would be a significant environmental gain. The other thing that we would do is consolidate our solid waste and our hazardous waste licensing...So that would be a benefit both to the company and to ourselves. And we also see the environmental benefits of not having to transport that waste, we see potential for spills along the way, and

we'd have the same treatment technology, the same end point in terms of what happens to that waste. Those are the kinds of benefits that we're seeing out of the Green Tier effort.”

In this description of a potential Green Tier arrangement, flexibility would be given to the requirements of the waste water treatment plant, and the benefits would be administrative streamlining along with a decrease in the transport of waste. This seems like a ‘common sense’ improvement that benefits all. It is here, however, that the tension between flexibility and accountability begins. Green Tier is radical in that it explicitly acknowledges the discretion of DNR and legally empowers DNR to make fairly far reaching decisions about what “flexibilities” are granted to administrative law. Central to the logic of Green Tier is that one size does not fit all. Having firms that barely keep their head above water in following environmental regulations subject the same rules as those, which routinely are beyond compliance, does not help achieve the desired outcomes of a clean environment and healthy economy. The flexibility in the agreements allows DNR to treat these companies differently. In these cases, trade-offs have to be made. For example, to what degree can reporting frequency be reduced if a company has demonstrated that it has not even come close to the legal emissions limits for many years? This is a question that would have to be determined through negotiations under Green Tier, whereas before it was determined statutorily for all companies, regardless of performance.

Addressing the question of legitimacy and democratic accountability, the contracts also outline a number of reporting requirements, as well as provisions for public participation. The reporting requirements increase the transparency of the agreements over what one might expect under command and control. The public participation provisions vary across the agreements—but for the two Green Tier case studies an “interested persons group” convened with the company and DNR to discuss the agreement. The role of the interested persons group will be addressed in detail

during the case studies, but it is important to note that statutorily it is very loosely defined. The breadth provides room for experimentation across the agreements in the program. Public participation through the interested persons groups is managed by the firms, with oversight from DNR. This gives space to the firm, but it also is a retraction of the state.

It is useful to compare cooperative agreements to the permitting processes in a stylized way. First, in cooperative agreements, the entire facility's environmental impact across media is considered in one document. This differs from permitting, in which facilities often get permits for each media—air, water, solid waste—independently. The permits still exist under the cooperative agreement, but the flexibilities and expectations for 'superior environmental performance' are in one document. Second, in the cooperative agreements, regulators and firms can discuss broad actions towards environmental performance, such as the creation of environmental management systems, addressing non-regulated issues of concern, and conducting studies to further environmental performance. In a permitting situation, according to one DNR official, DNR sets "the parameters in which [the facility] will operate." There is no room for study, or discussion of broader goals. Third, in the cooperative agreements, members of the public are—at least in my two cases—engaged in ongoing discussion of the agreement with DNR and the firm. In a permitting arrangement, as seen in the case above, the public has a chance to comment during a certain period, and to voice their concerns during public hearings, but there is no space for deliberation or ongoing dialogue. Fourth, in the cooperative agreements, there is room for DNR and the firm to adjust their priorities over time to address exigencies. In a permitting arrangement, the permit is issued and not revisited until there is need for a change. When there is a change, the process starts over again. Finally, in the cooperative agreements, there is one point of contact between DNR and the firm that facilitates the building of a relationship. In a permitting

arrangement, the firm generally deals with multiple DNR contacts that are subject to change over time.

There are, of course, many details of the legislation and policy of Green Tier that I am not discussing. I do not want to get bogged down in the particulars of the policy, but to focus on how they are implemented. In the cases, I will bring out the details of the agreement to complete the description of Green Tier.

4.2 Three Views of Reform

The reform that is Green Tier takes place within a specific political context. Views of environmental regulation in Wisconsin vary widely, as do perceptions of the changes brought about by Green Tier. For example, some believe that environmental regulation is overly burdensome on industry, while others feel that the regulatory system is weak due to budget cuts. This is not terribly surprising given the usual politics of environmental regulation. However, there is much nuance and texture to these stereotypical positions—not all of the players fall squarely into one of these two camps. Even those with opposing views of regulation generally can have somewhat similar views of the regulators themselves, and Green Tier for that matter. For example, a subset, consisting of both people from the environmental community and from the business community, has little trust in DNR. Even though they have widely different senses of what the problems are and how to solve them, they both do not believe that DNR will solve the problems without external intervention. On the other hand, some with very different views of both DNR and environmental protection support Green Tier for completely different reasons. It is within these perceptions that one can find the concerns of actors that must be addressed in order to make reform work. In this section, I outline three views of Green Tier that comprise the range of perceptions of reform that I encountered in Wisconsin.

4.2.1 A New Way of Doing Business

Green Tier can be seen as new way of doing business. In this view Green Tier is an attempt to move from adversarial standards based regulation to cooperative regulation that will more effectively solve environmental problems while putting less of a burden on business. It is an attempt to address the unregulated pollution that is currently uncontrolled and largely unmonitored. It is an attempt to build trust in regulatory relationships to make them more open and productive. Green Tier provides the institutional tools to meet these ends without compromising the accountability of regulation or eroding the baseline of command and control.

The magnitude of change in this view should not be underestimated. Consider this quote from a speech that George Myer, then the Secretary of DNR, gave on Green Tier:

“Nevertheless, our national and ecological interests require courageous individuals in all sectors to boldly create a new ecological performance opportunity.”⁵

In this view, Green Tier is a “bold” and “courageous” step to create new opportunities to meet our interests. From this view, Green Tier will improve the environment, the economy, and provide more involvement for communities. Everybody wins. The “control tier,” or command and control regulation remains under Green Tier so that there is no erosion of the old system—only improvement.

In the introduction to this thesis, I spoke of the ‘myth’ of scientific bureaucratic administration. There is also a myth that by achieving performance standards that are set by laws, the environment will be safe. From this view, Green Tier takes these two myths head on and attempts to forge a new institutional structure to address environmental issues. It “reframes” regulation setting it on much more unstable (but more realistic) ground. This change requires a

⁵ *A Green Tier for Greater Environmental Protection.* Speech by George Myer, June 1999.

cultural shift within DNR and regulated firms to change the way they relate to one another. Trust must be built, the warm blanket of rules must be left behind, and chances must be taken.

In this view of radical change, democratic accountability comes from the participatory and transparency mechanisms. The interested persons groups provide oversight of the cooperative agreements. Even though these groups lack “hard” power to change the actions of the firm or DNR, their presence and considerable “soft” power provides a significant increase in accountability from the old system. Therefore, the shift toward more discretion of DNR does not engender a problem of democratic accountability.

I will stop here in my description of this view because it is the primary frame from which I analyze this program. Although I do take a critical stance, the descriptions of Green Tier that I provided above are shaped by the rhetoric of a radical change that many of the central actors in Green Tier—with whom I worked with in constructing this analysis—use to describe their own practice.

4.2.2 A Response to Over Regulation

Another view of Green Tier is a response to over aggressive regulation in Wisconsin. There is a perception from representatives of the business community that, in recent years, DNR has been unreasonable in its enforcement of regulation, and that this has hurt business. One politician that I spoke with stated that one could lower taxes to help business, eliminate DNR staff, and cut red tape, but that would only go so far. What is needed are programs like Green Tier that decrease the regulatory burden on business. Another elected official likened environmental regulation in Wisconsin to having police officers pulling cars over every block to make sure that they are not speeding. With this comparison, the way that environmental laws are being enforced goes well beyond the intent of the legislation. Green Tier was needed to make the enforcement of

the laws run more smoothly, and within the legislators' intent. Dan Johnson, the Chief of Staff for Senator Kedzie who sponsored legislation for Green Tier, summed up the problem with DNR in this way:

"We need to have a new partnership with the regulators. We will do right by whatever the regulators tell us to do, but we can't have them making these arbitrary decisions based on bad science...We talk to a number of business groups out there...[that] relay to us their DNR horror stories. We have businesses in Wisconsin that some consider are the model for environmental compliance. Really the model, just outstanding corporate neighbors, outstanding in their community. Some have been started by Wisconsin residents who care a great deal about their own state. But they exceed an emission standard, [or] there is a malfunction in a piece of machinery, something very simple, unintentional, and [they] start going through the process with the DNR. A notice of violation is submitted, it gets referred to Department of Justice, next thing you know it is a \$75,000 fine just for, like I said, a malfunctioning piece of equipment or a record keeping mistake...This is money that I could have used to give...employees raises. [It] could have [been] used to offset the costs of health insurance benefits...[or] to upgrade...equipment....When you take these revenues away from businesses, they don't have the ability to make their business better. They want to put it back into the business to buy new equipment, they can't do so, because the state is coming by and taking it."

Green Tier helps solve this problem by allowing companies that are 'good actors' to avoid "unfair" prosecution. In this view, Green Tier helps make regulatory relationships more cooperative so that there is less of a chilling effect on business, which causes businesses to hide their environmental problems from regulators. Continuing with Dan Johnson:

"[For example, a] company has a problem, but they are fearful of coming to [a] regulated agency, because they fear as soon as they walk in the door it's going to be notices of violation, bad press releases, citations, fines, shutdowns, closures, whatever you want to call it. There are CEO's that literally live in fear of those types of things. I'm not saying that these are mousy types of CEO's, these are very well experienced Wisconsin CEO's who say, 'You know, I would love to be a good actor, but I fear that if I open up my entire business to the regulators they are going to come in here like the wrath of God and absolutely thump me.' Through Green Tier [we] are trying to take away that fear. We are going to give you an assurance from the state that if you participate in this program, and if you come to us and you say look we have some problems here, we are going to give you the tools, the resources, and the time in order to correct those problems. If you don't do those

things in a certain amount of time or whatever, then we can talk about other things. But when you first come to us, we are going to be very understanding.”

From this point of view, one of the most important aspects of Green Tier is the deferred civil enforcement, often called audit immunity. Through audit immunity, firms are more likely to be transparent, and accountability is more likely to be achieved. Also, firms are protected from unreasonable behavior by DNR. From this perspective, the victims are the business and the jobs.

From this perspective, there is very little concern about accountability to the public, and little concern about superior environmental performance. During unstructured interviews, respondents were more concerned about DNR going too far than about regulatory capture. Some of the legislators that helped design Green Tier were not aware of the details of the interested persons group. Those who were, focused on the right of citizens to participate generally, but did not address the character or depth of the participation. This does not mean that in practice there is not greater democratic control, but it shows that at least for some this was not a priority. Further, there is a perception that the media and environmental NGO's are watchdogs that will go beyond what is necessary to monitor agreements. One state senator said: “I do know that environmental groups are going to be taking a close look at every single [cooperative agreement] that is proposed, so there's going to at least be that constituency.”

In summary, this view is significantly different from the view that Green Tier is a new way of doing business. The main goal of this view is not to deal with unregulated problems, but to prevent regulators from going too far. There is a shared goal to have more trust and transparency, but this is meant to make things easier for business to thrive, and for DNR to ensure that business thrives responsibly.

4.2.3 A Dangerous Shift

Another view is that Green Tier is a dangerous handout to business that will weaken the already frail DNR. According to this view, there are two major problems with Green Tier. The first is that DNR is already an overtaxed organization, and these high cost agreements will be a distraction from DNR's core mission of protecting the environment. The second is that agreements reached under Green Tier will largely be unaccountable, and that DNR has incentives to give in to business at the expense of the environment.

Unlike the view that regulators are too burdensome, others observe that regulators are too understaffed and underfinanced that they cannot effectively do their job. This view cites cut backs in DNR's budget and staff in recent times. It cites the small number of facilities that are actually inspected in the state, and of those which are found in violation, the small number that actually get fines. With this perception of DNR, adding a program with lengthy contract negotiations is unsettling. Melissa Scanlon, from Midwest Environmental Advocates explains her worries:

"I do worry about the contracts...The DNR has their budget...cut every...two years. Their staffing has been cut back significantly in the air program and water program. It appears that this type of program is going to take more staff hours to implement than the standard command and control permitting, so I do have concerns from an administration perspective of: How is this going to be efficient? And what are the costs and benefits of this from a staffing perspective? What is this actually going to be taking away from?"

Studies of similar programs, such as EPA's Project XL, have shown that negotiated agreements can be quite costly (Blackman and Mazurek 2001). This challenges Green Tier to show that it the agreements are worth the resources put into them, which is a significant critique of the first view. It is very hard to measure the benefits of a cultural shift in regulation, and equally hard to measure how much it costs to make the shift. This view rejects 'win-win' language of 'common sense' improvements, and embraces a more skeptical view of the potential for reform.

The second major critique of this view is that the agreements reached under Green Tier will be unaccountable, and will inevitably become handouts for business. From this perspective, DNR is not trustworthy and has incentives to increase the numbers of participants in the program for the program's sake. Due to this incentive, DNR will not be responsible, and will let companies into the system that not are good performers. Moreover, the flawed enforcement system of command and control allows companies with significant violations to have unblemished records after settlements with DNR and therefore, qualify for Green Tier. Moreover, pressure on DNR will force it to negotiate softly with companies, and, therefore, give up too much in the name of flexibility. Caryl Terrell of the Sierra Club comments on the Cook Composites cooperative agreement:

“DNR kept on saying ‘No no no, you don’t understand what we’re doing, what the benefits are going to be.’ And we said ‘I think we do understand, and we want the incinerator to close down.’ We were party to getting rid of a lot of incinerators in the state, and they all managed to close down in a timely way within the law. Why can’t this company do it? Why do you have to use a program that was supposed to deal with innovative ways of reducing pollution, going beyond compliance, and involving the community in a transparent way? Why are you using this program to do something that is not innovative, that is not transparent, and that increases pollution?...This was, as far I’m concerned, an abuse of the program because...it allowed somebody to do something illegal, and because it was signed away as the [flexibility]”

In this statement, Caryl Terrell is questioning the reasons for the flexibility that was given to the company, and its benefits. Without trust in DNR, those who share this view have little faith that the flexibilities will be worth the benefits to the environment. This critique goes right at the heart of Green Tier, claiming it is not better for the environment because the trade-offs can be worse than the old system.

In addition, this view holds that Green Tier is neither transparent, nor able to be evaluated.

Because each cooperative agreement is unique, it is difficult for those outside to gather the significance of alterations in the regulation of a firm. Caryl Terrell explains this problem:

“[Permitting is] consistent, it’s not unique. And that the monitoring is consistent. [In Green Tier you read] a narrative that says that [the firm] will give X, Y, and Z reports, and you say ‘Is that more, or less than they did before? Is it as complete? Does it cover everything?’ So you [are] sort of forced back to saying in your comments, unless this is as much as they had to give us before, we are not giving any flexibility on reporting because this is so unique we have no way of comparing it to any similar facility. Being unique is wonderful for the company, its a headache for the DNR. I don’t understand how they will ever document if they’ve cut down on their staff time on this.”

With a flexible system, it is difficult for NGO’s to monitor DNR’s practices. For example, the Sierra Club in Wisconsin, one of the biggest players in the environmental arena, has two full time employees in their Madison office. This makes it extremely difficult to participate in a devolved system of regulation in which the relationships between DNR and many firms are unique. Note that this is precisely the opposite of what some of Green Tier advocates from the business community predicted would be the case. Further, the narratives that are difficult to compare can easily lend themselves to white-washing by DNR and the firms. More ‘win-win’ and ‘common sense’ language that covers up trade-offs. Skeptics ask: “What am I missing?” From this view, lack of standards that are ‘there for a reason’ is extremely problematic for accountability.

This view cast doubt on the ability, or the inclination, of the interested persons groups to make up for the accountability deficits. Consider the following to quotes from Melissa Scanlon and Caryl Terrell, respectively:

“What about the person who finds out about this the day before it goes through? With a permit, if there is a hearing, you don’t have to be an insider to have a say. You can be a general member of the public whose got a lot of other things on their mind besides whether a company is complying with the law. They are hoping that the state agency they pay taxes to is actually making sure that happens. But they

might find out at the last minute that this is happening, get concerned, and have the opportunity to show up at a hearing and learn about the issues and express their opinion. If you are doing something by contract with a pre-selected group of people that are supposed to be representative of the public, that is very limiting to people who are not insiders.”

“Most citizens are going to come to one plant, they want to know what's going on in that plant, they will probably like the narrative, and they will probably say ‘Oh, you’re saying that you’re doing a good thing, and DNR is not contradicting you, so you’re doing a good thing.’ [One] needs to be able to compare against something...The problem with this program is: How do you expect someone who lives across the street from a plant, or even somebody who used to work there and knows the chemical process, to understand the policy issues behind it?”

According to this view, the lack expertise and perspective of the interested persons group, makes it impossible for them to hold DNR and the firm accountable. Caryl Terrell identifies two distinct forms of expertise—knowledge about the technical aspects of production and pollution and knowledge of the permitting process itself. This critique holds that citizens need to develop competence in order to meaningfully participate. Caryl Terrell is skeptical this will happen through Green Tier.

In addition, the structure of the interested persons group creates a barrier for those who may not be “insiders” to have a say. A group of local elites can capture the forum, and marginalize voices of dissent within the community. This view contradicts what was described above as “civic environmentalism.” It calls into question the capacity of lay citizens, and their civic engagement. Therefore, the interested persons group is less of a place to find accountability and democratic legitimacy, and more of a place to find cooption of lay people by the firms and DNR.

In summary, the cautious view contends that while Green Tier is good intentioned, the difficulties created by a shift away from rules—which are seen as a genuine way to protect the environment and as legitimate—are not mitigated by the institutional design. This view challenges

the legitimacy of the reform as a whole, asserting that it is essentially 'breaking the law,' and that the results of the reform will be perverse. To some degree, this view is supported by the view that the business community has of Green Tier. Advocates for less regulation claim that DNR needs to be more "customer friendly," this is precisely what critics of Green Tier worry about. Green Tier's ability to function in practice without fulfilling the predictions of these critics will be essential for success.

4.3 Conclusion

In conclusion, Green Tier is a large shift from the bureaucratized system of command and control regulation towards a more flexible form of governance. However, there is a wide spectrum of views of what this means for the environment, business, and democracy. This debate is not unlike the debate in the literature. While there is a strong motivation to solve many of the problems exhibited in the Acme Metals case above, there is also much skepticism in the promise of reform. In the following two chapters, I explore two cooperative agreements in detail. It is through these explorations that I will add empirical data to the theoretical debate and the debate among practitioners.

Chapter 5: Cook Composites

This chapter tells the story of a cooperative agreement between Cook Composites and Polymers and DNR. This is a story of substantial change in relationships between regulators, a regulated firm, and a community. It demonstrates that change can happen, although one's perspective shapes whether this change is seen as positive. It also demonstrates that simply opening up a space for dialogue between the community and a firm can alter relationships substantially. Finally, it shows that there are a lot of difficulties to reform along the way. Through my presentation of this case, I hope to address both theoretical and practical concerns. However, I do not structure the story too much in order to let the details speak for themselves.

5.1 Introduction

The story of the cooperative agreement between Cook Composites and Polymers and DNR starts with a long professional relationship between Mike Gromacki, Director of Quality, Safety and Environment at Cook, and Lynn Persson, an official at DNR. When Mike Gromacki was an engineering student, he interned at DNR under Lynn Persson. This is an important aspect of the story, because the familiar relationship provided a foundation for the development of a cooperative relationship between Cook and DNR. This reduced the risk to the first mover in cooperation—it is easier to believe the actors will not exploit other's disadvantage when there is a shared history and personal relationship. At about the same time that the Environmental Cooperation Pilot Program was began, Cook won an award for its environmental performance based on work with Lynn Persson. Lynn Persson tells how they began talking about the agreement:

“We had a ceremony here...where Mike and them received the award and after we went and had coffee with Mike and crew...They said, ‘This [award] is nice, we did some nice things,...but there are some real things that we would like to accomplish.’ And he was mentioning that they had the hazardous waste incinerator that they had to get rid of, but they were under this time crunch, and the law for the environmental cooperative agreements had just been passed in the last six months. I said ‘Mike, if you want to accomplish that [the cooperative agreement] might be a vehicle to do so.’ So then we just started talking.”

Three years after these initial discussions, in October of 2001, DNR signed the cooperative agreement with Cook under the Environmental Cooperation Pilot program. This agreement allowed Cook to stop incinerating hazardous waste without going through an expensive re-permitting and closure process with DNR. In exchange, Cook promised to take a number of steps towards ‘superior environmental performance.’

Before beginning the discussion of the agreement, it is necessary to describe the context of this case in more detail. Cook Composites and Polymers manufactures chemicals, specifically polyester and alkyd resins, that have a number of industrial uses—such as in paint used for farm machinery. The focus of this case is one of Cook’s plants located in Saukville, Wisconsin. Saukville is a small (self described) middle class village, of about 4,000 people and a median household income of about \$53,000. It is on the border of rural and suburban, located about 25 minutes north of Milwaukee.⁶ There is a large industrial park outside of town, but like Acme, Cook is located in a residential neighborhood, in the middle of the village, blocks from the church and library. On two sides of the plant, there is almost no buffer between Cook and the community. Cook’s buildings abut the backyards of its neighbors. Unlike Acme, this area is distinctly not urban. Trucks going and coming from Cook have to drive on small residential streets to get to the plant. Historically, relations between the plant and the community have been

⁶ 2000 US Census

strained. Prior to the early 1990's, the plant was operated by a company named Freeman Chemical. Neighbors describe Freeman as a source of noxious odors in their community. When Cook bought the plant, neighbors saw improvements, but there were still problems.

