The Brownfield Bargain: Negotiating Site Cleanup Policies in Wisconsin

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Abstract

In this paper, the first part of our three-part study on the development of brownfields policy in Wisconsin, we examine the regulatory history of the brownfields policy. We start with the 1978 Hazardous Substance Spill Law, the antecedent to the brownfields regulatory reform of the 1990s, and examine the interaction of policy entrepreneurs in both the public and the private sectors that has led to innovation. We follow this by exploring the response of the Wisconsin Department of Natural Resources to reform efforts, looking at both how it anticipated and led some of the efforts and how it addressed demands placed on it by the state legislature and executive. We then discuss the central role that the state's Brownfields Study Group has played in moving brownfields cleanup and redevelopment objectives into legislation and the field. We base our work on interviews with nearly 70 individuals from public, private for-profit, private nonprofit, and tribal organizations.

Key Words: brownfields, policy innovation, regulatory history

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1. Introduction

The push for brownfields redevelopment has remained politically potent for more than a decade, and its luster for politicians, regulators, and private sector developers as well as community development corporations is not likely to dim anytime soon. As a policy issue brownfields is unwieldy, a grab bag of federal, state, and local incentives promoted by various agencies, each with a different mission. But for many brownfields practitioners and policy entrepreneurs, this jumble of policies makes brownfields attractive because it provides opportunities for creative negotiations, deal-making, and the possibility of reforming regulatory practices. Brownfields cleanup and redevelopment are part of a new approach to environmental governance in this country, one in which successful outcomes, such as cleaning up abandoned or vacant properties, depends upon aligning market forces with environmental goals and in creating institutions to design better-functioning markets for contaminated property.

It is also part of a substantial decentralization of environmental regulation from the federal to the state and local level. For much of the past three decades, the U.S. Environmental Protection Agency (EPA), through federal legislation such as Superfund, has been the preeminent environmental regulator at sites contaminated with hazardous substances. But in the brownfields domain, the primary authority and principal responsibility for addressing contaminated sites are now lodged at the state and local level. Since 1990 alone, more than 40 states have developed voluntary cleanup programs

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to clean up and redevelop contaminated properties; only 3 states remain without a formal voluntary program (ELI 2002). To address the many thousands of contaminated sites identified in state and federal inventories, state programs have been built on two premises: first, that the energies and resources of the private sector must be used more effectively to clean up and redevelop brownfields; and second, that to engage the private sector, state regulatory agencies must see potential developers and owners of contaminated property as clients and partners rather than as adversaries.

The development of brownfields policies in many states has made extraordinary, and at times painful, demands on state regulatory agencies to enlarge their mission from a traditional focus on environmental protection and risk reduction at brownfield sites to one that seeks to incorporate into rules and procedures other important social goals, such as economic development, efficient infrastructure use, and job creation. The burgeoning brownfields literature has little to say about how such transformations occur, or how regulatory agencies respond strategically to the political preferences of state legislatures; we know relatively little in detail about how new brownfields policies emerge at the state level, for example, and what groups or political interests push them forward and how these negotiations are structured. This paper attempts to trace the development of brownfields policy in Wisconsin, considered one of the more innovative states with respect to contaminated site cleanups (U.S. General Accounting Office 2000). We examine how the interactions of policy entrepreneurs—both in government and in the private sector-reshaped the intellectual premises and regulatory policies of contaminated land cleanups in Wisconsin during the past two decades. Our aim is not to evaluate Wisconsin's brownfields policies but rather to examine the politics and process of policy change itself.

Our account of regulatory innovation in Wisconsin begins with the passage of the Hazardous Substance Spill Law in 1978 (known as the Spill Law or Spill statute) and concludes with reforms to the brownfields program that were adopted as part of the state's 2001–2003 biennial budget. Within this period, we focus on three stages of policy development: legislative change, bureaucratic response, and implementation in the field

First we examine the provisions of the Spill Law, the primary statute used by the Wisconsin Department of Natural Resources (DNR) for environmental cleanup. It serves as our starting point for the simple reason that subsequent efforts to change cleanup policies were motivated by the need to avoid the constraints, both real and perceived, that the Spill statute placed on property transactions. We discuss how many of the premises of

the legislation, along with its interpretation in the courts, were challenged as people became increasingly aware of the political and technical difficulties of implementing the legislation and sought a guiding theory or, as one participant in this effort put it, a new "vocabulary" to enable them to reform the law. This effort culminated in the first major legislative revision to the Spill Law; in 1994 the Wisconsin state legislature passed the Land Recycling Act.

Enacting legislation is, however, only the first step in policy innovation. In public administration textbooks, it is the function of administrative agencies like DNR to turn statutory language into the flesh and blood of a program. In Wisconsin this was, and in many ways remains, problematic; DNR was considered by many to have a robust regulatory program, a strong tradition of enforcement, and a decentralized regional structure that allowed field staff considerable discretion to approve or disapprove individual cleanups. The Land Recycling Law and subsequent reforms, by contrast, anticipated less DNR oversight at contaminated sites, assumed more consistent cleanup decisions across DNR regions, and provided for greater regulatory flexibility.

In the subsequent section of the paper, we consider how DNR responded to the clear shift in focus the state legislature had given it to promote economic development at contaminated sites. DNR did not simply sit on the sidelines as a hapless bystander while state politicians and local officials maneuvered and designed new brownfields policies. In keeping with much recent writing on bureaucracies, we illuminate how DNR managers anticipated, influenced, and responded to legislative demands (Rourke 1984; Kingdom 1995; Meier 1997; Cannon 1999; Krause 1999; Spence 1999; State of Wisconsin 1999; Hula 2001).

The real test of policies is how they are carried out in the field—how legislative intent influences the behavior and choices of various groups and/or sectors targeted by the legislation. Even with a statutory basis for brownfields reform and regular interactions between DNR and the state legislature and the governor's office, brownfields policy may have floundered without the support of key players in the development community, who constituted the third pillar of policy development. Those in DNR and in state government who wanted to reform contaminated site policy needed to convince the wide array of groups involved in redevelopment—lenders, developers, assessors, municipal lawyers, and others—that the proposed reforms would indeed make it less risky and more profitable to invest in contaminated properties. This was no simple feat. After more than a decade of largely avoiding what one commentator called the Bermuda

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triangle of contaminated property, those players in brownfields redevelopment were cautious and needed incentives to participate. Perhaps more importantly, they needed to gain a degree of familiarity and trust in the program.

We then discuss how this relationship was embodied not in an abstract institution but in the creation of the Brownfields Study Group. Set up in 1998 by direction of then-Governor Tommy Thompson and the state legislature, the Brownfields Study Group consists of diverse policy entrepreneurs from regulatory agencies, insurance firms, engineering companies, lending institutions, public utilities, municipal governments, and law firms who have been able to articulate their interests and through negotiations put forward a raft of new regulatory initiatives. Because many participants in the group are experienced in various aspects of brownfields—site assessment, land acquisition, financing, insurance, redevelopment, and public health—the group has been able to examine how salient these initiatives have proven in the field. Consequently, the group has created more knowledgeable means to address the linked concerns of brownfields cleanup and redevelopment.