The negotiations between Cook and DNR leading up to the agreement were primarily bilateral, and did not involve the community. In the second public hearing to discuss the cooperative agreement, many in the community were unhappy with the agreement. People were concerned, based on their past experience with the plant, that the changes to the regulation of Cook through the cooperative agreement would have adverse effects on them. They complained of odors that burned their eyes and throats, and were worried that these might get worse. The public hearing provided a format for people to air their concerns. DNR responded in writing and made a number of substantive changes to the agreement. The public hearing process was seen by some as inadequate for addressing issues in the cooperative agreement. This provides a baseline experience from which change in the relationships between Cook and the community can be gauged. Mike Gromacki of Cook describes the hearing:

"The way the meeting was done...was come up to the microphone, say whatever you want to say whether it's right, wrong, a lie or inaccurate...And everything gets recorded and treated equally and nothing is really facilitated, it's simply recorded. And so the idea of this sort of public hearing process, I looked at it with really a lot of amazement that: What value does this process really add? Because there is no real discussion, it's simply an airing of opinions,...and they may or may not be factual."

This dissatisfaction informed the change in community engagement that followed signing the agreement. From then on, Cook and DNR worked to engage members of the community in discussion, rather than limiting public comment to one way venting in public hearings. About six months after the hearing, the agreement was signed between DNR and Cook.

5.2 The Cooperative Agreement

The cooperative agreement between Cook and DNR makes a number of changes to the regulation of Cook. The two main features of the agreement are flexibilities afforded to Cook and commitments from Cook to go beyond compliance. In this section, I address each of these elements in turn. In addition, through the agreement Cook created an “interested persons group” that consists of neighbors of the plant, officials from local government, and an assortment of other local actors. I will address the role of this group in detail in a subsequent section. Finally, at the end of this section, I address the way that the agreement changed the relationship between Cook and DNR.

Before describing the details of the agreement, it is necessary once again to point out that the agreement is an experiment. The language of the agreement serves as a structure on which a myriad of changes to the relationships between Cook, DNR, and the community. These changes occurred over time. It is not as though the agreement was signed and Cook implemented it immediately, and without reflection. The agreement was signed, and Cook did implement it, but decisions were made along the way. The line between decision and action is blurred. Goals are updated as time goes by and new information becomes available. The continually changing nature of the agreement, however, make description difficult. Therefore, I arranged the description of the case into smaller stories that are not arranged chronologically. These stories overlapped when they occurred, but are kept separated for clarity.

One more note of simplification. As this case progressed over time, the actors involved changed. At all times, there were some people from DNR, Cook, and the community, and many of these people did participate throughout the length of the case. But there are some who did not. For simplicity, I treat the groups as fairly static, and fairly homogenous (that is I say that there is a

“DNR view” while there are multiple staff at DNR who all have somewhat different views). I deviate from these simplifications only when it the different views within a group, or the changes in the actors, have an impact on the events and interpretation of the story.

5.2.1 Flexibilities

The cooperative agreement provides flexibility to the standard rules that would normally regulate Cook. It does not completely change the way Cook is regulated—nearly all of their requirements remain in effect—but the changes at the margin are important. The most significant measure embodied in the cooperative agreement was to the process by which Cook’s hazardous waste incinerator was changed to a non-hazardous waste incinerator. This flexibility drove the formation of the agreement. Initially, Cook incinerated hazardous waste as part of its production process. Driven in part by the possibility of impending regulations, Cook wanted to stop incinerating its waste while it was hazardous, and begin to treat the waste before incinerating it. This process, both administrative and technical, is complicated and costly. Mike Gromacki of Cook explains:

“One of the complicated parts about incineration is that once you are in it, it’s not really easy to get out of it either. There’s a lot of costs involved and it’s very complex. You’ve got closure issues, and it’s tough to transition from one technology to another technology. So really, almost intrinsically [it] is a barrier to pollution prevention. If you are simply a generator, it’s relatively easy for you to say well, we are going to stop doing this, and start doing that. When you are a regulated unit and you want to talk about stopping something, you have to have notices before you stop. You have to have approved closure plans, and those closure plans have to be implemented and completed within a certain number of days, so it becomes very complicated. Especially if you are trying to do something online, where you are dealing with a high volume waste stream and you want to move toward a different technology.”

Adding to the stakes, Cook’s permit to run the incinerator was scheduled end before they could make the switch. This meant that they would have had to go through the costly process of

applying for a new permit, one that they were not sure they wanted to use for a significant period of time. Getting a new permit would require them to test the air emissions coming from their smoke stack at a cost upwards of \$100,000. Cook was faced with a choice, apply for the new permit and use it, which would have meant continuing to incinerate hazardous waste. Or, try to undertake the change before their current permit expired. Or, apply for the permit, use it for a short time, and then stop using the incinerator despite the investment.

Staff at Cook and DNR saw these regulatory hurdles as a barrier to innovation. This problem is precisely the evidence that critics of command and control use to argue that strict rules stifle opportunities to further environmental protection. Cook wanted to do the 'right thing' and stop incinerating hazardous waste, but the transition would put them at risk. This essentially created a disincentive to protect the environment. The agreement gave Cook flexibilities and assurances in the transition process to decrease the risks involved in changing their process. Cook would not have to worry about making the transition before their permit expired, and during the transition, Cook was assured that DNR would be responsive to their requests. With the streamlined process, Cook avoided the costly stack test, and saved a significant amount of money.

One other type of flexibility was granted to Cook through the agreement that is significant for my analysis of this case. Cook was granted deferred civil enforcement for any violations that it discovered during its own evaluations. Under this arrangement, Cook would not be sanctioned for any self-discovered violations if it reported the violation within 45 days and remedied it within 90 days of notification. One exception is if the violation creates an "imminent threat to public health or the environment or may cause serious harm to public health or the environment" enforcement

will not be deferred.⁷ I only mention this flexibility because, as described above, some view the this type of “audit immunity” as a key element in building cooperation. The assumption is that firms will be more open if they are assured that DNR will not slam them when they come forward and admit mistakes. This was not a driving force in the cooperation between DNR and Cook. Staff at Cook were not even aware that they had audit immunity, yet they still, as I will show, formed a cooperative relationship with DNR. Nor did Cook ever need to use this immunity. Therefore, this case does not support the hypothesis that audit immunity helps build trust.

5.2.2 Beyond Compliance

In the agreement, Cook committed to a number of actions to go “beyond compliance.” The most immediate was to stop incinerating hazardous waste sooner than they would have been required to by law. This is essentially what the flexibility allowed them to do—stop burning hazardous waste. This requirement was specifically outlined in the agreement, with a set closure date.

In addition, Cook agreed to undertake a number of studies and projects to minimize its environmental impact. One set of studies explored the feasibility of reducing its waste streams. Cook agreed to report the results of these studies to DNR, and the interested persons group. The hope was that Cook would be able to identify cost effective ways to reduce waste. Cook also committed to ‘strive’ to develop environmentally friendly products, develop a program for the promotion of waste reduction among others, and to partner with its customers to encourage environmental stewardship of its products.

⁷ The Cook Composites Cooperative Agreement

Finally, Cook agreed to create an environmental management system (EMS). An EMS is “a formal set of policies and procedures that defines how an organization will manage its potential impacts on the natural environment and on the health and welfare of the people who depend on it” (Andrews et. al. 2003, p 5). Encouraging the creation of an EMS is central to the goals of Green Tier. It reflects the shift from meeting standards to continuous management of environmental impacts. Also, in the development of the EMS, Cook was required to engage the interested persons group, which will be addressed below.

5.2.3 Changing the Relationship Between Cook and DNR

Unwritten in the agreement was a fundamental shift in the relationship between DNR and Cook from an adversarial to a cooperative relationship. This shift is not due to any single commitment by Cook to go beyond compliance, or by DNR’s commitment to respond to Cook’s requests in a timely manner. However, using this agreement, DNR and Cook were able to develop a more trusting and cooperative relationship.

In the introduction to this case, I noted the long relationship between officials at DNR and staff at Cook. This relationship formed the foundation of trust between the two organizations, and made it easier for them to work towards the agreement. Lynn Persson describes the value of her relationship with Mike Gromacki of Cook:

“There is also from the DNR perspective, the fact that Mike Gromacki and I had worked together. We had an innate trust, now, I know Mike is a procrastinator, and I can kick him and nudge him. I can do it in a different way than others, so that I think that part of the success in this project was just the inherent trust that Mike and I had to begin with.”

One of the difficulties in cooperation is the risk of the first move. Making the transition of a vicious cycle of distrust, to a virtuous cycle—in which actors have an opportunity to show their

trustworthiness, and from which trust can be built—is extremely difficult. This relationship helped make this first move less dangerous but was not sufficient to change the character of the relationship between these organizations. Mike Gromacki is a relatively senior official at Cook, whose office is in Kansas City, far from Saukville. For the change to take place, the people who actually implemented the cooperative agreement needed to be on board. One of these people is Glen Preisler, the Plant Manager. For Glen Preisler, interactions with DNR before the agreement caused anxiety, and at first he was skeptical of the agreement. Glen Preisler explains:

“I kinda came in right at the signing of this agreement. And I'd be lying if I said I didn't at first have concerns when I first heard about it.”

“[Now] we have a much more positive relationship with [DNR]. In the past, you know, if you heard DNR was coming to do a waste inspection, or anything where they are going to be on site, everybody was a little bit nervous about ‘Oh no, we are having an inspection.’ Now when the DNR shows up at the door, it's very positive. That fear isn't there any longer. They come on in, they know exactly what we are doing...If the DNR shows up for an inspection and they do find some minor things, rather than slapping your hand and giving you some fine, they work with you. They say we will work with you to correct it, and we will come back in a few months and check how you are doing.”

Preisler describes a shift in the working relationship between DNR and Cook. This may be related to the provision for audit immunity described above, but none of the respondents alluded to this as important for their openness. Indeed, staff at Cook were not even aware that they had any immunity for violations that they find themselves. Like Preisler, others at Cook were initially nervous about the agreement, but soon they too came to see DNR more as a friend than a foe.

In the general theme of shifting from government to governance, there is also a shift from a more vertical relationship between DNR and Cook to a flatter relationship. The agreement helped engender this change by putting requirements on DNR to respond to Cook's requests in a timely manner. In this sense, accountability flows in both directions. Mark McDermid, the Bureau

Director, Cooperative Environmental Assistance at DNR, describes this shift, including the shift in the relationship with the community.

“The community is relying on us [DNR] to do certain things in order to get to the progress that we identified. Correspondingly the community is expected by us to do certain things, and the community is expecting the company to do certain things, and the company expects it’s suppliers to do certain things. And there is a relationship that is recognized in the agreement to produce results. And in the 360 [degree] nature of the accountability system, no one party can really act independently. You can have independent actions, but the consequences of those [actions] take on added importance as a result of that agreement being in place.”

The flattening of these relationships is another, not wholly independent, change in the relationship between DNR and Cook. Mike Gromacki explains this new cooperative relationship: “Ultimately when we come to an agreement, and we move forward on that agreement, my expectation is that you stand beside us as a partner. Not as a regulator, but as a partner in this agreement.” Staff at Cook were able to see that DNR had changed its actions, and this reinforced their commitment to a new relationship. Michael Lotman, the Director of Coatings Manufacturing at Cook, describes this change:

“We saw similar commitment on the part of DNR...It's not something that, I sit with you today and I see the commitment. The commitment shows in action, and it is a process. We felt that we do see the same level of commitment in the DNR side in the process that followed...in actions that were taken.”

The process of developing change was slow, and was reinforced through action from DNR following through on the commitments they made to a more cooperative relationship.

Embedded in these statements is an expectation of a partnership working towards a common goal of environmental protection. This new way of doing business is at the heart of what Green Tier is trying to accomplish. The hope is that working together and being transparent will lead to better outcomes; this is not just about feeling better about regulation. However, allow me to problematize this new relationship using the view point of those who are skeptical of

Green Tier. How do we know that this is not another form of regulatory capture? Regulatory capture is avoided by preventing close relationships like this from developing in the first place. Shouldn't we want Cook to have some fear of DNR? If they find violations, shouldn't DNR fine them? It is the basis of the adversarial system. If not, what is the point of the laws if they are not enforced? This brings us to the interested persons group, and direct deliberative democracy. It is not the only source of accountability, but it is a novel one that I believe is worth consideration in the context of an analysis of flexible administration.

5.3 Interested Persons Group and Democratic Accountability

The cooperative agreement between Cook and DNR established an "interested persons group." The interested persons group, or the "community advisory committee," was required as a part of the legislation that gave DNR the authority to enter into the cooperative agreements during the pilot program. However, the interested persons group in Cook Composites goes well beyond what is required by law. In this section I will focus on the interested persons group through the frame of democratic participation and accountability.

5.3.1 The Basics

The agreement is structured such that Cook is responsible for implementing the participation of the interested persons group with oversight of DNR. Cook hired a facilitator, Steve Skavroneck, to organize the community participation. Skavroneck was known to Lynn Persson of DNR as an active member of the environmental community in Wisconsin who had done work on Green Tier. Lynn Persson connected Skavroneck with Cook as a potential person to design and implement community participation, and he was subsequently hired as a consultant. Like the beginning of this story, personal connections through the network of the environmental

community brought the actors together in a constructive fashion. Skavroneck conducted a survey of the community to identify their concerns and to solicit participants. The survey was conducted before the agreement was finalized and signed, and the first meeting of the interested persons group was held on January 11, 2001.

The interested persons group is made up of neighbors of the plant, local officials from government, such as the director of the emergency management office of the county, one business representative, and one professor. The make up of the group has changed over time, but not significantly, with the exception of one individual whose departure I will discuss in more detail below. The meetings take place at Cook on Wednesday nights at seven. This is significant because it is a time that people can attend after working hours. At first, the meetings took place every quarter, but after a number of meetings the group decided to meet twice a year. The meetings are facilitated by Skavroneck, and the format is an informal combination of presentations and discussion. The group deliberates about the cooperative agreement, the impact of Cook on the neighborhood, and makes recommendations. There is no formal decision-making process, and no decisions are actually made by the group. The group has no "hard" power over the agreement, and it is not clear what would happen if participation ceased. The agreement was largely negotiated by DNR and Cook without input from the interested persons group.

Nevertheless, the group is a deliberative forum that allows communication among members of the community, and among Cook, DNR, and the community about the cooperative agreement. This contrasts strongly with the public hearing that was described earlier in this case. In this forum, participants are accountable for their statements because others have an opportunity to respond. One cannot make a claim and not expect to be asked to back it up if someone questions it. There is a three way information flow, in which members of the community, Cook,

and DNR all both give and take. In the public hearing, the information flows from the community to DNR and a response does not come immediately. The deliberative form of the interested persons groups has distinct advantages over the public hearings, which will become more clear as the case is developed.

Participants joined the group in two ways. Cook recruits members of the community to join by publicizing the meetings in the town. The meetings are open to all that want to attend, but there is a core group of people who consistently participate. In addition, Cook asked, often through the facilitator, a number of other people to participate. This included one representative of a local business, professor from a university in Milwaukee, an official from the county government, and officials from the village government. According to those I interviewed, there are some in the community that do not attend and do have an interest in the happenings of the interested persons group. These people are not overtly kept out by Cook or DNR. The assessment from the people who do participate is that some other members of the community are skeptical and therefore choose not to participate. In 2004, a survey that Cook conducted of the neighborhood surrounding the plant found that 67% of the respondents were aware of the interested persons group. It is hard to gauge the significance of this number, whether it is a lot of people or a small amount. However, considering the small town community, it seems rather small. Consider this statement from an employee at Cook: "I'm from this area...I was born and raised in Port Washington...The village president here is my cousin. I know pretty much everybody. I know the neighbors, I probably went to school with some of their kids." With such a tight community, and with Cook's conspicuous position in the middle of the town, one might expect that more would be aware of the interested persons group, but it is hard to judge. This information is useful, however, because it helps further describe the participants from the

community. They are part of the little more than half the community that is aware of the group, who are not cynical and believe there is value in participating, and who are willing to give up one Wednesday night every six months to participate in a meeting.

5.3.2 Role of the Interested Persons Group

The role of the interested persons group is defined in the cooperative agreement loosely. In the agreement, Cook “commits to provide an ongoing opportunity for community information exchange and dialogue, to the extent possible, relating to all aspects of [Cook’s] environmental activities during the period of the agreement.” Using this definition, it is clear that the interested persons group is a place to exchange information and dialogue, but nothing further than that in terms of direct local control. Steve Skavroneck, the facilitator, describes their role to provide input on a “wide range of environmental issues related to the development of the EMS, pollution prevention, and other things that the company was doing.” An agreement on just what the role of the community group is has not yet consolidated. For example, one neighbor and member of the interested persons group describes his role:

“Just as a neighbor sitting in and trying to understand...I'm not making any influences, I'm not going over there and telling them anything. I just sit there and try to resolve for myself 'Are they in compliance with the rules that are around here?' And I think yeah, they are working [on] it.”

This is much different than the role described above by Skavroneck in which interested persons group provides input to Cook about setting priorities. Indeed, it is much different than the central feature of Green Tier, bending the rules where gains can be found. Cook’s compliance with the rules should be less important than Cook’s environmental performance. Mike Gromacki speaks of a balance of empowerment and Cook retaining control of business operations, stating:

“You know you have to understand it’s an advisory committee, it’s a feedback kind of committee and you don’t want to discourage their involvement, and you want to show action and take things seriously. On the other hand, you know you also have to make it clear that you know the business decisions still have to come from the business.”

In this quote, the role of the interested persons group is to walk a fine line between what they can and cannot influence. Between providing oversight on the agreement, and not going so far as to influence “business decisions.”

In addition, the role that the interested persons group has actually played, regardless of how it is perceived, seems to have shifted over time. Within the range of issues described above by Skavroneck, which are also described in the cooperative agreement itself, the focus of the group shifted towards concentrating mostly on nuisance issues. Another member of the interested persons group, and a local official, explains his view of this change:

“It started out good, I don't know if it stayed good...Now it just turned out to be a complaint session. Noise and alarms and stuff like that, and semi's [trucks] being parked outside the gate. I think they lost their focus on the environmental issues.”

In this view, the role of the group has not shifted so much in terms of the way it relates to the cooperative agreement, but in terms of the range of topics that are addressed, and the character of the conversation. From this participant’s perspective, the group has become less a deliberative forum, and more of a “venting session.” This is important because, as we will see later, the deliberative quality of the meetings helped build legitimacy in Cook and the agreement. Lynn Persson of DNR shares a similar assessment:

“I think their focus has been primarily odor, noise, and then the emergency issues, spills and things...and more minor stuff, and still there obviously, are aesthetics, lights...I’m not sure how much they are looking at superior environmental performance, except for the odor and noise.”

Without focusing on superior environmental performance, the group does not provide oversight of the regulatory discretion of DNR. The group does not contribute to a directly democratic way of determining if the trade offs of superior environmental performance are worth the flexibilities given to Cook. This does not mean that DNR is giving handouts to industry, but it calls into question whether the role of the group in practice has been to address solely non-regulated issues—a practice that would fall short of providing real accountability. DNR is still under the control, to a degree, of the bureaucracy—but the hierarchical control has been loosened by Green Tier. Therefore, there may be a net loss in democratic control with a wider range of administrative discretion.

Despite this discouraging assessment of the ability of the interested persons group to play a meaningful role in accountability of this regulatory arrangement, there are some encouraging attributes of their role. For one, there is a group of people that Cook has to report to about its actions. One of the members of the interested persons group, who works as an environmental professional at a nearby industrial plant, explains:

“They have to give a report on their status, and for instance, they were late on one report. So they have to present that to the group, ‘We were late.’ And I don’t remember if they were fined, there was some penalty for doing that, but, so that accountability is that if you make a mistake it is more visible to the community. Where, if they had been late filing that report even if they had to have a public notice or whatever, nobody is going to notice. This way all their neighbors knew that they were late with this report. I don’t think in that instance it was a big deal, but it could have been, if it was something other than a late report.”

Using this assessment, one can see the role of the interested persons group as important for engendering accountability merely because it ensures that someone, anyone, is paying attention. Offering another example, a member of the interested persons group explains how the presence of local officials on the group encourages Cook to be open:

“I was disappointed that I didn't get there the other night, because they did have an incident up there a couple of weeks ago where they had a reactor go [a] while on them. As far as I understand they did get all of the environmental agencies involved that they were supposed to, haz mat, and the county, and the local haz mat person...They were all there at the scene and nothing was covered up. And [the director of emergency management of the county] was a [member of the] committee so I think that was a great help....They were honest, and [the director] knows what they are doing out there, so nobody is reluctant to call anyone like that, because it is going to come up at the committee meeting that they had an incident. So [the director is] on it, and he [would say] ‘What do you mean you had an incident? We weren't called?’ He'll find out. Having the committee and having some of these government officials on there helps keep their feet to the fire because they know its going to come up and they gotta have answers.”

The expanded transparency that is created by meeting with neighbors of the community, in of itself, has an effect on accountability. Without the interested persons group, Cook could just stay quiet, but with the group, Cook has to explain itself.

In summary, the role of the interested persons group is less than clear. For some, the role is more about consultation, for others it is about monitoring. For some it is about nuisance issues, for others it is about the full gamut of Cook's environmental impacts. These different roles will become more evident upon further explanation of the workings of the group, but it appears that this uncertainty pervades throughout.

5.3.3 Conflict

As stated above, the interested persons group has no decision-making process. This renders the controversy difficult—there is no way of accommodating opposing interests. In interviews with participants, all agreed that, generally, there is little conflict in the group. However, at the advent of the agreement, there was significant conflict around the views of one participant. This individual was a neighbor of the plant and a former employee of Freeman Chemical. As an engineer for Freeman, he was involved in the workings of the hazardous waste incinerator. During the public hearings (prior to the formation of the interested persons group

began) he expressed concern about the agreement. He later was a part of the interested persons group but he stopped participating after the first couple of meetings. Through my interviews, it was clear that there were a variety of perceptions of this conflict. The perception I will share first is of Glen Preisler, the Plant Manager of Cook, who describes the controversy that was due to this former employee.

“Early on we had one individual that was a member, in fact, he was an ex-Freeman Chemical employee. When we signed the agreement, he was a member of the committee. He didn’t totally agree that by not burning solvent at the incinerator was enough to say that [it] was a non-hazardous waste incinerator. That type of thing. In his mind, he had environmental issues. He left the community advisory team, I’m not sure why, but since his departure, there really hasn’t been any conflict. He was just the type of person that always wanted to stir the pot...[The interested persons group] pretty much ignored him, they wanted him off. But as far as conflict, there isn't any. It’s an open dialogue, I can’t say there is conflict.”

This view from Cook depicts the former employee as having ‘an agenda,’ just wanting to make things more difficult for Cook. Here is the view of Lynn Persson of DNR about this participant. (My question is in italics.)

“He is an active Sierra Club person. So he brought up some of the technical issues where other people would not have, per se, because he had the background with the incinerator at the facility.” *Eventually he stopped?* “He just said, ‘I’m not being listened to.’ And he pulled out...In asking [the] questions he does, there is value added. In how he deals with the group, and how he deals with individuals, he is a difficult individual to work with. So it became easier for a stakeholder group to work together and to tackle stuff, but...its good to get somebody that asks the hard questions. But its also the...people...[who have] that kind of passion don't always listen to other people as well along the way.”

In addition to this quote, it is important to note that from DNR’s perspective, DNR made huge efforts to retain his participation. Many hours were spent responding to his comments and many discussions were held to try to determine exactly what the correct course of action was upon losing his participation. This perspective, however, was not shared by all. Caryl Terrell, of the Sierra Club, describes her view of the conflict.

"My local member, who used to work there, knew what was going on. One of the reasons he wasn't there any more was...he was not satisfied that they were actually fixing things up, and he thought DNR was facilitating this bogus idea about what the plant was doing by using their terminology, and not stating in laymen's terms that they were incinerating a chemical."

"He forced his way on to the committee because you shouldn't be able to keep somebody off, and was considered disruptive by raising our points again at a meeting where they were trying to schmooze people, so he was uninvited to the committee. And he told me, he wouldn't go back there if they paid him."

"An outside observer would say 'This guy has an agenda.' Yeah, the agenda was to get them to close down the incinerator in a timely way, and to reduce some of the other air pollution emissions that were not covered by the permit, but were obviously there."

Before commenting on this cacophony of views, it is useful to present one more. This is the view of a local official who is a member of the interested persons group, and while an expert in his own right, is a layman when it comes to hazardous waste incinerators. (Again, the italics are my questions.)

"We had the one guy, he came to a bunch of meetings. He wrote Steve [the facilitator] a bunch of letters saying that it was all smoke and mirrors. Then one night at one of the meetings, he just stood up, and rattled off all of this stuff, said it was just a farce and 'I'm done,' ...and he's never been back...If we were being bamboozled along the way, I think he should have stayed and helped us see that, or showed us where it is going, so that we could be a better committee...But he was labeled, because I heard some of the DNR people talking, because he sent them information and that, I don't want to say extremists, but they thought he was a little...[out of the average.] I don't know, it bothered me for a while, but the man disappeared." *Why did it bother you?* "Well, were we being told the truth? As a committee, are we being told the truth? And for me, I got over 4,000 people's health [as my responsibility], and then everybody that comes in and out of the community everyday...If they are doing something that is not right and they are hiding it or lying, I don't [know]. I'm 90% sure they are all right, but now there [is] always that 10%."

As is evident from these four quotes, perceptions vary widely. While it is easy to fixate on the fact that there is variation, it is more useful to examine what this variation tells us about the institutional design of the participation. First, it is evident that the interested persons group failed

to address this conflict in a way that maintained the confidence in Cook and DNR. The participant quoted above clearly had doubts after the controversy about the veracity of the claims that DNR and Cook were making. The diminutive description of the conflict from DNR and Cook shows that they did not recognize the extent of this problem. Second, there is an idea that was shared by many about this controversy, and about Green Tier in general, that extreme views are disruptive and we need not focus on them. This person's view, as perceived by DNR and Cook, was extreme. But from the perspective of the Sierra Club, this person's view was clearly appropriate. This is a difficulty that always exists with conflicting opinions. What is extreme for one person is acceptable for others. Nevertheless, the response from Cook and DNR, while trying to keep the person participating, did not realize the seriousness of the extent that it impacted the others on the group. Regardless of whether or not this view was "extreme" or if the group would have functioned better without this participant, one would hope that the group would reflect critically on the significance of the departing participant. This does not seem to have happened. The person left and there are still some participants who are not sure why.

After the exit of the former employee, there was little conflict among the group. There was a sense that perhaps DNR could have gotten more out of Cook in the agreement by some, but this was not a strong enough of a preference to bring about any significant action. However, all of the participants agree that there is almost no conflict now. As discussed above in the section about the role of the group, the discussion almost always focused around nuisance issues. It is possible that the lack of conflict may be due to a lack of meaningful discussion of regulatory issues, such as the ones that were raised by the former employee above. Without observing the meetings, it is difficult for me to assess this possibility, but it seemed quite real based on interviews with participants. Regardless of the reasons, the interested persons group has developed an equilibrium

of relative agreement. Decisions continue to be made about the ‘continuous improvements’ that Cook is making to its environmental performance. And with the exception of nuisance issues, the neighbors on the interested persons group are passively agreeing to everything.

5.3.4 Ability to Exercise Change

Despite not having any formal control over the implementation of the agreement, or any formal decision making process, the interested persons group was able to exercise change. This shows that the group does have a degree of informal power, and are listened to. The group has made the most progress in regard to issues that they care about the most—the local nuisance issues: noise pollution, odors, and traffic.

The nuisance issues that were the center of concern of the community are not included under the regulatory authority of DNR. In the cooperative agreement, Cook is committed to finding ways to minimize odors through cooperation with the community. It is important to note that this is completely voluntary, and without the cooperative agreement Cook would have no obligations to DNR to reduce the nuisance impacts on the community. To facilitate reduction of odors and noise pollution, Cook put in a hotline that residents could call when there is a problem. Cook developed a sheet to help residents identify odors when they called. If the residents called immediately after smelling an odor, Cook could more easily correct the problem. Steve Skavroneck, the facilitator of the meetings, stated “in order to address the problem, [Cook] needs to know right away whose smelling what, where, [and] when, so they can go back and figure out what batch process was going on [and] then trace it back to something they did during that batch process.” This provided an opportunity for the community to work with Cook to solve a problem of common concern. Participants reported that the reductions in noise pollution and odors that were made through these efforts were significant.

Another nuisance issue that the interested persons group was concerned about, and that was addressed, were trucks that would come in and out of Cook. The trucks would arrive at Cook early, and park nearby, leaving their engines running releasing their exhaust. Cook worked with the drivers, who are not Cook employees, to prevent this practice. As Cook has been making decisions to manage their environmental impact, they have asked for community input to ensure that there is support. Glen Preisler of Cook explains:

“In fact, right now we are looking at going away from incinerating that non-hazardous water to shipping it offsite for disposal. And we went to the neighbors and told them what our plans were, how it was going to increase truck traffic outside the plant. We compared the increased truck traffic with the fact that the water wouldn't be incinerated, and the people were positive.”

This shows a willingness on Cook's part to engage the community in issues that are important to the community, and to act on their concerns.

A third nuisance issue that was important to the community were noises due to alarms at the plant. The alarms at the plant would wake people up in the middle of the night. Steve Skavroneck explains the communities concern and Cook's reaction:

“[There] was an interesting situation at the last meeting: the plant manager and one of the staffers were reporting on what they had done to try to reduce the number of alarms that have gone off since the last meeting. Then, when he was all done one of the neighbors got up and handed out a sheet of paper that showed there were 26 instances in the last few months when she heard a loud alarm from the plant. And you can see the plant manager's face drop because he thought he was getting somewhere on this stuff.”

While this matter had not been resolved at the time of my fieldwork (January 2005), Cook reported that it was working to resolve the problem. This delay caused some conflict surrounding the amount that Cook was willing to invest to solve the problems, but some on the committee

believed that Cook was seriously committed to solving the problem.⁸ One member of the committee, and also a local official describes the effort that Cook has made to fix the problems:

“In some cases, they are very expensive fixes, and Cook has spent a lot of money upgrading that plant. And, that is all money that their predecessor dropped right to the bottom line, but Cook has made that commitment to try to be a viable part of the community, and they're spending the money to try to make those changes to address any of those community concerns.”

This shows the extent to which members of the group feel that they have been able to influence Cook into making real changes that effect their quality of life. The ability of the group to exercise change, and hold Cook accountable for addressing nuisance problems provides evidence that the interested persons group has been successful in some fronts. It also shows that soft power can bring about change in some circumstances.

5.3.5 Transparency

In the cooperative agreement, Cook committed to a number of reporting requirements. These requirements include providing annual reports on the progress that Cook has made in implementing the agreement to DNR and to the interested persons group. These reports, which are on the internet, provide details on the milestones reached by Cook, decreases in emissions, and money saved. In addition to these reports, Cook sends out newsletters to the surrounding community detailing the workings of the agreement, and the progress they have made. During the meetings, Cook and DNR present the progress that they are making, and provide detailed

⁸ Indeed, some members of the committee feel that neighbors are focusing so exclusively on eliminating the alarms that they may push Cook away from protecting the environment. The alarms go off to warn that a tank of chemicals is filling too high, and has the possibility of spilling. Some neighbors wanted the alarms reduced at the expense of prudent monitoring of the tanks. This shows the extent to which some are focused on nuisance issues at the expense of environmental issues.

information about implementation. All of this information is available in a repository at the local library, which is located blocks from Cook.

In these reports, Cook is open about spills and accidents that they would not normally have to share with the public. Mike Gromacki explains the reasons for this transparency, and the willingness of Cook to share this information.

“I think that one of the real advantages of this process for us has been in terms of building...public trust has been...transparency. To say look, we’re going to talk about our issues and our problems, we going to talk about it openly. And what we’ve tried to communicate to the public is to say ‘Our expectation in being transparent is that you not attack us for our transparency.’ In other words, we’re going to be open on mistakes and accidents and things, incidents that happen. We’ll tell you what has happened. Our expectation is not that you take that information and then twist it, or use it in a way that’s harmful to us.

From this perspective, the goal of the transparency is to increase trust with the community.

However, it takes a degree of trust on the part of Cook for them to increase the level of transparency. The iterative process of dialogue and meetings has made Cook comfortable with taking that risk.

Most of the members of the interested persons group that I interviewed were happy with the level of transparency. There were two exceptions that are worth noting. One member pointed out that she had never seen baseline data on Cook’s environmental performance before the agreement. And because of this, she would not be able to evaluate the progress that Cook has made from implementing the agreement. Further, she had never been shown Cook’s Toxics Release Inventory data, which is publicly available data of the releases and transfers of a set of chemicals. In addition, she had never seen Cook’s compliance history to understand for herself if Cook had been in or out of compliance. It is difficult to assess whether the lack of sharing these data is an indication of a lack of transparency, especially because Cook clearly shared information

that it did not have to and this information is publicly available. However, this shows that the ad hoc transparency has difficulties because it requires assessing for each agreement, at each moment, if enough information has been shared. There are limits on both sides—the extent to which Cook is willing to compile the information and share it, and the extent to which the interested persons group can spend their limited resources trying to understand the information. In the command and control model, the required transparency would be set in advance—regardless of whether it is adequate. However, this requirement lends legitimacy to decisions of what to share, and although it may result in less information actually being shared, this situation may seem less troubling to participants. There is a comfort in having required information that is predetermined to be “important.”

The second lack of transparency that was problematic to some on the interested persons group involved the group itself. The names of the members of the interested persons groups were made public in some of the newsletters, but some information about the participants has been kept confidential. One of the participants explains:

“A funny thing occurred. Steve...wanted to publish a thank you letter from [Cook] listing all of the committee members, thanking them for the effort they put into this. Two of the committee members were afraid to have their names put in the paper...They were afraid of retaliation from their neighbors, or people from the community saying they weren't doing enough. And I never understood that. I thought in my viewpoint, if our names were in the paper as a thank you...that you as a citizen might know who I am, and then have a complaint that I could find out about, or a concern that I could then bring back to the committee. Or [I could] talk this person into becoming a committee member or expanding it, so if people retire or move, or get tired of this committee, you would have fresh blood for more people joining. Then Steve [the facilitator] backed off it, and so did [Cook], and I don't think they should have, I think they should have went out there.”

There are three separate issues here. One is why the people did not feel comfortable with their involvement on the committee. I did not get a chance to interview these members, as I was only

given contact information from Cook for members who were willing to speak with me, and scheduling constraints prevented me from talking with all of this set. Therefore, I cannot say for sure why these two feared retribution. However, this raises questions about how comfortable they were with their own involvement, and how open the entire process has been. The second issue involves the motivation of Cook to concede to the request of these two members. As I will address in more detail below, there are a dearth of community members who are willing to participate in the group. The loss of two could be significant, so Cook has to take all steps it can to encourage people to continually participate. Cook may have conceded for this reason, but I cannot be sure because I did not address this question directly with Cook. Third, this is supposed to be a public process. Any lack of transparency should be critically examined.

5.3.6 Expertise

In order for members of the interested persons group to utilize the information they receive from DNR and Cook, they must have the requisite expertise. Staff from Cook are the primary sources of technical information for the group. This can be problematic, as shown above in the doubt that one participant had after the dissent of the former Freeman Chemical employee. DNR does provide information, but staff from DNR do not see their role as interpreting the information that Cook provides, and the expertise that DNR does provide is focused on policy questions. In response to a question about what types of issues the DNR comments on at the meetings, Lynn Persson stated:

“I would perhaps present an update on where we stood on implementation of the agreement from a DNR perspective. Or [Cook] would [say], ‘This is what we turned into DNR.’ I’d explain this is how we reviewed it, this is what we find or didn’t find, [and] this is what we need more information on...My role was explaining what the cooperative agreement was, what we expected from Cook, what DNR was doing to support the cooperative agreement, and so on.”

This information is primarily about the implementation of the agreement, and when asked, staff from DNR reported that the members receive most of their technical information from Cook.

In an attempt to build the human capital on the committee, the facilitator recruited two people, who have expertise themselves, to join the group—a professor from a regional engineering school, and an environmental officer from a nearby industrial firm. These two members brought their own insights, but lay members did not indicate that they relied on experts on the group for support.

Consequently, participants without their own expert knowledge have tried to use others to assess whether they are getting straight answers from Cook. By stating this, I do not want to imply that people are distrustful of Cook, I believe it is quite the opposite. One lay participant reported asking family member their opinions, stating “I have a son in law who is a chemist, so sometimes when they come up with these chemical terms I bounce it off him.” For this member, this was not problematic. In the very same sentence he indicated that Cook was doing a great job. But he also said, that it would be nice to have people with more knowledge on the committee, “because they will be able to tell us what we are missing.” There is a sense that because DNR is in the room, Cook is not lying, but at the same time, without technical knowledge, one does not know exactly what information is, and is not, being provided.

5.3.7 Changing Relationship Between Cook and the Community

Since the cooperative agreement, the relationship between the community and Cook has changed substantially for the better. Through face to face discussions with members of the community, the tone and character of communications between the community and Cook has become much less adversarial. Glen Preisler, the plant manager for Cook explains the differences between his interaction with the community before and after the agreement.

"It certainly makes my job much easier when I get a call from a neighbor that's pleasant on the phone, that has a concern, but knows that what we are trying to do. Rather than someone calling up, screaming at [me], [saying] 'I'm going to call the cops.' That makes my job easier, it is a benefit to running the plant."

This is a substantial difference in the tone of the complaints that Cook has gotten. The feeling from the community is mutual. When members of the interested persons group ask questions, Cook tries to answer them instead of being closed. This quote is from one of the members of the group, who is also a local official. (Again, my question in italics.)

"There was a change in philosophy within that whole organization at Cook. It was really surprising that...there was going to be a committee. Then when I heard it was part of their agreement with the EPA and DNR, I guess that would be one of the other reasons I joined, to see where this was going to go, to see if this was just some smoke screen...If they were really going to listen to this committee or if [there] is just somebody...taking notes at the committee meeting and then coming back saying 'We can't do nothing about that.' *And that wasn't your experience?*"
"No, they were genuine and interested. They fly people in for every meeting from Kansas. Key people...they fly in. So they answer questions, or they write the notes and answer the questions. They have their own engineer, he's there. The head of maintenance, the supervisor of the plant there, and some other people. So [are] higher up people. They just don't bring in some flunky at the bottom just like a whipping post. They just don't bring a PR guy that is sitting there going 'uh ha.' So its actual people that can actually answer questions on-site, or get answers for the next meeting, or mail you answers."

This assessment was typical of the way people generally felt about the Cook's behavior. They used language such as 'Cook has seen the light,' and Cook makes 'good faith efforts.' Even if Cook cannot follow through, participants are generally comfortable that Cook is trying. This is seen as a major change from the way that Cook worked with the community in the past.

Staff at Cook agree that there has been a change. Michael Lotman, the director of coatings manufacturing at Cook, explains the stance at Cook before and after.

"There was a lot of discussions prior to me of 'Who was here first? Was the plant here first, or the village?' At the end of the day it makes no difference. We are here, they are here, we are here to stay. We wanted to be a good neighbor, a good

citizen, and let's move on...Let's realize what kind of issues we have, and work together to solve them."

The question, 'Who was here first?' shows the adversarial tone of the relationship with the community before the cooperative agreement. It is difficult to assess whether the cooperative agreement is responsible for this change, or if the change encouraged Cook to participate in the cooperative agreement. Glen Preisler of Cook offers some insight into this question.

Without the cooperative agreement, when the community complained, could the company react like it does now? "It could have, but it didn't...As Freeman Chemical it [was] just 'That's the business we are in, that's the odors you have. And we're here and you're here. I guess you have to live with it.' I think with the agreement that has changed all of that. Now that's not saying without the agreement that couldn't have happened, but it wasn't happening."

Whatever the cause, Cook definitely takes a different approach in dealing with the community, and many, but not all, in the community recognize this.

Many respondents speculated that the community accepted Cook's changes because they saw that Cook took actions to solve problems that concerned them. One member of the group stated "Actions speak louder than words." The decreases in noises, odors, and truck traffic were noticeable improvements. Further, with the noise and odor reporting system in place, the community was able to contribute to Cook's ability to solve these problems. And when Cook did not solve the problems, the forum with the community provided an appropriate place for an explanation. This could not happen without a space for deliberation.

One difficulty that may be a result of this good relationship is the dearth of participants from the community that are part of the interested persons group. The group has decreased the frequency of its meetings from four times, to twice a year to try to retain participants. One member of the group explains:

"We're small, 4,000 people you know. For 4,000 people we got 20 people on the committee, or maybe two dozen. And out of that two dozen you may only have six that are citizens, really citizens. That aren't some kind of government, fire department, person, DNR, water."

"The citizens, if they don't touch the property or within a block of the property, there is nobody else. So the core the committee is just people that live next to the site."

All the participants that I spoke with, with the exception of Cook, were concerned that participation from the neighbors would dwindle to nothing. They attribute this problem to Cook effectively dealing with the acute burdens on the community—noise, odor, etc. As things get better, people do not want have anything to come and complain about. Attempts are being made to recruit more members, but it has not been easy.

5.4 Evaluating the Success of the Agreement

The general consensus among participants in the interested persons group, and among staff at Cook and DNR is that the agreement is a success. However, participants were unclear on how to actually describe that it was a success, and even less clear in describing their method of evaluation. By describing the process of self-evaluation in this section, I hope to first show how this institution evaluates itself and to show the results of that self assessment.

As stated above, the cooperative agreement requires Cook to report its performance under the agreement each year. The most recent report available, from October 2004, describes the implementation over the first three years. Cook's self reporting here, and in other places, are obvious places to begin looking at evaluation, because they are the formal mechanisms for self-evaluation. The report shows that Cook saved an estimated \$400,000 as a result of not having to perform the stack test and going through the process of re-permitting of the hazardous waste incinerator. In addition, DNR saved considerable money by not going through the permitting

process again. In the December 2004 community newsletter, Cook reported that it reduced its xylene usage from approximately 4 million to approximately 2 million pounds. In the annual performance report from 2003, Cook projected that it would save \$172,000 in solvent purchasing in 2003 due to waste minimization.