Our discussion of regulatory innovation in Wisconsin owes a considerable debt to scholarly work on policy networks. Heclo (1974), for example, argues that policy change can be explained only in part by large-scale economic and political changes. More central to innovation, in his view, are issue networks, consisting of specialists or "policy middlemen" who are capable of influencing policy change because of their "sensitivity to the changes going on around them and access to powerful institutions." In Sabatier's (1988) "advocacy coalition framework," the most useful aggregate unit of analysis for understanding policy change is what he terms the policy subsystem, which consists of various advocacy coalitions. These coalitions are composed of people from a variety of public and private organizations who share a set of normative and causal beliefs. For Sabatier, policy changes occur over time as a result of formal policy analysis and trialand-error learning. Mintrom (2000) emphasizes how members of a policy network can represent a repository of suggestions about policy innovations, tend to be well versed in the political strategies of policy promotion, and can serve as a conduit to interested parties. While not wanting to discount the importance of political and organizational structures in influencing the shifts in Wisconsin brownfields policy, we focus our analysis on the actions of policy networks and, particularly, on policy entrepreneurs who helped drive brownfields policy development in the state.

Any attempt to write a regulatory history of a phenomenon as complicated and multifaceted as brownfields risks grabbing only a part of the story. As we shall see in the following sections, the impulse to change cleanup policy emerged from many quarters at different times and for different reasons. In this regard, we have tried to resist the temptation of attributing too much foresight to the legislative process to explain the dynamics of brownfields policy. Brownfields policy was not the unfolding of some wellconceived plan. In practice, innovative ideas frequently emerged but failed to influence legislation or regulatory reform for a number of reasons, including budgetary concerns, a lack of political leadership, mistrust on the part of various stakeholders, and competing agendas. And yet, while the policy process certainly was not linear, neither was it, to borrow a colorful phrase from two policy scholars, "a chaos of purposes and accidents" (Clay and Schaffer 1984). Perhaps a more useful metaphor to help us understand the contingencies of policy development is "ripeness"-those moments of convergence when political opportunities are aligned, people find common ground by finding a new way to conceptualize the problem, and reform becomes possible. Over the course of a decade, fundamental legislative and administrative reforms did occur when ideas that had initially been rejected were revised, put back in the mix, and accepted. How and why this happened is the subject of this paper.

2. Framing the Problem: The Wisconsin Spill Statute and Its Discontents

In 1978, the Wisconsin legislature enacted the Hazardous Substance Spill Law. Like the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)—better known as Superfund¹—that the U.S. Congress passed two years later, the Wisconsin law was based on the premise that those who caused the pollution should pay to clean it up. Accordingly, the law cast a net over any person who discharged hazardous substances into the environment and gave the state's DNR broad authority to require those responsible for contamination to take actions to restore the environment. The statute had a very long reach. A *person* was defined as an "individual, owner,

¹ Public Law No.96-510, 94 Stat. 2767 (1980) (codified as amended at 42 U.S.C. secs. 9601–9675 (1988 & Supp. IV 1992)).

operator, corporation, partnership, association, municipality, interstate agency, state agency or federal agency."²

The state statute also applied a broad, functional definition to the term *hazardous substance*. Under the statute any substance could be deemed hazardous if it could cause harm to the environment. Unlike other federal and state laws, however, the statute did not require that a substance appear on any list of hazardous substances in federal or state statutes. This meant that even a seemingly innocuous substance, such as milk spilled from a truck, could be deemed hazardous if it posed a hazard to the environment. In addition, the law covered an important source of contamination that the federal Superfund law explicitly excluded, namely petroleum products. Under the Spill statute, the contents of leaking underground storage tanks—gasoline, diesel fuel oil, heating oil, and other petroleum products—were considered hazardous substances, potentially implicating thousands of petroleum marketers, gas stations, commercial facilities, and homeowners.

But it was the statute's liability provisions more than anything else that affected how the private sector and local governments perceived the risks of owning or cleaning up property that was potentially contaminated. There were few exemptions from liability, either for owners of contaminated property or for holders of a security interest (e.g., lenders) or for persons with a limited non-ownership interest in contaminated property. The statute imposes strict liability for cleanup on any person who "possesses or controls a hazardous substance"³ or who "causes the discharge of a hazardous substance."⁴ The term *discharge* is defined as follows: "Discharge means, but is not limited to spilling, leaking, pumping, pouring, emitting, emptying or dumping."⁵ How this rather vague statutory language was interpreted by the state's Supreme Court proved crucial to the development of its brownfields policy. Specifically, in a 1985 court case, *State v. Mauthe*,⁶ the Wisconsin Supreme Court interpreted the terms *possess and control* and *discharge* and affirmed the broad scope of the statute's liability provisions. The findings

² Wis. Stat. §292.01(12).

³ Wis. Stat. §292.11(2).

⁴ Wis. Stat. §292.11(3).

⁵ Wis. Stat. §292.01(3).

⁶ 123 Wis.2d 288, 366 N.W. 2d 871 (1985).

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of the Mauthe case reverberated throughout the law offices and lending institutions of Milwaukee and their counterparts in smaller Wisconsin cities.

DNR had brought a case against Norbert Mauthe, the owner of a chrome-plating facility in Appleton, Wisconsin, after it discovered extensive soil and groundwater contamination stemming from more than a decade of industrial activities on the site. DNR sought an injunction requiring Mauthe to contain and remove chromium-contaminated soil and groundwater and to reimburse DNR for expenses it had occurred at the site. Mauthe tried to persuade the court on two points: he argued that since his chrome-plating facility had operated from 1960 to 1976, two years before the Spill statute was enacted, he should not be held liable as the current owner for contamination that was migrating from his property and contaminating groundwater on an adjacent property. Mere ownership of property, he asserted, should not trigger liability under the Spill statute to his neighbors should not be construed as a discharge under the statute since the seepage occurred naturally, without any human activity. He contended that the term *discharge* required some type of human activity to discharge hazardous substances.

The court ruled against him, holding that the statute imposed liability on persons who cause the discharge of a hazardous substance as well as on those who control the discharge through holding an ownership interest in the property. In its decision, the court also ruled that by using such words as leaking and emitting, the legislature had intended to define *discharge* broadly, and that a discharge under the statute, and the liability that attached to it, did not need to be linked to present human activity.

As one long-time observer of environmental policy in Wisconsin put in, "after the Mauthe decision property developers and municipalities went into a cave." From the private side, many lenders would not make loans on commercial ventures if there was the possibility of contamination; many assumed that their collateral, the property, might have little value or even negative value if contamination were found and steep cleanup costs were incurred. Moreover, lending institutions were concerned that if they acquired ownership of the property through a security interest, they might themselves be held liable for the costs of cleanup. As one private sector lawyer put it, the unintended consequence of the statute was to deter the private sector from providing much-needed investment capital to redevelop potentially contaminated properties, resulting in a pervasive anxiety or "chill" in the real estate market for industrial and commercial properties throughout the state, but most notably in the Milwaukee area. And when banks

did lend on such properties, private real estate transactions demanded more rigorous cleanup standards and a higher degree of protection from long-term liability than did DNR. Uncertain when a cleanup would be considered completed or "closed out" by DNR, private parties set up escrow accounts to pay for operations and maintenance activities at sites and negotiated detailed arrangements to allocate responsibility for additional cleanup if the remedy selected was not meeting cleanup standards. These transactions costs were formidable barriers to the acquisition and development of idle or underused industrial and commercial properties.