These numbers are impressive, but it is more difficult to assess whether the agreement has been such a cost savings. One official from Cook explains that some of the money they saved through recycling solvent needed to be spent on expenses caused by the change.

"The solvent we use to burn, well now we have all of this solvent waste that we have to dispose of, and that's a cost. So we put in a lot of real good recycling programs to send the solvent offsite, we have it distilled, we bring it back, we reuse it. I think we are up to close to a half a million pounds of solvent that we are recycling right now. That in the past would have been burnt as a hazardous waste."

Is that a cost savings? "Not really, not when you try to balance it. We are burning natural gas now to get rid of the water, and that's expensive. It's a cost savings if you just look at the solvent and say 'Do we want to dispose of it or do we want to recycle it?' In that way it's a cost savings."

From this description, including the costs of the natural gas and recycling, it is less clear that Cook is saving money. Nevertheless, the sense from Cook is that the agreement has increased the performance of Cook. Another staff member stated:

"At the end of the day...we are doing the job more efficiently, we are doing the job better. We are buying less solvent, we are wasting less resources financially, we are wasting a lot less natural resources. We are conserving more, we are working smarter."

While the financial savings are not clear, the feeling is that Cook's performance has increased from the changes they made in the agreement. A similar argument goes for DNR. There were cost savings due to not going through the permitting process, but it is not clear that the costs of

negotiating and implementing the agreement were more or less. Nevertheless the sense is that the agreement is going well, and that the investment has been worth it.

Similarly, members of the interested persons group feel that the agreement is going well, but have difficulty explaining exactly why or how. One member of the group explains.

How do you know if the agreement is going well? "We don't. The permits are all there. I think all of the permits are now in place. They are not violating the permits...they are looking at recycling more stuff, less waste, less environmental impacts...Is there less chance of environment being screwed up? Dumped on the ground or being released to the air?...I think the committee tried their best on all of that...We are non-professionals in the field. You are dealing with something that is complicated, relying on some experts, [Cook's] experts, the DNR experts, to help us out to give us information. But we haven't had, no major spills, the committee seems to be happy with that, things are improving."

This articulates some general ideas of what it means for the agreement to be going well. Less pollution, less of a chance of environmental degradation. However, this member's ability to evaluate the agreement was hampered by his own expertise.

To evaluate the changing relationship with the community, Steve Skavroneck the facilitator hired by Cook, undertook three surveys of the community. The first survey was in 2000, and the latest in 2004.⁹ The findings of this survey indicate that, in general, community did have a better impression of Cook in 2004 than before the agreement began. For example, the percentage of people who do not detect odors from Cook increased from 22% in 2000, to 32% in 2004. For noise, 48% said that noise from the plant was less in 12 months proceeding the survey than in previous years. The percentage of people who believe that Cook's environmental performance is similar or better to other local businesses increased from 75% to 82%. Finally, the percentage of

⁹ A quick note on methodology. In 2004 the survey was mailed to 179 individuals, bossiness, and organizations "mostly in the Saukville area." The return rate was 23%, or 49 responses. In 2000, the 140 surveys were mailed, and the response rate was 31%. For the sake of transparency, this survey was conducted by a paid consultant of Cook.

people who were aware of the interested persons group increased from 54% to 67%. There was still, however, some people who were not positive about Cook—including one who said “Get out of town.” Nevertheless, this form of evaluation, community surveying, has provided feedback about the relationship between Cook and the community generally, and the results have been encouraging.

In summary, the general consensus is that the agreement has been a positive experience. Many people who I talked with praised it emphatically. However, there is still a dearth of information about trade-offs. Was the time and energy worth the environmental and social benefits? This still remains unknown. Nevertheless, the overall assessment by participants in the agreement is that it has been a resounding success.

5.5 Conclusion

There are a number of issues that this case raises which are relevant for the central puzzles of this thesis. First, there are clear benefits to flexibility, but it is difficult to determine if the costs outweigh the benefits. Second, challenges of ‘smoke and mirrors’ and regulatory capture are difficult to resolve with loosely defined participation. Third, developing the capacity of the lay participants, and defining a broad role for the participants may have an impact on the sustainability and nature of participation. Fourth, it is possible to change the adversarial regulatory norms to more cooperative regulatory norms. And finally, there is tremendous opportunity to be gained merely by opening up a forum for dialogue between Cook and the community. I will address each of these points in turn.

5.5.1 Benefits of Flexibility

This case supports the critique of bureaucracy that strict rules can provide disincentives to environmental protection. By providing flexibility, DNR shifted the incentives for Cook from continuing to operate a hazardous waste incinerator, to reducing waste and recycling. This resulted in a considerable decrease in solvent use, and consequently it seems, in environmental impact. It also allowed Cook to explore innovative ways to efficiently reduce pollution. Further supporting this finding, there seems to have been an overall shift in Cook's view on environmental management that was induced, in part, by the agreement. By opening up the possibilities of addressing their environmental management, Cook was encouraged to become more reflective about their environmental impacts. For example, before the agreement, Cook was not aware of the material costs of solvents that they were burning in the incinerator. The funding for these solvents was not included in the plant's budget, as it came from corporate headquarters. Upon reflection of the costs, Cook was able to revisit the incentive structure of their operations to encourage conservation. In the end, Cook went beyond compliance to the letter of the agreement, but also fundamentally shifted its approach towards the environment. Consider this quote from Glen Preisler the plant manager.

"I don't want to say it is a result of the agreement, but it is part of the agreement. The shift in the business segment focused more on environmentally friendly non-hazardous products that will be manufactured. We started with virtually nothing and within a three years it is a third of our business. We start converting equipment that was designed for something else, into being...the best that we are aware of in the industry."

This change is well beyond what was required in the cooperative agreement. And while it is difficult to determine if the agreement is responsible for the change, there is no doubt the agreement encouraged it.

There is a difficulty, however, in assessing the real improvements that were made. Much of the language that participants use to describe the results of the agreement is in terms of 'win-win.' This obscures tradeoffs that take place. It is difficult and costly to measure such a thing, and perhaps even impossible. Judging by the feelings of those who participated, most feel that the experience has been positive. But this feeling, and anecdotal evidence of reduced emissions and saved costs, does not necessarily silence critics.

5.5.2 Dissent

The difficulty in addressing accusations of 'smoke and mirrors' was especially acute in this case. When the cooperative agreements free themselves from the constraints of command and control, they must rebuild their own legitimacy and overcome doubts of those who worry that the agreements will to decrease levels of environmental protection. This is difficult given the room for interpretation in what is actually an improvement and the naturally opaque technical information. When one participant claimed that it was all a sham, the participation process was unable to accommodate this accusation without eroding the legitimacy of the entire process in the eyes of some. One could argue, that this was due, in part, to a the openness of the process and the lack of formal decision making processes. If the group could have voted after deliberation that the agreement was not smoke and mirrors, and the majority, or even all but one of the participants agreed that flexibility would result in environmental improvements, moving forward would have seemed legitimate. In addition, if there was a way of maintaining participation of the individual who was accused of being 'difficult', the participation would have maintained more legitimacy in the eyes of outsiders.

5.5.3 Building Expertise and Sustaining Participation

As the nuisance issues were solved, participation becomes difficult to sustain. One interpretation of this is that as soon as things get better, people will stop showing up. But the problem of sustaining participation may be deeper than that. If one reinterprets this situation in slightly broader terms, one can say that when people no longer have the ability to actively shape the management of things they care about at Cook, people stop participating. In the interested persons group, the focus and interest of the community participants is largely nuisance issues. Two reasons for this readily come to mind. One is that only the nuisance issues were important to the community participants. Another is that the community participants only had the capacity to actively discuss and change the nuisance issues and, therefore, regardless of how important other issues were to them, they would not engage in these issues. I poise the this alternative because it suggests a relationship between capacity and parochialism. With myopic members, participation in the interested persons group will naturally decline as local issues are solved. However, with more capacity, the interested persons group would engage the pressing issues that were still being decided at Cook, such as the development of the EMS and decisions about treating hazardous waste on, or offsite. Issues that were only superficially addressed by the interested persons group, but that create the opportunity for sustained discussion. This raises a question: If the group had the capacity to engage a broader range of issues, would sustaining participation be a problem?

5.5.4 Cooperative Norms Can Be Established

The story of this cooperative agreement shows that norms of trust and cooperation can be established in institutions that once had high levels of distrust. The shift that is evident in Cook's

reaction to DNR's inspections and the unitary language used by the participants when describing the goals of better environmental performance. This shift is no small feat, and is precisely the hope of many reformers.

The case provides some hints of what it takes to develop the trust necessary to make the cooperative agreement work. One way is to provide opportunities for groups to show their good will by allowing them to make commitments and carry through on them. And when commitments cannot be met, providing a space to explain what went wrong without being slammed by the other group. For example, on one of the commitments that DNR made for timely responses to Cook's requests, DNR fell short and did not turn around fast enough. Cook was in a position to pull out, but continued in the cooperative arrangement, demonstrating a willingness to continue to cooperate. These opportunities are hard to come by in formalistic regulatory practice. There needs to be a deliberative space for explanations of why commitments were not kept. In short, the cooperative agreement did not cause DNR, Cook, and the community to work together, but it gave them the structure to do so.

5.5.5 Providing a Forum For Discussion

Finally, the agreement shows the value in opening a space for discussion. On the surface, it seems surprising to think that Cook and their neighbors did not often meet and talk face to face—especially so considering that people live within a stones throw of the plant in a quaint small town environment. With a little reflection though, it is easy to imagine that this is a problem with many neighbors. They simply do not have occasions to sit down and talk face to face with one another. By opening up the space to talk, relations between community members and Cook were substantially improved. This is not unlike the point made above about building cooperation in regulation. The space for dialogue in the community between groups generally proved to be

extremely valuable in creating an opportunity for Cook and the community to work together to solve common problems.

5.5.6 Conclusion

In conclusion, the Cook story reveals that Green Tier can go from policy to practice and change both formal and informal norms. However, some of the worries of critics of Green Tier are evident in this case. Many interested persons group lack expertise, and mainly relied to DNR to conclude that Cook was doing the right thing. The trade-offs were not clear, especially if one takes the critique by the former employee seriously. Nevertheless, the agreement did succeed in building its own legitimacy, overcoming hurdles of command and control, and changing the character of relationships among the actors. There are a number of lessons that can be drawn from this case about the theory and practice, I save these for the conclusion after considering another story about Green Tier.

It is important to remember, however, that this story is not over yet. At the time of this research, the changes are still happening. The relationships have not settled into a new equilibrium, nor does it seem that they will for quite a while. Therefore, when drawing lessons from this story, we must look at the institution as though it is in draft form—with changes to come. This story does have value in that it provides accounts of experiences during this change, but one should not extrapolate from these lessons too far and either condemn or commit to Green Tier based upon these experiences.

Chapter 6: Madison Gas and Electric

In this chapter, I describe the story of a cooperative agreement between Madison Gas and Electric (MGE) and DNR. As stated in the introduction, this case was selected because it is an example of one of the most developed cooperative agreements, with active participation from the community, in the pilot program. Before beginning, it is necessary to lay out the basics of this complicated agreement and case. This will help clarify a fairly complicated story that does not flow naturally in chronological order. Like Cook, this agreement is between DNR and a single firm, in this case MGE. The agreement focused on the Blount Generating Station, or BGS, but at times goes beyond the workings of the plant. In this narrative, I do not differentiate between MGE and BGS unless I am referring to another one of MGE's facilities. Also like Cook, this agreement created an interested persons group. The main flexibilities that were given to MGE were streamlined approval processes through the creation of a 'technical team' of DNR and MGE staff, and the ability to use more 'paper derived fuel' without additional permitting requirements. In return, MGE used more 'paper derived fuel', which DNR and MGE believed would result in less air pollution and would displace coal consumption. Like the Cook case, action and decision are intermixed, and the story is still unfolding. By describing discrete stories, this account may make it seem that the agreement is static, it is not. I use this method, nevertheless, because it is the clearest way to describe the story around the agreement in an analytical form. With this brief overview, I begin the details of the case.

6.1 Introduction

The story of MGE begins with geography. MGE operates a coal and natural gas fired power plant called the Blount Generating Station right in the heart of Madison, Wisconsin, just

blocks from the state capital building. This plant is small, serving the greater Madison area, but not much beyond that. In the eyes of all the people who I interviewed in Madison, geography is critical for explaining the behavior of MGE. People describe Madison as “nosy”, “progressive”, and “liberal.” The neighborhood that MGE is in is considered exceptional in these qualities, being the furthest left of all of Madison. The management of MGE is cognizant of this, and is aware that if they want to keep on doing business in Madison, they are going to have to get along with their neighbors—neighbors that tend to be mobilized and suspicious of industry.

The other place that the story begins is in MGE’s history of dealing with their environmental footprint. In 1970, prior to the formation of the EPA, MGE submitted an environmental impact report to the community because of concern that the community had about the impact of the power plant on the local lakes. Further, the company first developed an environmental management system (EMS) in the late 1970’s, well ahead of most companies. While these two facts do not comprise an assessment of MGE’s past environmental performance, they are indicative of an attempt (at least on the surface) of being a good environmental steward.

By placing these two facts next to one another, I am insinuating that there is a relationship. This is not verifiable, but is how many of the respondents explained the origins of the agreement, and this perception is important in its own right. In order to understand the MGE agreement, one has to first understand that MGE is largely perceived as a good environmental actor by a community that is self described as nosy and liberal—not the type that one would expect would welcome a power plant in their backyard.

With its good relationship with the community, MGE sought to build a better relationship with DNR by participating in Environmental Cooperation Pilot Program. MGE wanted to capture the knowledge that DNR has of other firms without DNR being accused of serving at MGE’s

consultants. They also wanted to decrease transactions costs by building a relationship with a group of DNR staff that could guide them through their interactions with DNR.

The relationship between DNR and MGE prior to the agreement was not necessarily bad, but was not good either. According to Kim McCutcheon, Environmental Assistance Coordinator at DNR, “[MGE] wanted to be able to come in and not be...behind the eight ball,...their conversations with us always coming after something went wrong. They wanted to be proactive.” This desire for a better relationship contains a number of implicit critiques of DNR. One is that DNR, to borrow language from medicine, lacks continuity of care. This creates additional transactions costs for both MGE and DNR as relationships have to be built from scratch each time there is an interaction. Second, there are barriers to building relationships when the only time the two organizations communicate is after things go wrong. MGE wanted to be proactive about solving problems, instead of reactive putting out fires after they started, but there was no institutional mechanism for them to be proactive. And third, the relationship between DNR and MGE had to at least appear to be adversarial, which limited the amount of DNR resources that MGE could utilize. Mike Ricciardi, of MGE, described the problem of getting knowledge from DNR rooted in the fact that DNR does not want to be “accused” of being a consultant to MGE. Implicit in this language is the assumption that DNR may want to be a consultant to MGE but cannot be a consultant because that would be perceived by outsiders as a departure from DNR’s role as a regulator.

This describes the starting point of the relationship between the two organizations, and the goals that MGE had in participating the cooperative agreement program. This is different from the Cook case, in which there was one flexibility to the rules that Cook really wanted from DNR. In the Cook case the whole agreement revolved around the incinerator. There is no central feature

such as the incinerator that precipitated the MGE agreement, which makes the story a bit more multifaceted, and consequentially more complicated.

For DNR, the goals for participating in the agreement are a bit less clear. At a general level, DNR's motives for participating in the cooperative agreement stem back to their motivation for creating the program in the first place. Nevertheless, it is still important to ask why DNR agreed to this particular company's proposal, at this particular time. Without conditions that engender the formation of individual agreements, reform will not take place. When asked what DNR wanted to get out of the agreement, one DNR official said:

"We wanted to show we could do it, [laughter]...Any environmental improvement that we thought we could get was a good thing. One of the things that we were most surprised we could get out of MGE was, you know, we asked them to do a lot of different studies...They have to hire a consultant to do that stuff, and they said, 'OK, we will do it.' And we were like 'Wow, OK, great.'"

The possibility that a company was willing to go beyond the minimum and to cooperate with DNR to improve the environment was motivation enough for DNR to want to participate in the agreement. In addition, DNR has an incentive for bringing participants into the program. This incentive, as was discussed above in the critical view of Green Tier, is seen as problematic to skeptics of the program. The fact that DNR just 'wanted to show that they could do it,' can be seen by some as a bit disconcerting. However, MGE did have a record of being a good environmental performer, and clearly could be part of a 'Green Tier.' Therefore, entering into this agreement does make sense from the point of view of the policy of the pilot program.

Unlike Cook, this agreement involved interested persons early on. MGE created the Community Environmental Advisory Group, or CEAG, well before the agreement was signed. Again, this group was created to fulfill the requirement of the legislation for the pilot program. These three actors, MGE, DNR, and the CEAG, began the process of institutional change in the

way MGE is regulated in the fall of 2000. It took two years for DNR and MGE to sign an agreement. In the meantime, changes were already taking place. The development of the agreement was an ongoing combination of negotiating the elements without a real process. It was, according to one respondent, a “chicken and egg thing.” All sides were trying to feel the other out. MGE needed to see what was appropriate in their application to the program, and DNR had to decide the same thing. The actual application for the cooperative agreement from MGE did not come until there were a number of meetings and negotiations, often involving the CEAG. It was approved, and the meeting and discussions continued as the actors made adjustments along the way.

6.2 Flexibilities and Superior Environmental Performance

In order to construct a clear narrative out of this complex story in which action and decision are intermixed, I first list some of the changes that are important to note to describe the agreement generally. I then tell some discreet stories about changes in the regulatory relationship and how they came to be. I do not cover all of the changes that were made in the regulation of MGE. This would take too much space, and would go beyond what is necessary to describe the new regulatory relationship.

6.2.1 Basic Structure of the Agreement

The environmental cooperative agreement between DNR and MGE provides a suite of changes to the relationship between these two actors. The agreement changes to approvals that DNR grants to MGE for air and water pollution control, and for solid waste management. Again, these are formal changes that are outlined in the agreement, but they are not static, and do not constitute the whole of reform. The implementation of the agreement, along with deciding what

to actually do, happened in concert, not in a linear order. Nevertheless, it is useful to outline the types of provisions that were included in the agreement. The following are examples of some of the operational flexibilities granted to MGE:

- The agreement provided a waiver of coal pile density requirements and monitoring.
- The agreement allows MGE to burn non-industrial waste through an expedited approval process.
- The agreement supersedes record keeping requirements of air pollution control in MGE's permit, requiring MGE to only keep sufficient records to demonstrate compliance with the agreement.
- The agreement provides for decreased reporting frequency of air pollution monitoring results to once a year instead of twice a year.

This is only a subset of the flexibilities that the agreement provides. In exchange, MGE made a series of commitments to superior environmental performance. The following is a subset of some of these commitments:

- MGE committed to create an environmental management system (EMS).
- MGE committed to conduct a study of one of its boilers to determine ways to improve stack opacity, increase the use of alternate fuels, and maximize boiler efficiency.
- MGE committed to purchase biodiesel for all diesel fuels it supplies at its central service center for use in its fleet.
- MGE committed to continuing a voluntary mercury thermostat recycling program.
- MGE committed to conduct a study of the feasibility of recovering heat from cooling water it now discharges into a local lake.
- MGE committed to work with the CEAG to identify and respond to noise concerns.

This subset of the commitments that MGE made for superior environmental performance illustrates the range types of requirements on MGE that go beyond the scope of the usual regulatory relationship.

The agreement also required MGE to conduct a baseline report, and conduct annual evaluations of the agreement and release the results to the public and DNR. In addition, civil enforcement of any violation that is found in this process and disclosed will be deferred pending

correction within 90 days. Exceptions to this immunity are if the violations present “an imminent threat to public health or the environment or may cause serious harm to public health or the environment.”¹⁰ This is essentially the same as the deferred enforcement in the Cook case. Also, like the Cook case, the deferred enforcement did not play a central role in shifting the relationship between the regulators and the regulated. Neither MGE nor DNR thought it was important for the functioning of the agreement. This provides more evidence that audit immunity is not necessary for cooperation and open relationships between DNR and firms.

This outlines some of the basic requirements and changes that the cooperative agreement makes to the regulation of MGE. The remainder of this section will explore some of the changes in details, including the controversies or difficulties that occurred in the process of the agreement.

6.2.2 Technical Team

As stated above, one of MGE’s goals for the cooperative agreement was to establish a better working relationship with DNR. In order to help achieve this goal, through the agreement MGE and DNR created a technical team made up of DNR staff from multiple bureaus, and staff from MGE with the explicit goal of improving the relationship between the organizations. The technical team is a way for MGE to ensure that DNR spends time working on MGE’s issues. It provides structure to an ongoing dialogue among the technical staff at the two organizations. They explore ways to improve the MGE’s environmental performance and decrease the administrative burden of regulation. Kim McCutcheon, of DNR, describes the team as a “great tool, because we can stay ahead of the curve on a lot of things.” The technical team is regarded as successful for

¹⁰ *Environmental Cooperative Agreement between Madison Gas and Electric Company and Wisconsin Department of Natural Resources*, 2002, p. 12.

DNR and MGE, and its existence is codified in the cooperative agreement as a way of streamlining MGE's requests to DNR.

Recalling the critique of the relationship between DNR and MGE above, this team helps solve problems of continuity of care and barriers to developing relationships because of lack of communication when things are not going wrong. As described by an official from DNR:

"I think there were technical people from this region who felt the only time [MGE] come[s] talk to us is when [MGE is] in trouble, and then they want to be all buddies with [DNR]. [DNR technical people] didn't like that role, whereas now we get together once a quarter, we set up an agenda, we talk about things...For [DNR], and for MGE, that is probably the single most beneficial outcome that they have got out of the agreement."

In addition, the technical team is multidisciplinary, which means that it has staff from multiple bureaus in DNR. This helps mitigate problems of balkanization at DNR. Moreover, it provides a bit of certainty to MGE in ensuring that they will get the attention that they need during changes. For example, for MGE to order a new turbine for a cogeneration plant from General Electric, MGE needed to commit millions of dollars three years in advance. Uncertainties in DNR's reactions to the project, and discontinuities in DNR staff working with MGE would make this investment very difficult. With the technical team, MGE and work with DNR in advance and make sure that DNR is comfortable with the project. This interaction did not clear all of the hurdles for MGE, there still were risks involved with this investment. However, the cooperative relationship with DNR reduces risk and makes it easier for MGE to invest. It is important to note, however, that this is not a quantifiable benefit. It is a decrease in the risk for MGE in regulatory transactions, but not something that can easily be measured. Nevertheless, the technical team is seen as largely successful by DNR and MGE.

However, there are one or two difficulties with the technical team. One difficulty has been its ability to interface with other actors. Kim McCutcheon of DNR describes one of these problems:

“The one thing we lack a little bit is taking that group and making sure it cross pollinates over into the community group because we have a lot opportunities to come up with some good ideas, and I don't know if that stuff necessarily translates over to that community group, or to the people that need to bring those ideas to the community group.”

Indeed, in my interviews with the members of the CEAG, none mentioned the technical team as part of the cooperative agreement. In addition, in a review of the detailed minutes from all of the CEAG meetings, the technical team comes up once or twice as a part of the agreement, but did not generate any questions or discussion from the community members.

Another difficulty with the technical team were problems with interfaces between the technical team and the rest of DNR. Staff at MGE occasionally went around the technical team when they had questions or issues with DNR. Sometimes MGE would go above the technical team on the hierarchy, which would cause discontinuity in the technical teams' understanding of the changes happening with the plant. This shows the fluid nature of the agreement, which sits in the context of larger institutional structures. The actors that are involved with the technical team, like the agreement itself, move in and out of the norms established by the agreement to norms of the larger regulatory environment. In the case of the technical team, this results in a breakdown in continuous communication. That said, the establishment of the technical team has been one of the most valued changes to the regulatory arrangement in the eyes of MGE. In addition, it has occurred without much dissent from the CEAG.

6.2.3 Alternative Fuels and Dioxin Concerns

MGE's Blount Street power plant uses coal, natural gas, and 'paper derived fuel' (PDF), which is also called 'plastic and paper derived fuel,' to produce electricity. Initially, MGE referred to PDF as "alternative fuel," which according to members of the CEAG made it sound much more environmentally safe than a fuel that involves burning plastic. This is perhaps one of the largest flexibilities given to MGE through the agreement, and it has been the most problematic. This story illustrates how regulations can put restraints on DNR and companies' attempts to improve the environment and economy, and the way the cooperative agreement allowed for the necessary flexibility. This story also illustrates problems with uncertainty and tradeoffs that some, but certainly not all, were comfortable with. Like the others, this story began before the signing of the cooperative agreement and continues today.

MGE began using waste as an alternative fuel before the cooperative agreement. MGE entered into a partnership with the City of Madison to purchase their waste and burn it. This first attempt had some difficulties due to fluctuating emissions relative to the quality of the materials that the City was providing. After this arrangement failed, MGE was approached by a company that was collecting materials that MGE could burn. Through this arrangement MGE started burning PDF, but they ran into a barrier. MGE is regulated as a power plant, not a waste incinerator, which limits the amount of waste that they can burn. As described by Mike Ricciardi of MGE, "There is a glitch in the DNR rules somewhat, we can burn non-recyclable paper...but it's gotta be pre-consumer...it would end up in a land fill. If it was...consumed by either manufacturing or the consumer, it was considered solid waste, and then we would be an incinerator." For example, MGE was not allowed to burn boxes that were used to transport chickens and then thrown away because they were already used, even though there would be no

difference between the boxes before and after use. MGE felt that burning PDF would help the environment. Again, Mike Ricciardi: "The emission profile is different than coal. Yes,...a couple [of pollutants] are a little bit higher, but most of them are a lot lower. There is less to landfill. So from my viewpoint, the overall benefit for burning the PDF is good." DNR agreed, and in the cooperative agreement the amount of PDF that MGE is allowed to burn has been increased. In addition, the approval process for MGE to introduce new fuels has been streamlined through the technical team. This, in the view of MGE and DNR, decreases transactions costs and improves the environment.

In MGE's annual report of their implementation of the agreement in 2004, they report that in 2003 by burning PDF, MGE displaced 10,758 tons of coal, and reduced emissions as follows: 306 tons of SO₂, 1 ton of NO_x, 0.41 pounds of mercury, and 4 tons of ash.¹¹ It is difficult to assess how much of an improvement this is, but using their 2002 releases as a baseline, it is possible to ascertain the percentage of MGE's total emissions: for SO₂ the reductions were approximately 4%, for NO_x the reductions were 0.07%, and for mercury they were 11%.¹² Finally, while I was unable to find an assessment of the amount of money that MGE saved, the emissions did come at a cost savings, which means that they are environmental benefits with a cost savings—in words used by many 'win-win.'

This 'win-win' change in regulation was not completely embraced by all on the CEAG. The first barrier, perhaps, was the language and the transparency of the flexibility. Lindsey Lee, a member of the CEAG, describes this concern:

"Early on one thing that concerned me is they have an alternative fuel source that they burn at the power plant...I call it plastic, its plastic paper something...I didn't

¹¹ *Environmental Cooperative Agreement Annual Report, 2004*; p. 3.

¹² WIDNR FACT System 3/19/2005

know about that. I thought it was a coal burning and natural gas, I didn't know about this alternative fuel. I had concerns about that I raised. Which was, most people in Madison do not know that you burn this alternative fuel. It might strike some people as odd that you're burning plastic."

Once it became transparent exactly what PDF was, and how it could have a benefit due to a 'different' emissions profile, the issue of lack of clarity was somewhat resolved. However, there were some on the CEAG that began to worry about the tradeoffs, most notably the risk of releasing dioxin from burning plastics. Jo Oyama-Miller, a member of the CEAG, describes her reaction to the problem with PDF:

"When we looked at the PDF, they brought up the concept of dioxins, but they said they were so low and they just kind of pooh-poohed it. So...I did more research on it, I began to look what was out there...I said yes, that dioxins on this are low, [but] what the research is telling me is that we shouldn't be putting out any. And right now we have none, or very very little, and [MGE is] telling me...if we burn more, we [won't] have as much sulfur and some other [pollutants], but we have dioxin. We don't have enough research on the dioxin."

Dioxin became a concern for other members of the CEAG, and was frequently a topic of discussion at the meetings. This issue has two main difficulties, that are somewhat intertwined: the trade-offs between dioxin and other pollutants that would be emitted, and the uncertainty regarding dioxin, which is difficult and costly to measure. The different actors perceived the dioxin problem in different ways. Members of the CEAG were concerned, but had a range of understandings of the problem. For example, one member of the CEAG said:

"It is my impression, and this is where the science escapes me, I'm not even sure what a dioxin is to tell you the truth...I heard over and over that they are hard to measure, I may have this wrong, there are maybe good dioxins and bad dioxins, I don't know. I really never got them on the record saying there is really [a] problem with dioxins."

Others, illustrated by the quote above of Jo Oyama-Miller took to the internet to find out more about dioxin. Upon finding out this information, she did not think the tradeoff was worth the

effort. She said: "If I had to tell the community, what was the lesser of two evils...sulfur or dioxin, [we should] burn coal. Make coal cleaner...but quit with the PDF stuff." This doubt of the benefits of the tradeoffs was exacerbated by the difficulty in monitoring actual dioxin emissions. DNR was unable to provide an accurate measure of the amount of dioxins that were being released. In addition, if they did do a test, DNR was not sure what kind of information the test would provide to the community because it would be so uncertain. MGE, in response to this concern, made an effort to determine what it would take to measure dioxins effectively. They first estimated that it would cost about \$100,000 to do a test, so they explored other options for testing. In addition, they were concerned that any test would be unreliable. MGE approached EPA to gather information about the potential risks of dioxin, and while the EPA assured MGE there was not a risk, EPA was unwilling to put this information in writing. MGE relayed this back to the CEAG, but was met with skepticism. Mike Ricciardi of MGE describes the reaction of the CEAG:

"[The CEAG said] 'How do I know? Is this really true? Should there be more studies?' So ultimately we [MGE] ended up [saying to one individual in the group], 'OK, we understand that is a hot button for you, we will continue to monitor the situation, we will give you updates, as we learn more we will pass that on to you. But right now based on what we are hearing from the regulators and the scientists, that this is not valid for us to pursue any further.'"

This interaction shows some of the difficulties of dealing with uncertainty. Members of the CEAG were not comforted by the lack of information, they wanted to know why there are no tests. In the end, the issue was tabled. Some respondents weren't sure how it ended, and the group moved on. One member said about the dioxin issue: "That discussion went on for quite a while and I can't say that I think we ever get passed that discussion. I think we mined it, but we never really answered the questions." Some of the members who were concerned were comforted by the fact that MGE agreed to continue looking into the possibilities of testing for dioxin, and did not shut the

door on the issue. In the end, the agreement encouraged MGE to increase its use of PDF as a replacement for coal despite the concern of the CEAG, and the ambiguity of the conclusion of the discussions.

6.2.4 Stormwater

As part of the cooperative agreement, MGE was able to change the extent that it monitored water pollution. This story shows the difficulties with implementing changes that do not change the baseline of environmental impact, as many describe the “floor” aspect of Green Tier claim, but changes more administrative aspects of regulation such as monitoring. This story also illustrates the extent to which the soft power of the CEAG can have an impact on the way the cooperative agreements are implemented.

Before the agreement, MGE had a “Tier 2” water discharge permit. The tiers of a water permit relate to the stringency of requirements to monitor, report, and prevent pollution. MGE had a “Tier 2” permit because it is the standard for all power plants, providing an additional example for the sweeping nature of environmental regulations. A change from Tier 2 to Tier 3 would decrease MGE’s monitoring and reporting requirements. According to the cooperative agreement, the major differences between Tiers 2 and 3 are as follows:

- Tier 3 does not require a storm water pollution prevention plan, which is required in Tier 2.
- Tier 3 does not require quarterly visual inspections, which are required in Tier 2.
- Tier 3 requires less rigorous annual inspections.

MGE and DNR felt that the Tier 2 requirements were beyond what is necessary to ensure protection of the environment. Nevertheless, in the agreement MGE committed to continue fulfilling a subset of the Tier 2 requirements. Kim McCutcheon describes the flexibility provided to the storm water permit as a minor issue in the cooperative agreement:

“That's kind of a no brainer...because from what I gathered...they were sort of in a limbo tier anyway, and they were actually implementing at a level they didn't have to, so they were actually already beyond compliance. For us to say sure, you can, it was no problem, because they were already operating at a beyond compliance level. It looked great on paper though...We didn't need the cooperative agreement to do it.”

However, members of the CEAG did not readily agree to this change. The reservations of the CEAG did not make a difference in the agreement, which still changed MGE from a Tier 2 to a Tier 3, but it made a difference in the way MGE implemented the agreement. Mike Ricciardi describes what happened:

“Early on in the agreement we had a storm water permit. It was a Tier 2. We wanted to go to Tier 3, it saved us some time in having to do the chlorine inspections around the plant. What we had done is we put berming around the plant, and felt very comfortable that the run-off was not leaving the site, or if there was any run-off...[it is not going to be any worse than] what was happening in the street. [The CEAG said] ‘You're reducing monitoring, we can't have that.’...So...we went to [a] Tier 3 program, but we continued doing all of the Tier 2 monitoring.”

Like the PDF story above, despite the perception from DNR and MGE that this was a shift that had no potential to harm the environment, the CEAG did not feel comfortable with the change. The end result was that the flexibility was granted only on paper, and the community group effectively blocked the flexibility in practice. This is different from the result of the PDF story, in which discontent from members of the community group did not change the action of DNR or MGE.

6.2.5 Nuisance Issues

As stated above, in the cooperative agreement MGE committed to address nuisance issues. This was not very controversial, but is important because it demonstrates the breath of the cooperative agreement, and provides another example of the CEAG's ability to affect change.

Lindsey Lee of the CEAG the input at the CEAG gave MGE in the formation of the cooperative agreement:

“The negotiations were pretty broad. Things were brought in, in some cases that were not really environmental concerns...Once again this was raised by several community members, noise coming in and out of the power plant. They used to bring in train cars, hoppers, I think there was some device that would pick them up and shake them, shake the coal out. It made a lot of noise. Several community members...said that that is disruptive to the neighborhood. You can hear it all down the isthmus. I think that was included in negotiations. Some other things [too], light pollution.”

These issues were readily addressed by MGE in an attempt to work with the neighborhood, and all sides view these changes as a success. Mike Ricciardi of MGE describes MGE’s perspective on the nuisance issues:

“So we’ve tried to work with the neighborhood, for instance, if noise is an issue, one of the things we tried to do as part of the cooperative agreement is we developed a noise compliant procedure...We’ve been very cognizant of [noise, for instance we] enclosed...all of the conveyers [that] used to be open. There used to be a lot of clanging and banging, all of that is gone. Another issue that came up is lighting, we tried to conform to the dark skies approach. We redesigned our lighting so it is strictly down lighting and we moved it around so it is lighting the area we want and nothing beyond that. That was a discussion and interaction with the group early on as some of the neighborhood concerns or items that they wanted to see.”

The response of MGE to concerns about nuisance issues was important for building a productive relationship between the CEAG and MGE. The process of building this relationship, its benefits and challenges will be explored in the following section.

6.3 The CEAG and Democratic Accountability

In this section, I focus on the CEAG because it is through the CEAG that democratic accountability and deliberation can occur. It is also through the committee that cooption, or group think, can occur. First, a few words about the make-up of the group. Unlike the Cook

Composites agreement, the CEAG is an associative arrangement. The members of the CEAG represent predetermined segments of society informally as members of secondary associations. The arrangement did not depend solely on secondary associations, some individual leaders and government officials who were part of selected communities participated in the group. Regardless, the members of the group saw themselves as representing specific segments of society based on group affiliation. Also unlike the Cook Composites agreement, all citizen members were not immediate neighbors of the power plant who had acute exposures from the plant.

My sample of participants indicated that people had a wide variety of reasons for participating, but all tied their participation to their general civic engagement. One member was contacted through his involvement in a local business association. He did not know much about MGE before agreeing to participate, but chose to participate out of curiosity and interest. Another member is an alderperson for the ward that MGE is in, and participated out of interest in environmental issues, global warming, and care for what happens in her district. A third member filled an institutional slot in the group. The environmental NGO that he worked for had a person on the CEAG who left the organization, he took the position as part of his professional duties. A fourth member was an active advocate for low income communities in the area, and was selected to represent their interests.

Members of the CEAG were selected by MGE, with oversight from DNR to ensure that they meet the guidelines provided by the legislation of the pilot program. The legislation for the pilot program required that MGE set up an interested persons group but does not specify exactly whom should participate. Selection by MGE was a bit problematic to some in the group. One member of the CEAG describes this concern and his role representing a segment of society:

"I had concerns that, was I being asked to serve because I am a business right next to MGE, although my business doesn't rely on MGE...I was just concerned that I was being asked to serve because I would be considered easy going...and if I'm going to be involved in something I want to be fully engaged. I don't put much effort on networking, being involved with the community just to be involved. That was a concern that I had."

While all respondents did not express this level of skepticism, there was agreement that it is important the group did not just "rubber stamp" the agreement. However, the members are not sure how CEAG got this way, and attributed it to just luck or Madison exceptionalism. Having MGE select the members of the CEAG with DNR oversight was intentional. A representative of DNR explains the logic behind letting MGE take the lead on selecting and running the CEAG. In response to my question, why DNR did not select the members of the CEAG, the DNR official's response was:

"Command and control. If DNR is telling them what to do. This is putting the power in the participants, because this is a voluntary program we don't want to be dictating all of these different aspects to them. This is supposed to be for their benefit, not necessarily ours...This is a voluntary program that is looking for superior environmental performance too, and, for us to dictate who should be on your interested persons group, just, you need to go out there to help bring input so you can go out there and tell us how you are going to do this. So, to me it is totally logical...We tried to help, but quite frankly our expertise with any kind of public participation was pretty much grounded in public hearings, things that are very prescribed...So, we actually didn't have a lot of experience in how to do something that was not required by some other law. We are just used to working in bureaucracy, so to me it made a lot more sense...The business community has been telling us that, [the way we do things] isn't the way to do business. So, OK, [we said to the business community] 'Show us how to do it better.'"

In this case, DNR made a tradeoff between the perceived independence of the group and the desire of DNR not to be "command and control" oriented. But it is not clear that this was a conscious decision—in other words, that DNR knew that participants worried about the independence of a group selected by MGE. Also, embedded in this quote is the desire for experimentation. DNR did not want to dictate because it wanted business to help figure out the

best way by trying new things. However, there is an assumption that DNR would not be the group to do the experimentation—to actually design the new forms of participating and try them out. This had to come from business.

To complete my overview of the group, the CEAG there are two more details that are salient. The CEAG initially met with representatives from MGE and DNR quarterly, but now meets every six months. The meetings are facilitated, and involve a combination of presentation and open discussion. When asked, participants did not find the facilitators critical to the success of the meetings. MGE provides dinner to all that come, and detailed minutes are taken, which are approved by the CEAG. This is the basic framework of the meetings, apart from this the format is fairly open. With this introduction, I will explore some of the characteristics of the group in more detail.

6.3.1 Representation

The “representative” nature of the CEAG was somewhat problematic to its members. As described above, the CEAG is a associative arrangement, with individuals representing segments of society. Judy Olson, a member of the CEAG describes how she sees her role:

“Well, to, somehow represent the area served by MGE, and to reflect the concerns that you would expect the community would have about this agreement. To review the agreement from the standpoint of an informed lay person, and to reflect that concern. So we were in a position to ask many question. To raise concerns and expect answers.”

However, for some members this was worrisome. Continuing with Judy Olson, who as an elected representative, has a measure of democratic legitimacy of her own right, articulated her unease as follows:

“It made me a little nervous to be put in a position of possibly having my opinion being thought of as being reflective of the opinions of the surrounding neighborhood. And vice versa, that my opinion of MGE might somehow be thought to reflect the opinion of the neighbors. I'm very much a lay person, and a lot of what were looking at was highly technical. There was a great deal, there was a lot of questions that we asked, it took a great deal of time, they were very patient with us, but still, although some of the people in the group were more technically savvy than I, it was still pretty much a lay persons group, and they could have anything, frankly. It did make me somewhat nervous to think that [MGE was] embarking on a relationship with DNR that was somewhat looser than the usual regulatory relationship. And members of the community who were lay people, and myself especially, were somehow sanctioning that.”

Other members expressed this same concern and worried about representing others when they themselves did not feel like they knew exactly what was going on. Other members were more comfortable with representing different segments of society. From my limited sample, these members were actively part of NGO's, and were accustomed to advocating on the behalf of others.

Rarely did the members of the CEAG discuss the cooperative agreement with those whom they “represented.” One member indicated that even if she wanted to, she would not now how to discuss the agreement with others because she did not understand the agreement well enough to explain it. This confusion over roles will be addressed in the next section, but it is pertinent here because it poses a communication barrier.

6.3.2 Role of the CEAG

For this agreement: “The CEAG is a group of interested persons who live, own a business, or work within MGE's service area and may be affected by the activities of [the Blount Generation Station (BGS)]. The CEAG will review and comment on BGS's Environmental Management System

and its performance.”¹³ However, in practice, the role of the CEAG was not clear. The consensus among members of the group was that their role was to ask a lot of questions of MGE, and to watch the process of the creation of the agreement. Nevertheless, members of the CEAG were not exactly sure what this meant. The idea that the CEAG would ask questions and request answers was shared by DNR and MGE, but there were other more subtle aspects of the CEAG that were also evident in their perceptions. For example, a representative from MGE, in discussing the role of the CEAG, said: “Our marketing people do a great job in talking to customers. But we thought we could improve by trying to get a group that was sort of mini-representative of our stakeholder group as a whole.” This likens to the CEAG to a focus group of customers to help MGE package its product—a view that is hardly compatible with a group that is supposed to provide democratic accountability. An official from DNR provided a different perspective of the confusion of those involved about the role of the CEAG:

“I don't think they totally grasp the power at this point. And that may be...because how MGE chooses to run their meetings. They are facilitated meetings, but they're...set very loose, so the group doesn't get a lot of instruction on what the expectations are. It's become more of a venting session, which is kind of unfortunate, because there is some bright people on that group and they could really help MGE set some of the objectives if they want to. And I don't think they've totally figured out how they can utilize that body to do that, especially now with their EMS in place, I think they could really tie that back to that community group, it could be real powerful.”