Private parties were not the only ones affected. Under the law, municipalities were potentially liable for cleanup costs if they foreclosed on tax-delinquent properties that were determined to be contaminated. This fear of exposure to long-term liability came at a particularly bad moment. For many municipalities in Wisconsin, the early to mid-1980s was a time of industrial contraction, when fiscal realities, in the words of one county official, "demanded foreclosure." Not wanting to be caught in the Spill statute's liability net, however, local officials were reluctant to take title to tax-delinquent properties, thus stymieing efforts to devise public sector initiatives to redevelop blighted areas where contamination was likely to be present.

Complicating the matter was the strategic positioning of several large corporate property owners. In the early 1990s, county treasurers from southeastern Wisconsin said that some corporate property owners were attempting to avoid paying property tax by suggesting their property was contaminated. The liability provisions of the Spill statute, the officials argued, were being deployed by these property owners to dissuade county treasurers from foreclosing on the property tax deed or taking the owners to bankruptcy court. Moreover, many owners of such properties "mothballed" potentially valuable properties, preferring to pay property taxes on land they suspected contaminated rather than clean up the property for beneficial reuse. This further confounded the efforts of cities to redevelop large tracts of underutilized commercial and industrial land.

2.1. Cleanup Standards

Since cleanup costs are tied to the amount of contaminated soil or groundwater that must be removed or treated, cleanup standards tend to drive remediation costs. For lenders and local governments, the reluctance to take title to potentially contaminated property clearly was driven by the fear of having to foot the bill for costly remediation.

Until the enactment of the Land Recycling Act in 1994 and subsequent amendments to the Spill Law, there was little flexibility or consistency in determining cleanup levels at contaminated sites. The statute did not specify numerical standards for cleanups; rather, DNR established general objectives for site-specific cleanups on the basis of standards found in other state and federal legislation. Nor were cleanup requirements linked to the expected future use of the site so that, for example, a future industrial park could be remediated to a less stringent standard than property destined for residential development. The statute simply required that liable parties "shall take the actions necessary to restore the environment to the extent practicable and minimize the harmful effects from the discharge to the air, lands or water of this state."⁷

DNR had little flexibility in part because it had not yet developed comprehensive administrative rules to create a standardized process for environmental cleanups that could help liable parties anticipate the expected costs of cleanup and know when a site would be closed out.⁸ Without a regulatory blueprint to implement the Spill statute, there were few provisions in the law to constrain DNR's discretion in the field or to require DNR staff to formally take into account other criteria in selecting remedial alternatives, such as cost and anticipated land use. In the absence of a strong regulatory framework to make the program more transparent and predictable, the private sector and local governments complained that DNR cleanup decisions were often ad hoc, site specific, unduly stringent, and thus unnecessarily costly. As one long-time observer of the program noted, before the Land Recycling Act was passed in 1994, the party responsible for remediating a site "had to cleanup until they had to stop," and the cleanup objective at most sites under the Spill statute was "cleanup to background."

This perception of cleanup without end was tied not only to provisions of the Spill Law, however, but also to the state's groundwater cleanup requirements.⁹ No history of regulatory innovation in brownfields in Wisconsin can ignore the influence of the state's groundwater law on contaminated property transactions because the cleanup of

⁷ Wis. Stat. §292.11(3).

⁸ In the early to mid-1990s, DNR devised a set of administrative rules, the NR 700 series, to guide environmental cleanups conducted under the Spill law as well as other laws administered by the agency. The rules went into effect in 1994 and 1995 and address all stages in the cleanup process, including notification, site investigation, soil cleanup standards, the selection of remedies, and case closure.

⁹ Wis. Stat. Ch. 160.

contaminated property was in most cases driven by the state's groundwater standards. Groundwater protection in Wisconsin has been called the "third rail of environmental politics," and the importance attached to groundwater as a public good has shaped the trajectory of brownfields policy in the state. As Harrington and Marchik (1998, 184) point out, "virtually all subsurface contamination in Wisconsin is governed in one way or another by the Wisconsin program designed to protect the quality of groundwater."

Unlike many other states, and in contrast to the approach espoused by EPA, Wisconsin does not classify its aquifers according to their potential use or value, nor does it protect aquifers according to a particular classification level. The state's regulatory framework does not "write off" certain aquifers as industrial or consider them expendable, for instance, or assume that some will never again be suitable as a source of potable water. A strong conservation ethos for groundwater protection has had wide support in a state where nearly 70% of the population relies on groundwater as its sole source of drinking water. But the public good aspect of groundwater, and what many considered a civic obligation to protect groundwater for future generations, became a straitjacket for parties cleaning up properties with contaminated groundwater. As we discuss in more detail below, even after lengthy and expensive pump-and-treat efforts, many owners of contaminated properties could not meet the state's groundwater standards, and as a result many sites were not closed out by DNR. The significance of "closure" to facilitate property transactions should not be underestimated. Closure means that DNR has determined that no further action is needed to remediate or monitor soil and groundwater at a site and that for all intents and purposes DNR's involvement at the site has ended. But at properties where active remediation had reached the limits of its effectiveness and could not meet the enforcement standard, DNR would not consider the site closed out. As a consequence, the site owner would be required to continue to operate an engineered remedial system to reduce the mass and concentration of contaminants, even though in many cases the costs of doing so might not be justified by the small reduction in contamination. The site owner then would incur costs for operating and maintaining the remedy, as well as monitoring its effectiveness and reporting to DNR. and these costs could continue year after year, with little environmental improvement.

That situation was due in part to the limitations of groundwater cleanup technology but also to the provisions of the groundwater law. The Wisconsin groundwater legislation enacted in 1984 required DNR to establish enforcement standards and preventive action limits (PAL). The enforcement standard is a numerical

value, equivalent to federal Safe Drinking Water Act standards. PALs were established to serve as an early warning mechanism and "to establish the level of groundwater contamination at which regulatory agencies are required to commence efforts to control the contamination."¹⁰ They are thus more stringent than the enforcement standard, and for most cleanups, according to the administrative rules adopted to implement the groundwater law; it is the PAL rather than the enforcement standard that serves as the remedial goal. PAL values vary depending on the characteristics of the contaminant. For so-called public welfare substances (*e.g.*, chloride, iron, zinc) the PAL value is 50% of the enforcement standard; for public health substances (*e.g.*, chromium, lindane, phenol) it is 20% of the enforcement standard. In other words, the PAL values can be anywhere from 2 to 10 times as stringent as enforcement standards.

The essential point for our purposes is that under DNR regulations, the PAL values, as the state's groundwater cleanup goals at contaminated sites, are meant to apply uniformly throughout the state, regardless of soil characteristics or whether the groundwater under consideration serves a community water system or not. If it is shown that a PAL is exceeded, the cleanup objective is to "regain and maintain compliance with the PAL. If the department determines that compliance with the PAL is either not technically or economically feasible, the owner or operator shall achieve compliance with the lowest possible concentration technically and economically feasible."¹¹ Recognizing the difficulty in achieving PALs, DNR allows exemptions for contamination above the PAL values but below the enforcement standard. The intent of the law, then, was to maintain groundwater quality above drinking water standards, and to do so for all areas of the state, including areas of extensive industrial activity.