In this view, the CEAG does not fully utilize its power to influence the cooperative agreement. Supporting this view, members of the CEAG indicated that they when they were dissatisfied with the way DNR negotiated the agreement and the extent that DNR was willing to give into MGE's interests, the CEAG could have collectively opposed the agreement. But this would have required

¹³ *Environmental Cooperative Agreement between Madison Gas and Electric Company and Wisconsin Department of Natural Resources*, 2002, p. 5.

all members to fall into line and speak with one voice. Collective action would have been difficult, and the group did not exercise its power. As will be discussed later, there are no formal decision making processes of the group, and the group has no hard power. Nevertheless, the group is asked to weigh in on decisions that are made, and expected to ask questions. One can view with CEAG as a means to transparency. The members are given a privileged position in the transparency of the agreement by being privy to presentations and by having the power to expect that their questions are answered. This is similar to the Cook case, in which just having the firm report to someone increases transparency, and through this accountability. In addition, the group can be seen as an advisory committee because they have the ability to make suggestions and expect that the suggestions are at least considered.

There were at least two additional difficulties with the role of the CEAG. The first is that the initial role of the CEAG was in the creation of the agreement. Since the CEAG was a part of the process while the agreement was being negotiated, the CEAG saw supporting or not supporting the agreement as their main role. Once the agreement was signed, there was confusion over what the role of the CEAG actually should be. One member of the CEAG described the before and after the agreement as two “terms” on the CEAG. Another member thought that the group had lost all of their leverage after the agreement was signed. He stated:

“Now that the cooperative agreement is in place our role has been reduced and our leverage is also reduced. Once again, if there is something that is really bothersome, if we as a group said ‘We don't like this, and we don't want to be a part of it.’ I think there would be leverage there. Now I don't think there is any big issue I see where that would be called for...So I think our role has become more fulfilling the needs of the statutory requirements rather than playing a big role.”

In this quote, it is apparent that this member of the group saw its role in supporting or not supporting the agreement. However, if one looks back to the agreement, the group itself is created

as part of the agreement. The group is supposed to look over the implementation of the agreement, and is not a party to signing it. It is not clear how this could be resolved. The Cook agreement shows that involving the community late in the negotiating process can engender problems, but in this case the focus on the agreement caused a perception of loss of power after the agreement was signed.

The other problem was keeping the oversight of the CEAG within the bounds of the agreement. A DNR official described “keep[ing] enough of a lid on it so they could do things that were within their scope” as one of the main challenges to MGE. Further, she stated that she should probably bring the statutory definition of the role of the CEAG to each meeting. This way, the CEAG would not push their role too far. The CEAG members expressed concern about actions of MGE that had nothing to do with the cooperative agreement. This ranged to questions about the amount of renewable energy that was available, to questions about MGE’s political lobbying. Rich Bogovich, of the CEAG describes the latter:

“One member of the committee expressed disappointment at one meeting that MGE staked out a position on mercury [that was with industry.]...He was given the chance to have the floor, he was heard out.”

Members of the CEAG were concerned that the efforts they were making with MGE were being reversed by MGE’s action elsewhere. By politically supporting softening of mercury regulations, while trying to limit its own mercury emissions, this member thought that MGE was acting hypocritically. This type of comment has been accepted, to a degree by, MGE. One member of the CEAG said that after the signing of the agreement, “Our group also asked if MGE would be willing to look at issues beyond the CEAG...they said they would be willing to as long as it wasn't preposterous or it was within their mission and the goal.” A compromise was found, but there is tension between what DNR and MGE see as the scope of the cooperative agreement and what the

members of the CEAG, who are not socialized into the regulatory game, see as the range. Nevertheless, the fact that MGE would hear the ideas of the group and respond respectfully was valued by the participants.

Overall, the role of the CEAG was not consolidated. It continued to work well—members of the CEAG, DNR, and MGE all expressed admiration for the process—but none were sure exactly what the role of the CEAG should be. This is to be expected in experimental governance, in which institutions are constantly recreated, but it seemed to be a barrier to realizing some of the potential of the CEAG in this case. It is not clear, however, whether the roles will consolidate. Again, this is a snapshot of the process of change. One cannot know for sure where the roles will end up. Moreover, this would not be pertinent to the analysis because part of the nature of the cooperative agreement is to critically examine and adjust the roles along the way. Nevertheless, it seems that this state of disequilibrium, in which people are not sure what they are supposed to be doing is problematic because it hampers action.

6.3.3 Problems With Expertise

As shown above in the story about the PDF flexibility, expertise presents a major barrier for the CEAG. The significance of difficulties with expertise permeates many of the other aspects of the CEAG that I explore in this section. Nevertheless, I will try to treat expertise as an issue independently, as dealing with technical information seems to be one of the most intractable problems in directly deliberative forms of governance.

The members of the CEAG gathered technical information mostly from MGE, getting some information from DNR. Some members also gathered information on their own, but this was the exception. At first, members of the CEAG indicated that the information provided by MGE was gibberish. However, over time, MGE changed the way they presented the information to make it

more clear. Nevertheless, members doubted whether they could trust the information. One member said: "There were some issues that we felt, were we getting straight answers?" This presents a serious problem. The source of the information for the group is precisely the people, MGE, with the largest incentive to sugar coat it. This is not to say that MGE is going to lie, but that MGE's attention may naturally focus on information that supports its position. To some extent, DNR provided a degree of third party verification. There was a sense among members of the CEAG that if MGE was lying, DNR would tell them. Regardless, doubt remained among the interested persons group if they were really getting information that was unbiased.

DNR's role in providing information was also difficult. One type of information that DNR could provide well is "DNR technical information." This means, information about how MGE is regulated, and what the regulations mean. This type of information should not be underestimated in its importance. One of the issues that came up in the meetings was about pollutant trading. Members of the group did not understand what it meant for MGE to trade pollution credits, and DNR could provide this information. Moreover, DNR could inform the CEAG the extent to which the MGE was departing from the law. Only DNR was comfortable providing this information. MGE was reluctant to interpret laws or regulations for the CEAG because they did not want to make a mistake.

However, DNR was limited in the amount that they could interpret some of the technical information. An official from DNR explains difficulties helping members of the CEAG understand the implications of some of the changes to the way MGE is regulated:

"Sometimes [the members of the CEAG] will ask us about that information, and I think sometimes they are very disappointed because what we will say is that [MGE is] meeting their permit. Because we are not health people. There is this overlap between what DNR's regulatory authority is...and meeting standards,...complying with their permit, [and MGE is] complying with the standards...But that is not

saying that because [MGE is] complying that this means there is a healthy environment...And that's when things get a little weird for us, because people expect us to be this total expert knowing what their risks are, and we are not risk managers."

This is a major barrier for a number of reasons. One is that the members of the CEAG, in the words of one member "have no perspective." They do not know what the industry standards are, whether MGE's performance is above or below average. Further, they do not know what the health effects are likely to be, which is something that DNR does not know either. This blows open the myth that DNR knows how to keep the environment safe. The mix of all pollution, point and non-point source, that creates a 'toxic soup' is beyond the capability of DNR. This lack of knowledge always existed, but through the CEAG, it becomes evident. The example above about dioxin illustrates this well. According to DNR and MGE, there were no good tests, and the CEAG wanted to know "Why not!" In addition, if the CEAG is to provide input into any flexibility MGE is getting from the law, the CEAG would naturally want to know the significance of the deviation. Normally, in regulation significance is determined in a centralized fashion, using the mechanisms of representative democracy to make it legitimate. In this case, significance is determined at the level of the cooperative agreement by DNR staff, and the CEAG is supposed to provide input. But the CEAG does not seem to have the capacity, nor is anyone providing it the capacity, to provide precisely the type of input needed to make the agreement more democratic—an interpretation of the significance of the flexibility.

The combination of questions about getting straight information from MGE, and the CEAG's inability to interpret information even when they could understand it, led to doubt in the minds of some of the members. This engendered a profound concern about the responsibility that members of the CEAG had to the community. One member expressed this concern as follows:

“Early on I was concerned, I don’t have a...very good scientific education, but a lot of the presentations were pretty involved, and I sort of felt like, I understand a lot of it, but a lot of it I don't understand. I don't understand the implications of what is being presented to me, I guess my concern was, would there ever come a situation where ten years down the road burning the PDF would be causing problems, and I was there in a room where it was being described and it went over my head. I was always concerned; was I supposed to be playing a monitoring role? It was my understanding that was not our role. I think it was somewhat blurry what our role exactly was.”

This deep concern was shared by others. Some, but not all, felt that they did not really know what they were sanctioning. At the end of the quote above, the member ties this feeling back to the role of the CEAG. DNR informed the CEAG that they were not supposed to be playing a monitoring role. A DNR official explained it this way: “No one is expecting you to become a technical expert because that is not your job.” However, the members of the CEAG were sanctioning the agreement just by being in the room, and being complicit. They may not have the power to change the agreement, but they could have gone on the record saying they opposed it.

I believe this is especially significant because DNR does not have the ability, even though they have technical know how, to really say that burning PDF is not going to cause problems in ten years. Professional risk managers have a level of comfort with making these decisions in light of uncertainty. However, when outsiders are introduced into the regulatory game in a cooperative mode, they experience doubt that, to some degree, calls into to question the entire regulatory process. Supporting this last statement, the one member of the committee I spoke to worked at an environmental NGO did not share this level of discomfort.

The response to this problem by DNR and MGE was “education.” Numerous times in my interviews with representatives from these organizations, they would say that the problem is that they need to do a better job “educating” the members of the CEAG. The dioxin problem, was a matter of “education” because some in the group did not see how much of an improvement it

would be over burning more coal. I was unable to see how the members of the CEAG interpreted this effort at “education.” It was not differentiated from the information that was provided to them from MGE or DNR. I will comment more on this later, but for now I would just like to problematize an institutional design in which the overseers are “educated” by those they are overseeing.

In this section, I did not emphasize the agency of those in the CEAG for gathering their own information and expertise. There are members of the CEAG who have a working knowledge of environmental issues, some are environmental professionals. These individuals tended to be more comfortable with the technical information. Further, members of the CEAG educated themselves at times. This was effective in the case of Jo Oyama-Miller and her concerns about dioxin, that largely came from outside the CEAG. Finally, the members of the CEAG relied on one another to pool expertise. This pooled knowledge was, of course, greater than the knowledge of any one individual. One member of the CEAG indicated that having more experts to “have an extra couple of sets of eyes and ears.”

Overall, expertise is perhaps the largest challenge to the CEAG. It brings into question their ability to represent their community, it questions their role, it creates a strain on trust among the actors, and it decreases the ability of the CEAG to solve problems. Finally, it erodes the democratic accountability provided from the bottom up. As will be discussed later, solving the expertise problem may require a more affirmative state, which directly contradicts the goals that some have for Green Tier.

6.3.4 Decision Making and Conflict

As stated above, the role of the CEAG is to provide comments to DNR and MGE, and to ensure transparency. The CEAG does not have formal decision making power over the agreement,

or any other aspects of the relationship between DNR and MGE. To date, the CEAG never voted on issues. In addition, much decision making between MGE and DNR happened away from the meetings. In this sense, there were no norms of decision making within the CEAG. There are, however, some ways in which conflicts were resolved that provide a glimpse of how decisions were made (or not made) by the CEAG.

Some of the conflicts that came occurred during the CEAG meetings, such as the conflict of PDF that was discussed above, were spearheaded by individual members of the CEAG. Some members had an area that was of particular concern to them, and, as in the PDF story, pressed to get answers to their questions and attempted to change the way MGE was regulated. In order to keep the conversation moving, MGE would take conversations with these individuals “offline” from the rest of the group. This practice was praised by officials from DNR as a way of keeping the process from getting hung up on one particular sticky point. A compromise would then be worked out with the individual, which in the case of the PDF, was that MGE would continue to look into ways of measuring dioxin and inform the group of what it found out. Through this practice, conflict was kept down, but not all members of the CEAG would be aware of how the conflict ended. This is a bit problematic, because it takes precisely the issues that should be deliberated within the group off the table. Some members may agree with the member that has been siphoned off, but will never know it and, therefore, will not apply more pressure on MGE. But, this way of handling conflict did help the group continue to move forward without getting hung up on a single issue. This is another trade-off, and it was not clear how aware MGE or DNR was about the costs and benefits of proceeding in this way.

Despite the lack of formal power and decision making processes, the CEAG clearly exercised power. At times, MGE recognized that the CEAG as a group were unhappy about an

aspect of the agreement, and they changed accordingly. The nuisance mitigation described above provides an example of this. The extent of this, however, was limited. Returning to the discussion of the role of CEAG, an official from DNR stated:

“I mean no one is asking you [members of the CEAG] to make these big decisions, you are there to bring up concerns, but you are not there to make hard and fast decisions to say ‘MGE...will reduce mercury next year by 15%’...Because it is not based on any reliable information.”

This quote illustrates the limited sense in which the CEAG was expected to make decisions, which provides context to the lack of structure in the decision making process. Understanding where this line is drawn is critical for assessing the extent to which the CEAG provides a measure of democratic accountability.

The extent to which the CEAG has power and can influence decision making is not clear. It seems to depend on a number of things, including to ability of the CEAG to undertake collective action. One member of the CEAG noted that at the point of signing the agreement, there were a few members of the CEAG who felt that DNR could have gotten more from MGE. They discussed whether they should collectively push for more, but in the end decided against it. There remained the possibility, however, that the group could collectively stop participating in protest, and through this exercise a power over the decision making process. This did not happen because the group, in the end, was satisfied enough with the agreement and it would have taken a lot of work with members of the group acting together. However, the possibility remained, and at least some members of the CEAG were cognizant of it. But the extent to which the group has resources to organize resistance to DNR and MGE is not clear. Also, the extent to which DNR and MGE will be receptive is not clear.

This description of the decision making process is somewhat vague because the actual decision making process, or lack there of, was somewhat vague. However, it is important to understand the functioning of the CEAG, and the extent to which power was devolved (or not devolved) to this local body. There seems to be a mixed result, in which under some conditions the group has exercised change, and under others the group has not.

6.3.5 Transparency

Transparency can be divided into two categories. First, transparency of MGE and DNR to the CEAG. Second, transparency of the CEAG to the rest of the community. Like the Cook agreement, MGE shared more information with the CEAG, and the public for that matter, than it is normally required to share. MGE conducted two analysis to date of their implementation of the cooperative agreement, and shared these reports with the public. These are audits of their environmental compliance, which are usually kept confidential. Further, the meetings of the CEAG themselves provide significant transparency over normal command and control regulation. Presentations were given to the group on a number of issues and much information was shared.

The main mechanism for transparency of the workings CEAG were the meeting minutes. At each meeting, detailed minutes were taken by MGE. These minutes were then approved in the following meeting by members of the CEAG and posted on MGE's website. Members of the CEAG indicated that the minutes were the mechanisms by which the community would know about their actions. Members felt it was very important that their opinions be recorded in the minutes. Indeed, some of the early conflicts were about the minutes themselves. By having the minutes public, the CEAG members could show that they had concerns about an issue, such as the PDF, even though they had no formal way of affecting change. One member of the CEAG stated that when people from the community would ask her about the agreement, she would tell them to read

the minutes because it was too difficult for her to explain it all. In addition, a representative from MGE indicated that the minutes are shared with a local neighborhood association, which shares them with their members. The minutes are the sole source of transparency for the discussions in the CEAG. There is information that is available on the agreement generally both on MGE and DNR's websites. This information is detailed, including the baseline report of the agreement, the results of the first annual performance audit, and the text of the cooperative agreement.

Nevertheless, there was a bit of discomfort among some members of the CEAG that they knew things about MGE that most others in the community did not know. One member describes transparency as it related to the controversy over burning PDF:

"I could say that if that particular issue ever got discussed among members of the general public that it would be a matter of great concern. So I felt a little bit like we were hiding secrets. And MGE, I can't say that I ever recall them talking about CEAG in a very open way. It wasn't very clear to me that our role was ever discussed with the rate payers. There wasn't anything written up in the newspaper about it,...it wasn't closed but it was certainly far from open."

In this view, the passive transparency of putting the minutes of the meetings on the web was not enough to provide comfort that what these members of the CEAG were doing was open. Overall, there were varying degrees of comfort among members of the CEAG with the level of transparency. There was clearly value put in the fact that the minutes were on the web and public, but there was doubt that this was adequate among some.

6.3.6 Trust

Part of the role of the CEAG, in the words of one DNR official, is to "build public trust." Given the nature of the soft power that the CEAG has over the agreement, and the difficulty the CEAG members have understanding the technical information, it is important that the CEAG members trust MGE and DNR in order to make the agreement work. Otherwise, informal norms

will not change, and adversarial regulation will remain despite changing the formal rules. Initially, coming into the agreement, most members of the CEAG did not know very much about MGE. MGE's reputation as a responsible company preceded it, but beyond that members of the CEAG that I spoke with did not have strong opinions of MGE. However, there was a range of skepticism among members upon joining the group based on their general feeling about corporations and the environment. Some members noted that MGE is a for profit company that has to make trade-offs between profit and environment. One member said: "I think there is a recognition that...while MGE faces business pressures, they are not trying to secretly damage the environment." While there was no doubt in the minds of some on of members of the CEAG that MGE was trying to do the right thing, when it came down to making trade-offs they were not sure what MGE would do.

In an attempt to give credibility to their claims of environmental performance, MGE hired an independent auditor. This turned out to be problematic for a number of reasons, but for now I will focus on a perceived conflict of interest. One member of the CEAG questioned the independence of this auditor, invoking Arthur Anderson and the Enron scandal. The third party auditor, in the eyes of some of the members, lacked legitimacy of its own and, therefore, was unable to confer legitimacy onto MGE. In this case, the members of the CEAG did not completely trust that MGE's performance was really measured by the auditors, but the members went along anyway.

The level of trust, according to all of the people I talked with that were associated with this agreement, did increase over time. Kim McCutcheon of DNR describes some of the changes:

"[At the beginning] it was [CEAG members saying] 'I have an agenda, I'm going in here, I don't trust anything any of you on the other side of the table have to say.' [CEAG members were coming in] guns blazing, just trying to get people riled up. Now you don't see that. The questions are raised, if [CEAG members] don't think they are getting satisfaction then the conversations will usually go offline...That's

what's happening more versus [CEAG members] sitting their...insinuating that [MGE is] not being truthful."

The increase in trust can be attributed to a number of things. One is that MGE respectfully entertained the questions of the group. Multiple members noted that they were pleasantly surprised when MGE agreed to look into a number of issues that they raised. In the end, the final decision may have been against the suggestion of the member, but the fact that MGE made an effort to try to address the concern showed that MGE was acting in good faith. Moreover, the reasons why MGE did not pursue the suggestions of the members were given. In addition, MGE's practice of being open with the CEAG, even when MGE did not have to be open, helped build trust with the CEAG. For example, Lindsey Lee of the CEAG recalls one instance of openness from MGE. In response to a question regarding transformer storage:

"I think it was Mike Ricciardi who said, 'It is interesting that you ask that because we did have a leakage problem in this outdoor storage facility.' Which you have to give him credit for not coming up with some other way to answer the question. He gave a straight answer to a direct question, and he wasn't under any oath."

In this quote, the fact that MGE was willing to answer a question that they did not have to answer, demonstrated that they are trustworthy to the members of the CEAG. In addition to answering questions, MGE also demonstrated its trustworthiness through action. The fact that MGE made measurable changes to mitigate nuisance complaints from the community, even though this was a completely unregulated area, helped MGE gain the trust of the community. This is the "studied" trust in which studying the world and a problem together actually builds more robust trust than, say, having confidence that MGE will do the right thing and not checking to ensure that they actually do it.

Another part of the meetings that helped build trust were the personal relationships that formed over time. One member of the CEAG described his relationship with MGE as one of

“mutual respect.” By sitting at meeting with every quarter with people, relationships form. I could not identify many relationships that grew beyond the CEAG meetings, but some did develop to the point in which people would meet for coffee. The importance of even the relationships that formed during the meetings, and the trust that members of the CEAG had in MGE, is illustrated by the quote from one member of the CEAG:

“There are definitely people in MGE management that I think very highly of. Their environmental officer,...I am very comfortable with her. It is my impression that I would be very surprised if MGE was doing something that was not right, that she would put her career above doing her job. It is her job to make sure MGE is complying with DNR, EPA, and other regulations. She strikes me as an honorable employee of MGE.”

The impression that an employee of MGE is ‘honorable’ seemed to be directly related to the trust that the members of the CEAG had in MGE. This type of relationship was able to develop from face to face contact that occurred over a long period of time. This is the sort of “blind trust” that needs to be differentiated from studied trust. This type of trust can easily be destroyed if it is betrayed by lack of one party living up to a commitment. However, this could also be considered the forming of friendship, which may help people look beyond their self-interest.

Despite the trust that CEAG members developed for MGE, the CEAG did not feel comfortable decreasing monitoring. This runs counter to my initial hypothesis, that trust would lead to the CEAG being more comfortable with less oversight of MGE. The example of the stormwater monitoring above illustrates this discomfort with decreasing monitoring of pollution. Another example is provided by Jo Oyama-Miller of the CEAG. She describes a question about potential decreases in monitoring:

“I remember that as being one of the tougher questions. The question would come back [from MGE] ‘We are well within the limits, you don't have worry.’ We [the CEAG] would come back and say ‘That’s not what we are trying to find out. You can be real close to fire and still get burned.’...Once we began to see what those

limits were for the emissions, and if we found that, there was a couple of them that weren't reported. Why not? Either [MGE] just forgot or it wasn't on the schedule. [We said] 'If you continue to do that, maybe that day you are beyond the limit. And now tomorrow you are not.' And that was one of the key things that DNR said they would watch"

Embedded in this quote is a concern that, despite confidence in MGE's motives, there might be emissions that are over the limit by accident. This relates to the doubt I discussed earlier about expertise. Among this group, there is a strong conservative feeling that things could go wrong with the environment, and that it needs to be monitored, regardless of trust in MGE.