With hindsight, of course, we can readily point to the unintended consequences of both the Spill Law and Wisconsin's groundwater statute on property transactions. But such an *ex post* evaluation can be problematic: it can obscure the extent of public support for what was then DNR's approach to site cleanups and thus make it harder for us to see how, in a very different regulatory era, policy entrepreneurs in government and in the

¹⁰ Wis. Stat. Chap. 160.001(8).

¹¹ Wis. Reg. 140.22(2)(b).

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private sector were able to build conditions for reform. The current enthusiasm and support for brownfields redevelopment should not color our view of the past or lend a sense of historical inevitability to brownfields policy development in Wisconsin. Brownfields conferences—now promoted with such exhortatory names as *Let's Make a Deal* and *Deal Flow*—would have been unthinkable a decade earlier. In national surveys and comparative risk projects conducted at that time, the public consistently ranked toxic waste dumps as one of the most severe environmental risks facing communities (U.S. Environmental Protection Agency 1987). Public concern was not unfounded. In 1991, an influential report by the National Research Council noted that studies had detected excesses of cancer in residents exposed to compounds found at hazardous waste sites, and it pointed out the lack of any comprehensive inventory of waste sites across the nation, insufficient data for determining safe exposure levels, and inadequate systems for identifying sites that required immediate action to protect public health (National Research Council 1991).

The 1978 Spill Law in many ways was a creature of its times. It was shaped by a limited understanding of the scale and nature of the problem, by political ideologies about the relationship between regulatory agencies and the private sector, and by a strong public consensus that toxic waste sites were among the most serious environmental threats. The Spill statute marked the culmination of a command-and-control approach to environmental regulation. It was a time when such regulatory conduct—prescriptive, adversarial, combative—was seen as both necessary and politically acceptable, and when the problem of cleaning up contaminated properties was defined in ways that fit existing organizational structures and traditional program areas, rather than in dimensions inherent in the problems themselves. This would soon change.

2.2. The Beginnings of Reform: The Land Recycling Act

In 1992 state Senator Brian Burke convened the Special Committee on Tax Delinquent Contaminated Land, comprising two state senators, five state representatives, four local officials, four attorneys from private practice, representatives from the banking and insurance industry, and a member of an environmental organization. In less than two years, the committee developed legislative initiatives that were passed by the Wisconsin legislature and signed by then-Governor Tommy Thompson. These initial reforms were enacted into law in May 1994 as the Land Recycling Act. The act created far-reaching

exemptions from liability under the Spill Law as well as incentives for municipalities and private parties to acquire, clean up, and redevelop contaminated real estate.

For the participants of the Burke Committee, however, it was something of an open question whether any legislative proposal they developed would be enacted into law. A year earlier, draft legislation to reform contaminated site cleanups failed even to make it to the floor of the state legislature. This 1991 proposal authorized state general bonding authority of \$250 million to provide funding for remedial action at waste sites and landfills, and contained liability exemptions for municipalities that completed approved cleanups at landfills. Given the failure of this earlier initiative, how did the legislative proposals put forward a year later become law and set the stage for more profound reforms?

The literature on policy change suggests that new ideas and regulatory innovations are more likely to be adopted if certain conditions hold. These include the ability of institutions to respond and foster new opportunities for deliberation; the capacity of policy entrepreneurs to redefine a problem in ways that identify opportunities for joint gain; the extent to which a political leader is attuned to the problem and has the status or commitment to convince crucial stakeholders that the government can act expeditiously in the matter; and the adoption of similar policy reforms in neighboring states (Mazmanian 1983; Baumgartner and Jones 1993; Stone 1993; Rochefort 1994; Stoker 1995; Roe 1998). These conditions applied in Wisconsin in spring 1992, when the state's Joint Legislative Council established the Special Committee on Tax Delinquent Contaminated Land.

2.2.1. Institutional Practices

Institutions should not be confused with organizations. For our purposes, institutions can be defined as the ground rules that are used to determine who is eligible to make decisions in a particular policy arena, what actions are permitted, how deliberations are structured, and what information is made available. In this way, institutions influence how organizations operate. Through rules of participation, norms of behavior and other means, institutions help determine incentive structures, shape agendas, and ultimately produce public policies (North 1994). In this regard, the Wisconsin Joint Legislative Council, created more than 50 years ago, has been a key to the development of brownfields policy in the state. The council comprises 22 members from the state legislature, and its primary responsibility is to establish study committees

to examine policy issues identified by state senators and members of the state assembly. These study committees are made up not only of politicians but also include private citizens with the expertise needed to contribute to policy innovation. As one state official noted, the role given to public involvement in study committees stems from a Wisconsin political culture that has traditionally emphasized consensus and an open and deliberate investigation of complex problems. Although for some, Wisconsin's claim to be a model of "good government" has eroded in the past decade, the Special Committee on Tax Delinquent Contaminated Land proved an effective mechanism for policy entrepreneurs both in government and in the private sector. It allowed them to assemble evidence and first-hand testimony related to the shortcomings of the state's contaminated site cleanup policy and to make a convincing case to the legislature to amend the Spill statute.

The Burke committee was stocked with able advocates, but one perhaps less obvious source of policy innovation on the committee was the Joint Legislative Council staff. The council staff typically supports the work of study committees by providing analysis of policy issues, interpreting pending legislation, and developing legislative proposals for committees or individual legislators. This last function is the most relevant. The goal for both the committee members and the council staff was not to produce a white paper but to get a legislative proposal out of the committee by unanimous vote and into the legislature where it could be enacted into law.

In this process of policy formulation, council staff do more than simply provide support to the study committee's deliberations. In drafting a legislative proposal, staffers can in a subtle ways help resolve disagreements and clarify competing positions, and by so doing they become policy entrepreneurs in their own right. As one participant noted, "when a study committee first meets, different agendas are at play, and the initial discussions can be desultory, full of non sequiturs and contradictions. At the end of the first meeting, the committee members might turn to the staffer and say that now we want you to draft a proposal." Staff members use professional judgment and lawyerly guile and review failed draft bills on the subject to find useful policy nuggets and in this way transform the rambling discussions of the committee into a draft bill. Committee members then discuss the draft and consider how it amends an existing statute or, if it's a new policy area, how it relates to other laws. Negotiations are central to the policy process. Council staff and committee members discuss the extent to which the draft bill and subsequent drafts adequately capture the consensus of the committee's deliberations. As the draft proposals are refined, there is likely to be some informal off-the-table

discussion with regulatory agencies and other experienced parties to help tighten up certain provisions of the bill and help the committee anticipate how the bill might influence or constrain the behavior of regulated entities and affect practice.

The design of study committees in Wisconsin has been a lengthy experiment in policy development. State resources are used to encourage public deliberation, and in the case of the Burke committee, the institutional context helped create an atmosphere of constructive engagement and nonpartisan inquiry. The particulars are worth noting. In Wisconsin, unlike certain other states, legislative proposals are drafted by civil servants, not by lobbyists; study committee meetings are public, not held behind closed doors; and consensus rather than partisan voting is the decision norm. Through these working rules, the Burke committee was able to respond to the pressures for change that had been fomenting in different corners of the state.

By 1992, the moment for reform was clearly at hand. DNR had recently completed inventories of contaminated sites throughout the state, and the results showed that the problem was pervasive. Every county had its share, but it was the cities, particularly Milwaukee, that had the largest number. Of the approximately 10,000 sites identified, Milwaukee had roughly one quarter.¹² One observer said, "when you find contamination, you find a victim," and it was this sense of widespread victimization that impelled the Burke committee to find ways, as one member of the committee put it, to "forgive" certain parties the burden of liability for cleanup.

2.2.2. Policy Entrepreneurship

As the scale of the cleanup problem became clear, many groups realized that a new, more flexible approach to site cleanup was needed. The impetus to create the Burke Special Committee came primarily from county treasurers of the larger metropolitan areas in the state—Milwaukee, Green Bay, La Crosse, and Stevens Point—where much of the state's industry was located. These county treasurers had numerous tax-delinquent

¹² During the 1980s, DNR created inventories to list contaminated sites, including hazardous and solid waste landfills, spill sites, and sites contaminated by leaking underground storage tanks (LUSTs). By 1992, DNR had identified 3,200 medium- and high-priority LUST sites and 1,200 low-priority sites. In addition, the Registry of Waste Disposal Sites listed some 3,000 thousand known solid and hazardous waste sites in the state. Although DNR did not collect information on brownfields at the time, state officials estimated in interviews that, in addition to the LUST sites, there were some 5,000 to 7,000 brownfields in the state.

properties on their tax rolls, and many of the properties—particularly industrial sites were thought to be contaminated by years of careless or haphazard waste disposal practices. County treasurers may seem an unlikely source of policy innovation, but in Wisconsin counties are on the hook for all delinquent property taxes. This means that even if a county treasurer does not collect taxes on delinquent properties, the county must nevertheless pay all delinquent taxes owed to various taxing jurisdictions within its boundaries. Taxing jurisdictions such as schools, cities, and special districts are paid out in full, and the county payments to these entities are carried on the books as accounts receivable.

For most tax-delinquent properties this arrangement works well enough; the expectation is that the county, having secured a first-priority lien on the property, will recoup its costs through foreclosure, whereby it can rely on the inherent value of the land to collect principal and any interest and penalties. Contaminated properties, however, upset this arrangement. An entire spectrum of industrial and commercial facilities, gas stations, and other sites were seen to be "upside down" properties, where the costs of environmental cleanup could exceed the value of the land. Not surprisingly, county treasurers were reluctant to foreclose on the tax deed to these properties. With a secured lien to the property, a county would assume liability under the Spill statute to an economically upside down property and potentially face high cleanup costs if the property proved to be contaminated. The rub, of course, was that if counties chose not to foreclose on the tax deed, receivable costs would continue to accrue to county taxpayers and counties would not recover these funds. In 1992, for example, Milwaukee paid out \$9.2 million for this purpose.

Adding to the costs of tax delinquent properties were the vagaries inherent in the assessment of real estate. The county treasurers argued that contaminated land should be reassessed to a nominal value, reflecting the costs of cleanup. This was not customary practice. Although Wisconsin law required that assessors take into account environmental impairments related to the presence of a solid or hazardous waste facility, there was no statutory basis for them to consider the diminution of market value attributable to hazardous substances in soil or groundwater.¹³ For many county treasurers, tax-

¹³ Wis. Stat. Ch. 70.32.

delinquent contaminated land was the worst of all possible financial worlds. Property assessments of these parcels were unrealistically high, and yet they had few leverage points to compel municipalities, villages, and towns within their boundaries to deal with tax-delinquent properties, since the county, not these other jurisdictions, was incurring the costs. From the perspective of county treasurers, what was needed to address the problem was a liability exemption for local governments that acquired tax-delinquent properties through foreclosure.

County treasurers and other representatives of local government taking part in the deliberations of the Burke committee wanted to promote measures that could stop the siphoning of county financial resources on tax-delinquent properties. To accomplish this, they needed to find ways to shield local governments from environmental liabilities under the Spill statute. This narrow policy objective was the starting point for the committee's deliberations, but other interests were also at play. By state statute, county treasurers are mandated to foreclose on tax-delinquent property, and failure to carry out this responsibility was considered by some officials as misfeasance, the improper execution of a legal act. According to the invited testimony of one country treasurer, the state constitution required uniformity of taxation, and "a property tax system which permits certain owners to avoid payment of taxes is not uniform." In the face of this nondiscretionary duty, however, counties found various ways to avoid taking title to contaminated properties and the attendant cleanup responsibilities. Though perhaps it was not their primary motivation to take part in the Burke committee, country treasurers wanted to put an end to this legal legerdemain.

Although county treasurers may have been the first, as one observer noted, to "put a word in the ear" of state politicians to establish a special committee on tax-delinquent properties, they were not the only advocates for a new approach to contaminated lands. Written accounts of the committee's public meetings indicate that farmland preservationists and those interested in historic preservation wanted to steer development toward cities and pushed the issue of infill development. In addition, city managers and mayors wanted to find funding for downtown revitalization efforts to staunch the flow of tax revenues from cities to the suburbs. From their perspective, abandoned sites decreased surrounding property values and deterred much-needed commercial development. Tax-delinquent properties tended to stigmatize neighborhoods and caused businesses to relocate or expand existing operations outside city boundaries. As one participant of the committee noted, the shift to a suburban culture drained resources not

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just from Milwaukee but also from other towns and cities in the state, and mayors were "desperate to do something."

The goal of the public sector to secure liability exemptions was supported and, in important ways, extended by the representatives of lending institutions on the Burke committee. In the 1980s and early 1990s, the banking industry in Wisconsin had incurred significant losses through having lent on properties that were later discovered to be contaminated. These properties were typically put up as collateral by borrowers as a condition of the loan. When the borrower defaulted, the bank foreclosed on the bad debt, and if contamination on the property were discovered in a subsequent real estate transaction, the bank, as owner, would be liable for cleanup. Because of the strict liability provisions of Spill Law and what bankers considered an aggressive enforcement policy by DNR and Wisconsin's Department of Justice, lenders were refusing to foreclose on contaminated properties. As a result, more properties were being abandoned and falling off the tax rolls, and large swaths of potentially valuable real estate were sitting idle.

The interests of the lending community overlapped with those of the country treasurers, but there were important differences. From the lenders' perspective, if the Burke committee construed its purpose as simply to assist counties in acquiring taxdelinquent properties, then the unintended consequence would be to encourage tax delinquency. For the lenders on the committee, tax-delinquent properties were part of a larger and more intractable problem. The liability provisions of the Spill Law and CERCLA, they suggested, imposed significant but unintended social costs on the communities in which potentially contaminated properties-not simply tax-delinquent properties—were located. In their view, the broad net of liability had created a negative incentive structure that compelled lending institutions and developers to locate new projects not on older industrial and commercial sites but on properties that carried little risk. Liability concerns also made site owners reluctant to sell industrial and commercial properties, further depressing the real estate market in older cities. The lenders urged the committee to address a more profound question. What types of incentives were needed to attract private funds to clean up and redevelop the state's older industrial and commercial areas?