6.3.7 Accountability

Overall, what does this mean for the CEAG's ability to hold MGE and DNR accountable to the goals of superior environmental performance without eroding the baseline required by law? The answer seems to be yes and no. The CEAG could alter the actions of MGE and DNR, which was illustrated by the stormwater monitoring example. In addition, MGE did undertake actions at the request of the CEAG, such as the nuisance mitigation. However, at times despite concerns from the CEAG, the agreement went ahead; as illustrated by the PDF story. This shows mixed success for the CEAG in influencing the cooperative agreement. However, it is to be expected that the CEAG should not always get their way. The goal of this program is not complete devolution. There was a feeling among members of the CEAG that their time was not being wasted—none quit out of protest. But it is hard to know to extent to which the members of the group really knew what they were sanctioning because of the lack of technical capacity of many in the group. With these contradictory pieces of evidence, it is difficult to really judge the extent to which the CEAG is able to hold MGE and DNR accountable to the goals of the program. Nevertheless, it is clear that MGE and DNR are held more in check with the CEAG asking questions than without it.

6.4 Conclusion

In this section, I will discuss some of the salient features of this case. The goal of this section is to explore a few additional empirical stories, and to summarize some of the main challenges to the flavor of cooperative and deliberative public administration that is embodied in the MGE cooperative agreement.

6.4.1 Evaluation

Possibly one of the most intractable challenges of the MGE agreement are the difficulties in evaluating progress. Inability to evaluate the impact that the changes made through the agreement have on the environment and the economic performance of MGE has posed a difficulty to building confidence among the members of the CEAG in MGE. Also, this has been a barrier to demonstrating to those who are not active participants in the agreement that it is worth the time invested in the agreement. Despite the inability to conduct a comprehensive evaluation, most of the participants that I talked with feel that the cooperative agreement is good for the environment and for MGE. The difficulty is proving it to others, who have not been involved in the agreement, and those who remain skeptical.

The first problem is quantification. Evaluation tends to be focused on quantifying costs and benefits, usually in dollar terms. However, there are a number of benefits that cannot be quantified easily—for example, the benefits from the technical team. MGE was unable to incorporate some of these advantages into standard accounting procedures. There was just no way to count it. Mike Ricciardi of MGE describes the problem:

“Now utilities aren’t in a competitive stream, but yet, environmental issues carry a big ticket item if you do things wrong or you don’t anticipate certain things. You’ve seen some of the companies getting fines and so forth, and you know,

they're millions of dollars, and that's [going to have] a pretty good impact on any industry. So from my viewpoint...if you can get a good crystal ball, a system that captures and evaluates all of that, it gives you not only piece of mind and the dollars and cents, but it gives you the opportunity to move you in a direction where you are not looking over your shoulder all of the time."

In this quote, Mike Ricciardi describes some non-quantifiable benefits of the cooperative agreement. The importance of this should not be underestimated. When management at DNR, or at MGE looks at the agreement, it is impossible to contrast benefits and the costs. This has also been a hurdle with the CEAG. Kim McCutcheon describes the reaction that the CEAG had to some of the changes to the relationship between DNR and MGE:

"The interested persons group was scratching their head about, 'Why are you doing this?' They couldn't put their arms around this better relationship thing. [They asked,] 'Well how does that improve the environment?'...[My response is] it facilitates things maybe happening a little faster, but [the CEAG] wanted to see some concrete stuff. So we actually had to work pretty hard with MGE to come up with a suite of activities that would be more tangible environmental improvements."

Even within the participants of the agreement, the benefits of better relationships are elusive.

Partly in response to the questions about environmental benefits, MGE conducted a detailed audit of their compliance with the issues. The attempt of the auditors to quantify compliance with the agreement illustrates the limitations that quantitative measurements have. Some of the violations that the auditors found were described as insignificant by DNR and MGE. For example, the some of the official communications that MGE received from DNR were not on DNR letterhead, which means that technically MGE did not have an official approval from DNR. In the opinion of DNR and MGE, the potential environmental risk from not having certification on DNR letterhead is zero, and the administrative breakdown is also minimal. Regardless of the perceived magnitude of this infraction, the auditors counted it as one infraction with the requirements of the agreement. When all of the infractions were counted up, it appeared as

though MGE had performed worse than the year before in implementing the cooperative agreement. The quantifiable measurement leaves no room for the significance of the incidents that are measured. Mike Ricciardi of DNR explains:

“There’s not a referee. We have a facilitator and he does a very good job in trying to put some of this into perspective in laymen’s terms, but still you get some points, people can’t recognize a true violation from something that is, what I would term, miniscule, a technicality.”

This shows the limitations of having outside auditors, who themselves are not in a position to determine the significance of violations, quantify performance levels.

The problem described is related to the lack of perspective among members of the CEAG that is discussed above. Without the context to know whether a violation is significant or not, the CEAG cannot distinguish between miniscule and significant issues. For example, one of the aspects of “superior environmental performance” that MGE committed to was using biodiesel in its fleet of service vehicles. Some members of the CEAG thought this was “window dressing,” and wanted to see improvements in the performance of the power plant. A similar label was attached to MGE’s efforts at recycling mercury from thermostats—members of the CEAG asked why MGE was doing this rather than making reductions in mercury emissions due to electricity generation. These last two actions, however, were seen as significant by DNR. I posit that this has less to do with the environmental ethic of DNR compared to the CEAG, and more to do with the inability for the CEAG to understand the significance of actions, good or bad, in the context of environmental regulation.

Another issue regarding evaluation that came up was that the CEAG wanted to see MGE make measurable commitments to emissions reductions. This was a reaction to the fact that many of the commitments that MGE made in the cooperative agreement were to conduct studies and

explore ways to reduce pollution. However, according to DNR it is difficult for MGE to make these commitments. Kim McCutcheon recalls one such request that the CEAG made, and the difficulties it posed:

“I mean all of our air engineers, all of our people understand that, we understand [MGE] can't [make this commitment to the CEAG]. But trying to put that in terms that the community group could understand was almost impossible. They didn't want to buy into it, just thinking that 'you are blowing a bunch of smoke at us.'”

Conversely, some members of the CEAG advocated for MGE to take paths towards superior environmental performance that were difficult to measure, engendering resistance from MGE. For example, MGE undertook a stormwater demonstration project to explore new technologies to limit pollution from run off. The project involved using filters that were put underground to capture pollutants. One member of the CEAG who was particular concerned about water pollution suggested that MGE put “rain gardens.” This approach was questioned by MGE because the impact of installing “rain gardens” would be impossible to measure. This example shows that in addition to the CEAG's desire to have measurable outcomes, MGE too shared this desire. It also shows that the actions that were taken to implement the agreement have been changed to allow for easier evaluation.

6.4.2 Taking the lead

An additional challenge with the cooperative agreement is the consolidation of a continuous effort towards a larger set of goals. The flattened relationship between the state and other actors creates uncertainties of who should lead and who should follow. Mike Ricciardi of MGE stated that he wanted to know from the other actors: “What does the CEAG group want? What would the DNR like to see now? One of the things that I hoped is...we would get a wish list. That hasn't really happened.” DNR was trying to take a hands off approach to allow MGE

and the CEAG to find ways to improve the environment. At times, such as with the PDF, DNR made suggestions to MGE, but DNR seemed reluctant to this, as it may be perceived as being prescriptive. The CEAG largely did not contribute ideas that were used to improve performance of MGE. There were exceptions surrounding nuisance issues, but largely the CEAG did not contribute ideas of ways MGE could improve the environment. This could be for a number of reasons—the process may not have solicited the CEAG’s knowledge, or the CEAG did not have meaningful knowledge to contribute. The sum of these roles leads to a stagnation in innovation, in which all actors are looking to one another for ideas. It appears that this stagnation may jeopardize the sustainability of the agreement by stalling out attempts at continuous environmental improvement. Without progress, MGE or members of the CEAG may feel that they are wasting their time. A solution is not easy to come by, however, because the shift from state led environmental protection to a polycentric model will involve a renegotiation of roles. This change takes time, and it is apparent that it is not complete in this case.

6.4.3 Conclusion

Despite these challenges, the MGE case provides another example of cooperation between a network of actors that is unusual and successful. The cooperative agreement between MGE and DNR provides a space for members of the community, regulators, and the regulated to interact in a deliberative way. Regardless of one’s baseline—whether it is the Acme Metals case described earlier, or any of the thousands of regulatory transactions that occur without extended dialogue between regulators, the community, and the regulated firms—the interactions that occur in the MGE case are a significant improvement. Transparency, at least within the groups that are participating, has increased. In the eyes of participants there have been some tangible, and many

intangible, benefits. And the likelihood that MGE's relationship with the community could slide to resemble that of Acme Metals is highly unlikely.

There was flexibility; DNR provided one really substantial flexibility to MGE allowing it to burn more PDF. There also seemed to be accountability, although this finding was somewhat mixed. However, over time, as the technical capacity of the CEAG grows from exposure and experience, there may be more accountability. Like the Cook story, the MGE story is still evolving. This snapshot of practice illustrates some interesting aspects of practice, but it does not provide a verdict on Green Tier, as Green Tier, like the cooperative agreement itself, is still forming.

Chapter 7: Conclusion

After examining these two experiments in a new practice of environmental regulation—experiments that attempts to provide flexibility with accountability through bottom up participation—what do we learn? Is this sort of change possible? Is it desirable? In this final chapter I revisit the puzzles I outlined in the introduction, and pose some preliminary responses to these questions. I conclude with a summary some of my findings that are particularly relevant to practice.

7.1 Is this feasible?

Is institutional change in environmental regulation towards a cooperative system possible? Is it possible to have flexibility with a degree of accountability? Upon embarking on reform, there are a number of possible outcomes. One is that there will be no change in the norms of the institutions, possibly due to path dependency (Powell 1991). A second is that the institutional change will take place, but it will not mirror the desired effects. For example, one can change the formal of norms an institution, but the strength of the informal norms will cause incomplete change, or change in a different direction. In the case of environmental regulation, this could be a move towards collusion instead of cooperation. A third possibility is institutional change—a shift in the “rules of the game” in the way the reformers intended (North 1990). In the case of Green Tier, this shift is to more cooperation—among firms, the state, and communities—to achieve a common set of goals. Looking at the evolution of the Cook Composites and Polymers case and the Madison Gas and Electric case—institutional change in the direction that Green Tier intends seems to be the result of the experiments. Changes on the margin of the formal regulation of these two firms, resulted in large shifts in the informal norms of the institution of regulation. The

relationships between the network of actors—the state, the firm, and the community—drastically changed. In Cook, prior to the agreement the relationships were, at best, functioning with minimal strain and afterwards were somewhat cooperative, open, and more productive. The extent to which this was caused by the cooperative agreement itself, I cannot say, but it seems likely that the cooperative agreement helped. Of course, there were bumps along the way, many of which I addressed in detail in the case studies. Nevertheless, the sum total of the change has been towards more cooperation. The individual regulatory arrangements freed themselves from the ‘iron cage’ of bureaucracy to a degree sufficient to engender real change.

This seems to be the case both when comparing across time in the agreements (relying on the memory of the participants) and when comparing to the out of Green Tier case, Acme Metals. The roles of all of the actors in the Acme case were different than they were in the Cook and MGE cases. DNR in the Acme case was reactive. DNR needed to ensure that the process as defined by law was followed. There was some improvisation when DNR staff reached out to the community, to the city government, and to conduct extra studies—but this action was limited to playing within the rules of command and control. In the Green Tier cases, DNR was able to take more of an improvisational role, participating more as a partner with the firm. This role, however, was limited in the degree to which DNR was proactive. DNR attended meetings between the community and the firms, but did not play a large role at the meetings, allowing the firm to manage most of the interaction. The firm in the Acme case did not play an active role in working with the community and in cooperating with DNR to improve its environmental performance. When it had information, it was strategic about what to release, for fear that it would be used against it. This contrasts with the roles of the firms in the Green Tier cases, in which the firms took a proactive stance in releasing information to the public and engaging the community to meet their needs.

Finally, the community in the Acme case chose exit from the system, whereas the community members in the two Green Tier cases were given voice and chose loyalty—to use Hirschman’s model. In the Acme case, the community exited the regulatory process and used the courts and EPA, working hard along the way to prevent Acme from getting worse rather than working with Acme to figure out ways to make things better. On the other hand, in the two Green Tier cases, the community members had voice within the system and, therefore, did not have to exit. They showed loyalty by continuing to work with the firms and DNR to improve conditions, and did not try to block changes even when they disagreed. These shifts in norms are substantial, but not completely in the direction of those who view Green Tier as a new way of doing business, or in the direction of institutional proposals, such as rolling rule regimes. I will address these incomplete changes below.

One additional norm that is important to examine is the norm of deliberation. The cases showed not only cooperation, but reasoned based deliberation with reciprocity (Gutmann and Thompson 1996). The deliberation took place in the meeting of the interested persons groups, and between DNR and the firms through dialogue over the course of implementing the agreements. This adds additional empirical evidence to the theory of deliberative democracy, demonstrating a deliberative turn in an institutional environment. Further it seems that this turn provided positive feedback to the shift towards norms of cooperation.

One other question in feasibility involves the willingness of participants to play the new game. There is the possibility that no firms will want to participate in such a program and that the public will not motivate to put the time and energy into civic engagement. Both of the Green Tier cases offer counter examples to these possibilities. This shows that not only is it possible to change the norms towards cooperation, but the new form of regulation is desirable enough to have

life. As was shown in the Acme case, norms of cooperation and open communication were precisely what was desired by many of the actors. While there are still questions about the sustainability of participation, the multiple years of commitment demonstrated in the two cases are a considerable achievement.

7.2 Even if it is feasible, is it desirable?

Is a change towards cooperation and flexibility in environmental regulation desirable? As I stated in the introduction, it is hard to argue against innovation, but desirability is a serious question. Revisiting the critiques of command and control—e.g. it is ineffective due to strict rules and unable to address certain issues, such as nuisance problems—is a flexible regime any better? Is a flexible regime as, or more, democratically accountable as command and control? What are the chances of perverse effects of cooperative regulation have been raised by theorists, such as political inequalities based on capacity for participants to argue in a deliberative forum, and by critics of Green Tier, such as lack of meaningful participation? My response to this question is somewhat less enthusiastic than the previous one—change is somewhat desirable with a number of caveats. It is apparent that there are a number of benefits over strict command and control. As theory and reformists predict, the Cook and MGE cases illustrate that loosening up rules can help engender innovation and solving problems that are not easily within the reach of regulators, such as nuisance problems. In both Cook and MGE, the firms were able to try new things and were encouraged to find better ways of producing while minimizing impacts on the environment. This supports general calls for looking beyond command and control.

Moreover, it seems that this change is possible without severely eroding democratic accountability. In the Green Tier cases, there is some measure of accountability achieved through

bottom up participation. The difficulties that did occur seem to be due to, in part, some policy choices in Green Tier. Especially the lack of resources and empowerment given to the interested persons groups. To some degree, this limits the ability of this study to endorse reform in this direction beyond Green Tier. The viability of bottom up accountability was one of the most mixed findings from the cases, and will be addressed in more below when I discuss the other side of this cautious endorsement of a shift towards cooperative environmental regulation.

Briefly, however, it is necessary to ask the “Compared to what?” question. I started this thesis with a discussion of the myth of scientific hierarchical bureaucracy—it is still a myth. In one conversation I had with a DNR official, she noted that before she had discretion, but it would take place with no discussion outside of DNR. Recall the decision not to fine Acme Metals. Now, with Green Tier, at least the discretion is somewhat more public. People are meeting and talking about the decisions that are made in the cooperative agreements. Green Tier openly acknowledges discretion and tries to democratize it. Therefore, institutions such as Green Tier seem that they can be more accountable than institutions, such as command and control, that try, often in vein, to limit discretion. We must ask, is a system with flexibility and bottom up accountability more accountable than a hierarchical bureaucratic system? It seems so, but it is contingent on the specifics of the bottom up participation. Participation has to be empowered, both in having some control over the agreements, and in having access to the technical expertise that it needs to understand what the group is holding the state for accountable doing.

Finally, I believe the deliberation among groups—DNR, firms, and the interested persons group—demonstrates a number of desirable features of deliberative institutions. Through deliberation, the unique regulatory arrangements are able to garner some of their own democratic legitimacy. I contend, that this would not be as easy with bargaining or shallow participation,

such as in a public hearing. The back in forth to explain the reasons why things went right, or sometimes wrong, was essential for building legitimacy in the two Green Tier cases. It helped participants understand the decisions that were being made, and the organizations—DNR and the firms—that were making them. This bolstered cognitive legitimacy. It gave people confidence that the firms would ‘do the right thing,’ building moral legitimacy. And it gave real benefits to participants that saw improvements to their quality of life, most directly from mitigation of nuisance issues, building pragmatic legitimacy. This legitimacy needed to be built for each of the individual agreements, which reveals a cost in economies of scale of building legitimacy in flexible regulation. Nevertheless, this seemed to have distinct advantages over the way legitimacy is secured in the command and control system. Also, deliberation helped identify ways to improve the environment and save money. For example, through discussions with DNR, Cook was able to identify the costs of incinerating solvent. Through deliberation, Cook was able to work out a better system for gathering public input about nuisance issues. This problem solving was a distinct benefit of the deliberative nature of the relationships.

Despite this reserved endorsement, the bumps along the way identified in the cases raise some questions about the particulars of institutions for cooperative regulation and bottom up accountability. In next section I address these worries at a general level.

7.3 Nuances

There are a number of nuances to my cautious endorsement of flexible regulation. The first applies to experimentalist governance. In experimentalist governance, the institutions themselves are the experiments. The cooperative agreements in Green Tier can be thought of as experiments in governance. Each is unique, and provisional—testing the new forms and hopefully

learning as they progress. The rolling rule regimes described above are essentially the same model as Green Tier. However, the practice of experimental governance raises questions about the theory. Much difficulty in the two Green Tier cases was due to the instability of roles. The participants in the interested persons groups were not sure what role they were supposed to play. None of the actors knew which group should take the lead. This instability is not an indictment of experimentalism. It is, however, something that will have to be addressed in experimental regimes, such as rolling rule regimes. The instability of loose institutional forms may be beneficial, but they can also be crippling. Taking a reflective stance on what, exactly, each actor is doing as part of the agreement can be helpful to ensuring that possibilities are considered and opportunities are found to be capitalized on. However, when people do not act where they can because they do know that they are in a position to act, stagnation results. Again, this does not mean that there cannot be heterogeneous regulatory relationships, or that we need hierarchy—but it does show that new norms may need to be consolidated on a case by case basis and a balance must be struck between constant recreation and the ability of the institutions to function. At times, this may mean more of an active role of the state. In the MGE case, DNR could tell people explicitly that they have more power than they are actually using. It can be made clear what will occur if participants in the interested persons group do not think the agreement is a good thing. In this case, will the firm and DNR continue to implement it, or will a compromise need to be found before moving on. If the interested persons group does not have power, it must be clear the extent to which they are sanctioning the agreement by participating. There has to be sense of who should take the lead, decide what counts as superior environmental performance, and decide what to be pursued next. Otherwise, blurring the line between decision and action may cause no action at all.

Second, the lack of contextual information in the interested persons groups shows that devolved governance not only needs to connect the parts to the center, but the parts to one another. Participants who only see one facility—with one set of environmental problems and one level of performance that changes over time—have trouble understanding baseline performance and trade-offs. Are we getting enough information? If information could flow from one group to another horizontally among the cooperative agreements, these questions may be answered. This has some difficulties, because burdens the limited resources of the participants and it needs a critical mass of firms participating. Nevertheless, without it, there may be significant deficits of information, which, it seems, can make devolved groups act more parochially.

Third, for bottom up accountability to work expertise needs to be taken seriously. This is where I would like to revisit the critiques of political equality in deliberative democracy. Due to the lack of expertise overall, the political inequalities seem to be in line with each set of actors: with the interested persons group having the least equal chance of shaping policy. Inequalities within the interested persons groups were difficult to identify, because the group's overall capacity was so lacking. Programs have been successful with extensive investment in developing capacity of the participants (Fung 2004). Green Tier shows the limitations that arise when this investment is not made. If the participants in the Cook agreement had greater technical capacity, would they have focused so myopically on nuisance issues? Would the accusations of 'smoke and mirrors' have created less doubt in their minds (or perhaps even more doubt)? The level of expertise in the MGE case, and the Acme case, was not necessarily sufficient, but was greater than that of the participants in the Cook case. The participants in the MGE agreement, and the mobilized community members in the Acme story were actively engaged in the environmental impacts of their respective plants both in, and beyond their communities. This suggests a relationship

between parochialism and capacity. However, with expertise being such a pervasive problem, it is difficult to determine if parochialism is more related to the type of community and environmental values than capacity. With my data, I cannot explore this issue further, but the suggested relationship may be important for the understanding the functioning of devolved environmental governance generally.