If this more ambitious policy were to have any political traction, two reforms were necessary. One would be to create a "safe harbor" for lenders. That is, a lender would not incur liability simply by maintaining a security interest in a borrower's facility as guarantee of an outstanding loan. This issue was of particular concern in the aftermath

of the 1990 decision by the Eleventh Circuit Court of Appeals in U.S. v. Fleet Factors Corp. The court found that "a secured creditor could incur liability if its involvement with the management of the facility is sufficiently broad to support the inference that it could affect hazardous waste disposal decisions if it so chose."¹⁴ This ruling caused a shock wave in the banking industry because it substantially weakened the securedcreditor exemption in CERCLA, which had served as a protection for lenders. Many in the banking industry felt that the Fleet Factors decision had created a new category of responsible party for the government or private parties to sue for cleanup costs. The words "inference of ability to affect waste disposal" raised the general anxiety level among bankers and left commercial lenders with little certainty about their environmental obligations and potential liability. According to a poll conducted by the American Bankers Association in 1990, nearly two-thirds of the responding banks reported rejecting loan applications based on the possibility of environmental liability (Goldberg 1995). This reluctance to provide much-needed financing was also evident in Wisconsin. As one lender told the Burke committee, "bankers fear that any connection with contaminated property will impose strict liability and enforcement on the lenders."

That fear did not stop banks from lending on sites with potential contamination, but it did make real estate transactions more complicated and costly. To avoid liability, banks required increasing levels of environmental due diligence to identify problems, demanded site cleanups before making loans, and added indemnities and guarantees as loan conditions. These transaction costs impeded market-driven redevelopment opportunities. The lenders argued that the state and local governments needed to provide incentives to encourage the participation of good-faith buyers and investors in the contaminated land market. Liability exemptions for innocent parties would be necessary to encourage potential buyers to assess sites and to quantify risk; but equally important, they argued, was the need for a cap on cleanup liability. If a bank or developer could take title to a property knowing how much its cleanup would cost, the private sector might be more willing to participate in cleanups. Potential buyers could be assured that they would not be responsible for unlimited funding of site remediation.

¹⁴ 901 F.2d 1550 (11th Cir. 1990).

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The explicit task for the policy entrepreneurs on the committee, according to one observer, was "how to put liability in a box and define it for different types of participants." In larger terms, they had to grapple with something of a conundrum. In the context of Wisconsin's command-and-control regulatory framework, based on a strict enforcement regime, how could the committee's proposals for reform best maintain the credibility of the cleanup program while offering the private sector incentives—liability relief, cleanup cost caps-to redevelop contaminated sites? Would such incentives for redevelopment weaken environmental protection or be interpreted as an example of regulatory capture by development interests? The committee did not have the luxury of appealing to the current brownfields mantra of win-win opportunity, the rationale for which is that economic development serves the interest of environmental protection. Committee members had to forge this link and make it believable for themselves. They had to decide whether imposing cleanup costs on liable parties at contaminated sites inadvertently imposed unacceptable broader social costs on a much larger population in terms of forgone economic opportunities. They had to search for a guiding theory for the Land Recycling Act-something that would allow properties to be cleaned up with a more reasonable assessment of the risks and costs, rather than face what one participant called the "endless black hole of liability."

2.2.3. Political Leadership

Having seen the failure of the more sweeping 1991 legislative proposal to restore waste sites for functional use and to fund the program with a \$250 million bond issue, those interested in pursuing legislative reform on the issue of contaminated sites took a different tack. The idea in forming the Special Committee on Tax Delinquent Contaminated Land was that very focused legislation on tax-delinquent contaminated land could gain adequate support in the assembly and senate and the approval of the governor. As one of our interviewees noted, the ungainly name of the committee helped keep the initiative under the radar screen of groups opposed to relaxing liability provisions under Spill Law.

Despite its low political profile (or perhaps because of it), the committee ushered in a period of rapid policy change, creating a voluntary cleanup program with new liability exemptions, innovative project funding sources, and a cap to limit the financial liability of purchasers of contaminated property. In part, the committee was able to transform its ideas into the more durable goods of legislative reform because of the

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effective leadership of its chairman, Democratic state Senator Brian Burke. The relationship between the committee and Burke is captured by Ryle's distinction between "knowing that" and "knowing how" (Ryle 1949). "Knowing that" refers to having a vision of some future state; "knowing how" is the ability to realize that vision. The committee was able to envisage a less punitive cleanup program that could serve the broader social goal of creating economic opportunity for distressed urban communities. Political leadership was needed to make the new reforms acceptable to the state legislature and to various stakeholders.

Burke was able to build public support for the committee's work and guide the proposals through the legislature for a number of reasons. The committee's proposals, particularly those that limited liability, could have drawn the ire of environmental groups. Environmentalists in other Midwest states had opposed changes to the liability provisions in their states' site cleanup laws, arguing that the loss of private sector funding would lead to two unacceptable options: more "orphan" sites (e.g., sites with no responsibility party to pay for cleanup) requiring increased state costs, and fewer cleanups if budgetary considerations limited state funding for these orphan sites (U.S. General Accounting Office 1998). Burke, however, was widely considered one of the most environmentally progressive politicians in the state, and this standing allowed him to push forward the committee's reforms without having to worry unduly about environmental groups' derailing his efforts. With a safe seat in Milwaukee, he had the political resources to get deals done in the state legislature and could use his political capital, if necessary, to get backing for new legislative proposals. In the state assembly, for example, where Republicans formed the majority, he could count on the support of five Republican legislators to help him gain bipartisan support of the draft bills submitted by the committee. He also had good working relationships with senior managers at DNR.

But Burke was more than a political fixer. With a large number of contaminated properties in his district, Burke was well attuned to the problem. At the outset of the committee meetings, Burke took members of the committee to Milwaukee to see a number of derelict properties. Many of the committee were appalled by what they saw. One person described the scene as "an archaeology of horrible, filthy technologies, one on top of the other—an abandoned metal plant, on top of a previous noxious use, with ad hoc dumping on the site… Burke made it clear to the members that this was one of 2,600 such sites DNR had inventoried in Milwaukee."

Compared with other states, such as Michigan or Pennsylvania, where Republican governors spearheaded reforms to contaminated cleanup policies, in Wisconsin the impetus for reform came not from the political apex of the state, but from many quarters, including state politicians, local officials, and policy entrepreneurs in law, banking, and real estate.

2.2.4. Seeing Is Believing

The literature on policy adoption suggests that state officials and regulators have incentives to let other states be innovators and, if necessary, pay the price for mistakes. If the regulatory innovation is seen as successful, the late adopter can then copy it (Lieberman and Montgomery 1988). To see how an alternative approach to contaminated sites could work, members of the Burke committee had only to look across the state line and consider Minnesota's Voluntary Investigation and Cleanup (VIC) program, which provided more explicit liability protection for prospective purchasers, lenders, and investors in contaminated property. The VIC program offered a range of assurance letters to different parties and provided varying degrees of liability protection from the Minnesota Environmental Response and Liability Act, the Minnesota equivalent of the Spill Law. For example, "no action letters" were issued when no contamination was found or when the level of site contamination was minimal and did not require cleanup. "Off site determinations" exempted voluntary parties from liability for groundwater cleanup if the source of the contamination was up-gradient to the affected property. But the model most pertinent to the committee's deliberations was the VIC program's "certificate of completion" at sites where the state regulatory agency, the Minnesota Pollution Control Agency, determined that a release or the threat of release needed to be addressed to protect human health or the environment.¹⁵ To be eligible for this assurance, voluntary parties not legally responsible for the contamination—and this could include banks, prospective purchasers, or assignees of a responsible party—were required to enter into a formal agreement with the agency that set out oversight requirements, enforcement provisions, and termination elements if the voluntary party decided not to

¹⁵ If a property did not require a response action, it was not eligible for assurance of liability protection under a certificate of completion. In such instances, a no-further-action letter could be issued.