Fourth, in devolved systems, there has to be a balance between which decision making power is pushed to the periphery and which is kept in the center. Models, such as accountable autonomy, try to strike a balance between the center and the periphery which enhances both spheres (Fung 2004). In the spectrum of devolution, Green Tier is relatively centralized. The interested persons groups have soft power to influence decisions, but no formal power to shape the actions of government officials or the firms. This, I contend, is partially responsible for the confusion over the role of the interested persons groups. Based on this occurrence in both cases, I argue that extending too little power to the periphery may prevent the establishment of norms of participation. If people cannot describe exactly what their role is confusion emerges. This is also a challenge to legitimacy, if you cannot understand the organization, it is hard to think of it as legitimate. This can exacerbate difficulties with experimentalist regimes. Also, without sufficient empowerment, accusations of 'smoke and mirrors' hold much more weight. This can be further exacerbated in deliberative settings, because the deliberation itself confers legitimacy with or without real empowerment (Young 2001). The fact that people are giving legitimacy to a process through deliberation without having real power over it, makes it susceptible to claims of fraud. Real power to the groups may have to be given in order to overcome these critiques.

Fifth, the ways in which participants in the interested persons group were selected and "represented" their communities seems to have made a difference in the quality of the deliberation

and the content of the discussions. The MGE and Cook interested persons groups used two distinct models of participation. In MGE, the model is clearly associative, with participation coming from representatives of secondary associations that meet certain normative criteria (Cohen and Rogers 1992). In Cook, the participation is more liberal, with individuals from the community participating alongside government officials and with other individuals who were selected to play specific roles, but not representing secondary associations. Both empirical and theoretical work has argued that associative arrangements promote deliberation (Mansbridge 1995, Oberg 2002, Hunold 2001). My findings support this assertion—the MGE interested persons group was able to deliberate about a wider variety of issues and sustain this deliberation. Further, the Cook interested persons group shifted somewhat substantially to an arena for airing complaints, which is hardly deliberative. In addition, the complaints were focused on solving concerns to the individual participants, not to solving problems for the broader community. In the MGE case, participants worried both about local impacts, and global impacts—taking a much more “representative” role. The associative nature of the MGE group may have other benefits as well, such as providing linkages to distinct groups that may have otherwise been left out. For example, the low income community around Madison was specifically represented, as was the environmental community, and the business community in the CEAG. In Cook, there is no such representation from the variety of groups that exist in Saukville except through government officials.

In summary, it seems that while this shift is desirable, there are a number of lessons that can be drawn to create institutions for regulation that are more effective and democratically accountable—especially the latter. At a theoretical level, these experiments show the plausibility of new institutional forms. They also raise a number of possibly paths of inquiry that can bolster

theoretical understanding of flexible governance institutions and bottom up accountability. In particular, the relationship between parochialism and expertise/representative structure of the interested persons group.

7.4 Ideas For Evolving Practice

Perhaps the strongest policy implication of my findings is the need for an affirmative state in implementing cooperative agreements. The shift from government to governance does not necessarily mean a retraction of the state. However, it seems that DNR has taken a back seat role in the implementation of the agreements, pushing much responsibility out to the firms and to civil society. Responsibility requires resources, which can justifiably be spent by the firms that receive benefit from cooperative agreements, but are lacking in the civil society sector. There are four policy implications of this research, all of which require DNR to take more of an active role either by directly intervening or by helping develop the capacity of other parties.

First, the difficulties with expertise and the democratic nature of the interested persons group need to be addressed to buttress accountability. Relying solely on DNR staff and the companies participating in the agreements leaves much doubt in the veracity and completeness of information available to the participants in the interested persons group. This requires more than having a facilitator to make sure that DNR and the firms do not use too many acronyms. Resources could be invested to give the participants access to independent expertise, either through consultants, academics, or NGOs. Some of these resources can come from the firms, but participants need to have control over them. This way, questions about the implications of the trade-offs contained in each cooperative agreement can be explored. Further, independent expertise could give those participants contextual knowledge to benchmark the cooperative agreement against other firms to see if it is indeed 'superior environmental performance.'

Therefore, questions about whether Cook could just close down its incinerator right away because, as some have claimed, other companies have done it, could be answered with the support of a third party. In addition, questions about the level of transparency that have to be answered on an ad hoc basis can be explored, engendering more confidence from the participants that they are 'getting the whole story.'

DNR could explore taking a more active role in shaping participation. In the two Green Tier cases, DNR relied on the companies to recruit participants. In these two cases, there was a response, but these seem to be the exception in the program generally. Some participants found it problematic that they were selected by the company. The limited role that DNR took in shaping the interested persons group (otherwise it would be "command and control") raised serious questions in the minds of some of the independence of these groups. DNR oversight of the participation may be enhanced by further DNR action. This does not mean doing things the old way—public hearings that are legalistic—but DNR action should not be precluded categorically from thinking creatively about forms of participation. Experimentation should encourage a variety of institutional forms, including those in which DNR takes a very proactive role. Otherwise, possibilities will be missed, and reform may be stifled. Also, recruitment of participants can go beyond word of mouth and public notices in newspapers. More resources can be invested in actually getting people to the meetings of the interested persons groups, and ensuring widespread knowledge of the interested persons group. This can both create more participation and increase the publicity of the cooperative agreements.

With investment comes questions about the returns. My second suggestion is that costs and benefits of the cooperative agreements need to be made as clear as possible. Evaluating the benefits of cooperative agreements seems to be extremely problematic. Consider this question: By

participating in a cooperative agreement, how much does it reduce the chances that a regulatory relationship will turn into a story like Acme Metals, which is costly for all sides? This is extremely difficult, if not impossible, to answer. Even more concrete questions are difficult to answer, such as: Is burning more coal than paper derived fuel better for the environment? Engineers may agree, but without the buy in of those in the community, the opinions of the engineers may only create tensions between democratic and technocratic decision making. Capacity must be developed within the participants to understand these trade-offs and to evaluate the agreement. Not 'educating' participants that certain decision is already deemed correct, but building the capacity for participants to be able to use their own, or draw on others, expertise to make critical evaluations. This does not mean that everything will have to be quantified, or even clear, but that the participants must be comfortable with the level of benefits from the agreements, and must be able to communicate this to others. Lessons can be drawn from the Cook case, in which Cook undertook community surveys to gauge changes in the community's perception Cook. Methods of evaluation, such as community surveys, can provide detailed information about the effects of the agreement and can easily be expressed to those beyond the immediate participants in the agreements.

Further, the costs of administering the agreements must be clear—both for the firm and DNR. For DNR to stand up to the critique that this program is a distraction, it needs to at least know how much it costs to negotiate an agreement. DNR also needs to know how much it spends on other comparable regulatory transactions to put this estimate in perspective. Further, to recruit firms to join, the costs and benefits must be clearer. These two cases were pilots, just beginning to experiment with these types of institutions, therefore I do not expect that the costs and benefits be worked out in detail. However, the language in much of the evaluation of the agreements does

not take costs of administration seriously, as was shown in the Cook case. I am not arguing that options should be tabled because they cannot be evaluated, but that evaluation needs to be taken seriously. The language discussing the agreements must recognize the trade-offs that take place. The language of 'win-win' tends to bury negatives—while there may be some actions that all agree are beneficial, an attempt must be made to seriously consider costs.

My third suggestion for improving practice is to allow, and even support, conflict among the participants. Management of the interested persons groups should not seek to minimize conflict to keep progress moving along. The practice in the MGE group of addressing individual concerns one on one, instead of with the group is an example of this. The goal of keeping things moving forward is important, but there are costs as well. The relief that staff at Cook felt after the “disruptive” participant left is indicative of the discomfort that intense questioning can cause. It seems as though the people who manage the involvement of the interested persons group are afraid that stagnation in action will result in a decline in participation. People will stop showing up if the meetings don't seem to go anywhere. This is a valid concern, but there are costs to trying to put out fires before they start. Minimizing discussion is counter to the project of deliberation, and raised doubt and uncertainty in the mind of some in the interested persons groups. Conflict needs to be clarified, people should know if they do truly disagree after discussing an issue.

A simple decision making process, allowing the interested persons to make a statement and vote on it, or reach consensus on it, even if this has no power over the action of DNR or the firms, can help the group make a statement and move on. Exploring options to deal with conflict, recognizing conflict, or even encouraging it to induce reasoned discussion, could all be explored. Providing yet another example, in the Cook case, perceptions of the former employee's impact on

the other participants, and the importance of his dissent varied widely. By bringing these conflicts out into the open, these views may be reconciled.

Fourth, from a democratic point of view, the Acme Metals case had one main advantage over the Cook and MGE cases—openness of the process. With the intense conflict surrounding Acme Metals, many in the community were aware of what was going on. They mobilized, formed a secondary associations, acquired their own human capital and financial capital, and made enough noise that all are aware of Acme Metals and the community's actions. Compared to the interesting persons groups, which were “not closed, but not open either,” the public nature of the Acme controversy is a major advantage. People from the community know what Acme is doing, they know what the community group is doing to fight it, and they have an opinion one way or the other. I am not arguing that all of the problems identified in the Acme case are worth the openness, but when changing institutions we should be aware of the features that we may be losing. Most non-controversial regulatory relationships clearly do not have the public nature of Acme, however, building more openness into the cooperative agreements improve their democratic character.

7.5 Concluding Remarks

Designing institutions to address the challenges of environmental regulations is not easy. It can be reasonably argued that these institutions should draw on technical expertise, but still be democratic. That they should be formalized and rule driven so they can be evaluated and implemented without large transactions costs, but they should still address issues that are not covered by the rules and should not get hung up on the rules when it ‘doesn’t make sense.’ Green Tier struggles with these issues head on. My hope is that this thesis has helped document these struggles and provides another tool of reflection to practitioners.

These cases are just the tip of the possibilities of experimentation. By stepping away from the comfort of prescriptive rules, and towards the uncertainty of policy making, there is potential to strengthen democracy while creating more effective policies. Only as Green Tier continues, develops, and changes over time will we know if this possibility indeed comes to fruition through this institutional form. Nevertheless, based on my explorations into this program, I am hopeful.

Appendix: Partial List of Interviews

Organization	Position	Date	Interviewed By
DNR	Bureau Director, Waste Management	1/25/05	Matthew Amengual
MGE Interested	CEAG and Clean Wisconsin Staff	1/27/05	Matthew Amengual
Cook Interested Persons	Cook Interested Person, Saukville Utility Superintendent	1/19/05	Matthew Amengual
Cook Interested Persons	Professor	11/3/04	Matthew Amengual
Cook Interested Persons	Ozaukee County Emergency Government	11/3/04	Matthew Amengual
Cook Composites	Director of Quality, Safety and Environment	6/5/03	David Laws and Ian Finlayson
Thousand Friends	Executive Director	1/26/05	Matthew Amengual
Senate	Aid to State Senator	1/24/05	Matthew Amengual
MGE Interested	MGE CEAG, Treasurer of the Greater Williamson Area Business Assn, Owner of Local Coffee Shop, Ground Zero Coffee	1/18/05	Matthew Amengual
CCP	Director Coatings Manufacturing	1/21/05	Matthew Amengual
DNR	Environmental Assistance Coordinator	1/20/05	Matthew Amengual
DNR	Bureau Director, Cooperative Environmental Assistance	1/26/05 and 1/29/03	David Laws and Ian Finlayson at first date, Matthew Amengual at second date
DNR	Former Secretary	3/7/03	David Laws and Ian Finlayson
Senate	State Senator	1/24/05	Matthew Amengual
Assembly	State Assembly Representative	1/18/05	Matthew Amengual

Organization	Position	Date	Interviewed By
MGE Interested Persons Group /Madison City Council	MGE CEAG, Madison City Councilor	1/20/05	Matthew Amengual
MGE Interested Persons Group	CEAG	1/27/05	Matthew Amengual
DNR	Waste Management Specialist	1/27/05	Matthew Amengual
CCP	Plant Manager	1/21/05	Matthew Amengual
MGE	Senior Director Safety and Environmental Affairs	1/18/05	Matthew Amengual
Midwest Environmental Advocates	Founder and Executive Director	1/26/05	Matthew Amengual
Wisconsin Manufacturers and Commerce	Director of Environmental Policy	2003	David Laws and Ian Finlayson
Consultant to Cook Composites		2003	David Laws and Ian Finlayson
DNR	Natural Resources Manager	1/30/03	David Laws and Ian Finlayson
Cook Interested Persons	Ozaukee County Emergency Government	11/3/04	Matthew Amengual
Sierra Club	Chapter Director and Lobbyist	1/28/2005 and 3/14/2003	David Laws and Ian Finlayson at first date, Matthew Amengual at second date
Kestrel Management Services	Principle	2003	David Laws and Ian Finlayson
Anonymous Environmental NGO		1/25/05	Matthew Amengual
Anonymous Community Organization		1/25/05	Matthew Amengual
Cook Interested Persons	Cook Interested Persons	1/19/05	Matthew Amengual
Cook Interested Persons	Cook Interested Persons	1/21/05	Matthew Amengual
DNR		1/20/05	Matthew Amengual
DNR	Environmental Engineer Supervisor	1/20/05	Matthew Amengual
Acme	Public Relations	1/26/05	Matthew Amengual
Acme	Engineer	1/26/05	Matthew Amengual

Works Cited

- Abel, Troy; Stephan Mark. "Limits of Civic Environmentalism" *American Behavioral Scientist*, Vol. 44 No. 4, 2000.
- Andrews et. al., *Environmental Management Systems: Do They Improve Performance*, Prepared by the University of North Carolina Department of Public Policy for the Environmental Protection Agency and the Multi-State Working Group, 2003.
- Ansell, Chris. "The Network Polity: Regional Development in Western Europe," *Governance* Vol. 13, No. 4. July 2000.
- Behn, Robert, *Rethinking Democratic Accountability*, The Brookings Institution, 2001.
- Blackman, Allen; Mazurek, Janice. "The Cost of Developing Site-Specific Environmental Regulations: Evidence from EPA's Project XL," *Environmental Management* Vol. 27 No. 1, 2001.
- Cohen, Joshua, "Deliberation and Democratic Legitimacy," in *Deliberative Democracy* edited by Bohman and Rehg, MIT Press, 1997.
- Cohen, Joshua and Rogers, Joel. "Secondary Associations in Democratic Governance," *Politics and Society*, No.20 (1992), pp.393-472.
- Dryzek, John. *Deliberative Democracy and Beyond*, Oxford University Press, 2000.
- Durant, Robert. *Reconceptualizing Purpose*, in *Environmental Governance Reconsidered*, edited by Robert Durant, Daniel Fiorino, Rosemary O'Leary, MIT Press 2004.
- Eisner, Marc Allen. "Corporate Environmentalism, Regulatory Reform, and Industry Self-Regulation: Toward Genuine Regulatory Reinvention in the United States," *Governance*, Vol. 17 No. 12, April 2004.
- Hajer, Maarten; Wagenaar, Hendrik. *Deliberative Policy Analysis*, Cambridge University Press 2003.
- Fiorino, Daniel. "Citizen Participation and Environmental Risk: A Survey of Institutional Mechanisms," *Science, Technology & Human Values*, Vol. 15, No. 2, 1990.
- Fiorino, Daniel. *Flexibility*, in Durant, Robert. *Reconceptualizing Purpose*, in *Environmental Governance Reconsidered*, edited by Robert Durant, Daniel Fiorino, Rosemary O'Leary, MIT Press 2004.

- Freeman, A. Myrick. "Economics, Incentives, and Environmental Regulation," in *Environmental Policy in the 1990s: Third Edition*, eds. Vig, Norman; Kraft, Michael, 1997 Congressional Quarterly Press, Washington D.C..
- Freeman, Jody. "Collaborative Governance in the Administrative State," *UCLA Law Review*, 45, 1 October 1997.
- Fung, Archon. *Empowered Participation*, Princeton New Jersey, Princeton University Press, 2004.
- Fung, Archon; Wright, Erik Olin. "Thinking about Empowered Participatory Governance," in *Deepening Democracy*, edited by Fung and Wright, Verso, 2003.
- Gutmann, Amy; Thompson, Dennis, *Democracy and Disagreement*, Harvard University Press 1996.
- Hunold, Christian. *Corporatism, "Pluralism, and Democracy: Toward a Deliberative Theory of Bureaucratic Accountability," Governance* Vol. 14 No. 2, 2001.
- John, DeWitt. *Civic Environmentalism*, CQ Press, 1994.
- John, DeWitt. *Civic Environmentalism*, in *Environmental Governance Reconsidered*, edited by Robert Durant, Daniel Fiorino, Rosemary O'Leary, MIT Press 2004.
- Kelly, Terrance. *Unlocking the Iron Cage: Public Administration in the Deliberative Democratic Theory of Jürgen Habermas*. *Administration & Society*, Vol. 36 No. 1, March 2004.
- Knight, Jack; Johnson, James. "What Sort of Political Equality Does Deliberative Democracy Require?," in *Deliberative Democracy* edited by Bohman and Rehg, MIT Press, 1997.
- Locke, Richard. "Building Trust," presented at the Annual Meetings of the American Political Science Association, 2001.
- Lowi, Theodore. *Frontyard Propaganda*, in *Beyond Backyard Environmentalism* edited by Joshua Cohen and Joel Rogers, Beacon Press, 2000.
- Mansbridge, Jane. *Beyond Adversary Democracy*, Basic Books, 1980.
- Mansbridge, Jane. *A Deliberative Perspective on Neocorporatism*, in *Associations and Democracy* edited by Erik Olin Wright, Verso 1995.
- Mansbridge Jane, *Everyday Talk in the Deliberative System*, in *Deliberative Politics*, edited by Stephen Macedo, Oxford, 1999.
- Mansbridge Jane, *Practice-Thought-Practice*, in *Deepening Democracy*, edited by Fung and Wright, Verso, 2003.

- North, Douglas. *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, 1990.
- Oberg Perola, "Does Administrative Corporatism Promote Trust and Deliberation?," *Governance*, Vol. 15, No. 4, October 2002 455-475.
- O'Rourke, Dara. *Community-Driven Regulation*, Cambridge Massachusetts, MIT Press, 2004.
- O'Rourke, Dara; Macey, Gregg. "Community Environmental Policing" Assessing New Strategies of Public Participation in Environmental Regulation," *Journal of Policy Analysis and Management*, 22, (3), 2003.
- Papadopoulos, Yannis. "Cooperative forms of governance: Problems of democratic accountability in complex environments," *European Journal of Political Research*, No. 42 pp 473–501, 2003.
- Pateman, Carole. *Participation and Democratic Theory*. Cambridge University Press, New York, 1970.
- Powell, Water. *Expanding the Scope of Institutional Analysis*. In *The New Institutionalism in Organizational Analysis*, edited by Powell and DiMaggio, The University of Chicago Press, Chicago, 1991.
- Rabe, Barry. "Powers to the States: The Promise and Pitfalls of Decentralization," in *Environmental Policy in the 1990s: Third Edition*, ed. Vig, Norman; Kraft, Michael, 1997 Congressional Quarterly Press, Washington D.C..
- Romzek, Barbara; Dubnick, Melvin; "Accountability in the Public Sector: Lessons from the Challenger Tragedy," *Public Administration Review*, vol. 47, no. 3, 1987.
- Sabel, Charles. "Studied Trust: Building New Forms of Cooperation in a Volatile Economy," *Human Relations*, Vol. 46 No. 9, 1993.
- Sabel, Charles; Fung, Archon; Karkkainen, Bradley. *Beyond Backyard Environmentalism*, in *New Democracy Forum*, July 2000, Josh Cohen and Joel Rogers, eds. Beacon Press, 2000.
- Sabel, Charles. "Beyond Principal-Agent Governance: Experimentalist Organizations, Learning and Accountability", draft discussion paper prepared for WRR meeting, Amsterdam, 2004.
- Sanders, Lynn. "Against Deliberation," *Political Theory*, Vol. 25 No. 3, Jun., 1997 347-376, Sage Publications.
- Scholzman, Kay Lehman; Verba, Sidney, and Brady, Henry. "Civic Participation and the Equality Problem." In *Civic Engagement in American Democracy*, Chapter 12. Theda Skocpol, Morris P. Fiorina, editors. Washington, D.C., Brookings Institution Press ; New York : Russell Sage Foundation, c1999.

Shutkin, William. *The Land That Could Be*, MIT Press, 2000.

Sparrow, Malcolm. *The Regulatory Craft*, Brookings Institution Press, 2000.

Suchman, Mark. "Managing Legitimacy: Strategic and Institutional Approaches," *The Academy of Management Review*, Vol. 20, No. 3. 1995.

Thomas, Craig. *Habitat Conservation Planning: Certainly Empowered, Somewhat Deliberative, Questionably Democratic*, *Politics & Society*, Vol. 29 No. 1, March 2001.

Weber, Max. *From Max Weber: Essays in sociology*, Translated by H.H. Gerth and C. Wright Mills, New York, Oxford University Press, 1958.

Wilson, James Q. *Varieties of police behavior: the management of law and order in eight communities*, Cambridge, Massachusetts, Harvard University Press, 1978.

Young, Iris Marion. *Activist Challenges to Deliberative Democracy*, *Political Theory*, Vol. 29 No. 5, 670-690, 2001.

Young Iris, *Inclusion and Democracy*, Oxford University Press, 2000.