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clean up and redevelop the site.¹⁶ In what would become a critical component of regulatory practice in Wisconsin, the voluntary party under Minnesota law was required to work closely with the Minnesota Pollution Control Agency and to submit a "response action plan" for the site. Remedial action needed to be authorized by the agency. Upon completion of cleanup and after further review, the agency then issued to the voluntary party a certificate of completion, providing complete protection from future liability under state law (but not under federal law).

The VIC program, as a concrete example, provided the Burke committee with a limited but practical vocabulary to discuss reform to the Spill Law. The theme of liability forgiveness for voluntary parties appealed to the committee, as did the more cooperative stance of the state agency toward parties interested in investigating and cleaning up contaminated properties. The committee also recognized that the liability protections provided by a certificate of completion could be a powerful inducement to the private sector to redevelop contaminated properties.

The Minnesota initiatives offered other, perhaps, broader lessons. Although liability protection under the VIC program did not rule out federal enforcement under CERCLA or prevent EPA from revisiting voluntary cleanup decisions, in practical matters the voluntary cleanup program, as a parallel regulatory scheme, made unsought federal enforcement less likely at sites issued a certificate of completion. Any state regulatory program that reduced the uncertainty of liability was likely to be attractive to local officials as well as potential investors.

The state legislators on the committee were also not oblivious to the benefits of a voluntary cleanup program. If under a such a program more sites were investigated and cleaned up than under the status quo, legislators could take credit for enacting proenvironmental legislation. At the same time, they could demonstrate their sensitivity to local development concerns by displacing the threat of liability under CERCLA or the Spill Law with a state voluntary cleanup program that reflected the substantial state and local interest in attracting and retaining investment capital in metropolitan areas.

¹⁶ In 1992, responsible parties in Minnesota were not eligible for a certificate of completion under the state's Land Recycling Act, although the act was amended a year later to allow responsible parties to conduct cleanups and gain liability protection for their successors.

Clearly the time for policy innovation was ripe. With an institutional setting designed to promote statutory reform, an able group of entrepreneurs helping to create the political momentum for reform, the belief that draft proposals from the committee could be taken further by the efficacy of Burke's political leadership, and the example of successful innovation in Minnesota, policy advocates in Milwaukee and Madison and in other cities in the state believed theirs was an effort that could succeed.

2.2.5. The Land Recycling Act

In February 1993, after five months of deliberation, the Burke Special Committee voted by a 17-to-1 margin to recommend its legislative proposals for tax-delinquent contaminated properties to the Joint Legislative Council for introduction in the 1993–1994 legislature. Committee members voiced some initial disagreements about the scope of possible liability exemptions, the definition of a *voluntary party*, and expanding the focus of the committee from tax-delinquent properties to contaminated real estate in general. But by the final meeting the committee opted for a pragmatic, if somewhat narrow, set of reforms. The draft bill that emerged, in the words of one participant, was "bound tightly to tax delinquency" and focused on the buyer and point of sale.

But even taking into account its focus on tax-delinquent properties, the committee's draft proposals, enacted into law as the Land Recycling Act (Act 453) in May 1994, created substantial incentives for the acquisition and cleanup of contaminated property. Act 453 exempts lenders, municipalities,¹⁷ and purchasers of contaminated property from the Spill Law's liability under certain circumstances. In broad terms, the specific provisions of the act can be seen as a focused effort to introduce the concept of forgiveness into the way regulators and parties involved in redeveloping property assess responsibility for cleaning up sites, particularly at those sites that have become contaminated through years of industrial activities, and where the current owner has inherited the pollution, not caused it.

Under Act 453 a municipality is exempt from cleanup obligations under the Spill Law if the local government acquires the property through tax-delinquency proceedings

¹⁷ Municipality is defined broadly to mean a city, town, village, county, county utility district, town sanitary district, public inland lake protection rehabilitation district, metropolitan sewage district and redevelopment authority.

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or as a result of an order by a bankruptcy court. The exemption applies to property acquired by a municipality before, on, or after the effective date of the act. The act imposes requirements on municipalities to qualify for this protection: a municipality does not qualify for the exemption if the discharge of hazardous substances has been caused by an action taken by the municipality, the failure of the municipality to restrict access to the property, the failure of the municipality to sample and analyze unidentified substances in containers stored above ground on the property, or the failure of the municipality to dispose of or remove leaking containers stored above ground. These conditions did not blunt the enthusiasm of county treasurers and local officials for the act's liability protection. For local officials, the act was a first step in putting liability in a box, and thus it dismantled one of the primary barriers for counties, towns, and cities to acquire contaminated real estate.

To encourage municipalities to foreclose on tax-delinquent properties, the act created a new program, authorizing DNR to provide grants for municipalities to investigate and remediate contaminated properties owned by a unit of local government. An eligible property could include not only those sites or facilities contaminated by hazardous substances but also solid or hazardous waste disposal facilities and any other site where waste was disposed of. The grant was intended to pay municipalities up to 25% of the costs of their investigation and cleanup and could be used to determine the nature of the pollution, to plan and undertake the cleanup, to identify and negotiate with responsible parties, and to plan for redevelopment of the property after cleanup was completed.

The grant program set out by the act was not implemented during the legislative session, however. The act did not appropriate new funds for the grant program, and for reasons that are somewhat opaque, then-Governor Thompson vetoed an appropriation of \$500,000 from general revenues for the grant program, calling it an inappropriate use of state general fund revenues. Why did the grant program not get off the ground? Perhaps there was insufficient political support to commit general revenues to a program that was narrowly conceived. In subsequent state budget cycles, however, when the first pioneering projects undertaken by municipalities under the Land Recycling Act showed the economic benefits of brownfields redevelopment, the state legislature and Governor Thompson became more inclined to target funding to grant programs to help local government and private entities investigate and clean up brownfields.

The Land Recycling Act gives lenders¹⁸ a form of statutory relief similar to that provided to municipalities. As we noted earlier, under the Spill Law and CERCLA, lending institutions can be responsible for cleanup costs if they foreclose on contaminated property or were involved in the management of a business on the property. The act exempts lenders from liability under the Spill Law when they take title to contaminated property through enforcement of a security interest, provided the lender has (a) not intentionally or negligently caused a discharge or exacerbated an existing discharge; (b) notifies DNR of any known release; (c) conducts an environmental assessment of the property; and (d) after obtaining title to a property, is not managing a business on the representatives¹⁹ of a trust or estate for liability associated with the cleanup of a contaminated property, provided the person does not knowingly, willfully, or recklessly physically cause a discharge of a hazardous substance, or fail to notify DNR of a discharge.²⁰

The act also addressed the anxiety in the lending community after the Fleet Factors decision, which had expanded a secured creditor's potential Superfund liability if the lender's participation in the management of a facility could be construed to influence the facility's treatment of contamination. The issue for lending institutions was at what point typical lending activities, such as requiring compliance and environmental assessment audits, could be interpreted as influencing the facility's treatment of contamination. Act 453 provides exemptions to Spill Law liability on this point. It exempts lenders that inspect real property for compliance with environmental laws, those that conduct an assessment or investigation of property to determine the extent of pollution, and those that take action to clean up contaminated sites. The exemption, however, applies only if the activities listed above occur before the lender takes title to the property, if the lender conducts any assessment in accordance with DNR rules, and if

¹⁸ A *lender* is a bank, credit union, savings bank, savings and loan association, mortgage bankers, or similar financial institution.

¹⁹ According to Wis. Stat. 292.01(16), the term *representatives* refers to any person acting in the capacity of a conservator, guardian, court-appointed receiver, personal representative, executor, administrator, trustee of a living trust, or fiduciary of real or personal property.

²⁰ Wis. Stat. 292.21(2)(a).

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the lender notifies DNR of any discharge of hazardous substance identified in the course of a site investigation.

The lender liability exemptions relate only to cleanup responsibility under the Spill Law; the lender may still face liability under federal cleanup laws or other Wisconsin environmental laws.²¹ But for sites where there is no federal interest-and the majority of brownfield sites fall in this category-the act effectively displaces federal with state regulation. As one prominent observer noted, "...because the Spill Statute is an important basis for cleanup liability in Wisconsin, the exemption should provide a significant degree of comfort to lenders who are considering lending activities for property that may be contaminated" (Harrington and Marchik 1998, 36). Of the three statutory liability exemptions provided in the act—those for lenders, municipalities, and purchasers-those with the most far-reaching impact on policy innovation were the protections offered to purchasers of contaminated property. Under the Spill Law, a person who causes the discharge of a hazardous substance or who has control over the contamination through an ownership interest in the property-even though the person may not have been responsible for causing the discharge—is potentially liable for the cost of cleaning up the contamination. In broad terms, Act 453 sets out a process by which a qualified purchaser can undertake an environmental assessment and cleanup of a property in accordance with DNR rules, and once the cleanup is certified by the agency, the purchaser can receive exemptions from future liability. The act provides that a purchaser of contaminated property is not responsible for further remedial action on the property if the following conditions apply:

- the purchaser conducts a thorough examination of the property in accordance with DNR administrative rules;
- the purchaser obtains a certification from DNR that the property has been satisfactorily remediated; and
- the purchaser maintains and monitors the property as required by DNR.

²¹ These include the Environmental Response and Repair Law, the Abandoned Container Law, and the Hazardous Waste Law.

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A purchaser who can satisfy these requirements will be issued a DNR certificate of completion that exempts him or her from liability under the Spill Law for preacquisition releases.

By addressing concerns in the market about lingering or unforeseen future liability, this exemption was clearly intended to motivate reluctant buyers to acquire potentially contaminated property, work closely with DNR to remediate the site if contamination was found, and ultimately return the property to productive use. The act's protections do indeed remove much of the long-term environmental responsibilities buyers faced under the Spill Law. Under the act, the liability protections for qualified purchasers remain in force even if environmental standards become more stringent in the future, or if the cleanup activities on the property prove unsuccessful or if the contamination is discovered to be more extensive than anticipated at the time of the environmental assessment. As a further inducement, the exemption is transferable and runs with the land: it applies to a subsequent owner, provided the property is maintained and/or monitored in a manner consistent with DNR rules.

In keeping with the intent of the Burke committee to "forgive" parties that did not cause the contamination, the act restricts eligibility to purchasers of property. Under the act, a party must satisfy each of several conditions to qualify as a purchaser: the purchase must be an arm's-length, good-faith transaction, and the party must not have owned the property when the hazardous substance was released, caused the contamination, or participated in the management or the business that caused it. These eligibility requirements would be expanded by the state legislature in 1997 and again in 1999 to include any person who submits an application and pays the required fee. But under Act 453, the purchaser exemption in effect created a *cordon sanitaire*, separating those who could be at fault, primarily owners and operators, from purchasers who were innocent of polluting the property.²²

The framers of the legislation, however, did not completely separate these two groups. With a keen eye on making cleanups work more effectively with market

²² For those who were innocent purchasers, the act defined the term *purchaser* quite broadly, to include individuals, companies, associations, partnerships, and municipal governments. All of these entities, providing they could satisfy the above mentioned conditions, could benefit from the purchaser protection provisions of the act.

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dynamics, Act 453 allows either the purchaser or the seller to conduct a site investigation of a property, but only the buyer can conduct the cleanup. This distinction is not about fault or forgiveness but is rather a pragmatic calculation that recognizes how competing interests in the market work. For example, assuming there was development interest in a property, the purchaser would have a strong incentive to have a thorough site investigation, since the investigation would determine the extent of preexisting contamination and the scope of the buyer's liability under Act 453. The seller, by contrast, would have a strong interest in seeing that the remediation has been performed according to DNR rules to limit the risk that he or she might be held liable for future cleanup costs. If DNR were to issue a certificate of completion to a purchaser and the remedial action was later discovered to have been unsuccessful, the agency could pursue additional cost recovery from the seller. But a certificate of completion could be a valuable asset to the seller as well. In the course of a property transaction, the seller and purchaser would likely negotiate the price of the property based in part on what value each gave to the certificate of completion. The certificate is clearly a marketable asset, and its value could be viewed as equivalent to the costs of assessing and cleaning up the site. How each party used the certificate of completion in these negotiations was less important to the framers of Act 453 than to have created in the certificate of completion a market incentive to induce private parties to voluntarily clean up contaminated sites.

In broad terms, the purchaser protections were modeled on the VIC program in Minnesota. Purchasers who want to enter into a voluntary agreement with DNR would first have to submit a comprehensive site investigation plan for the agency's approval and then implement a site-wide comprehensive remediation plan in conformity with all applicable state requirements. For private parties, obtaining a certificate of completion was clearly more cumbersome and involved than complying with the cleanup requirements under the Spill Law. An environmental investigation was required for the entire property, not simply a portion of the property, as stipulated in the Spill statute. The act mandated DNR review and approval of all stages of the investigation, cleanup, and closeout of a site—a policy that could potentially delay a project. The act also allowed DNR to charge an application fee and oversight fees billed on an hourly basis, further adding to the costs of any project. In return, of course, a purchaser would obtain a certificate of completion, a liability exemption that far surpassed the liability protections found in the closeout letter offered by DNR. Such letters did not exempt purchasers from further regulatory action if additional contamination was found on their sites.

The provisions of Act 453, particularly the ability to obtain a certificate of completion, broke new ground for contaminated site cleanups in Wisconsin. The Burke committee and others who had participated in passing the legislation assumed that the policy innovations backed by the law—liability reform, regulatory flexibility, more consistent oversight—would stimulate a market for contaminated properties. They were familiar with the example of the voluntary cleanup reforms in Minnesota, where the state regulatory agency had received some 1,800 applications in the first year of the VIC program. Some members of the committee, envisaging a similar wave of applicants, were concerned that DNR would be unable to meet that level of demand and argued successfully to focus the reform on tax-delinquent properties and on liability exemptions for eligible purchasers, and not to include site owners or those who, under the Spill Law, might possess or control a hazardous substance.

Instead of thousands of applications, however, DNR received only 32 applications to the voluntary program in the two years following the passage of Act 453. The limited response suggests not only a deep-seated wariness among regulated entities but also policy limitations of the act itself. First, for many mothballed, potentially contaminated properties, the act had limited utility. By providing exemptions only for preexisting conditions, the act made it unlikely that parties who had held title to real estate for a long period of time would be able to document to the satisfaction of DNR that contamination on the site was not the result of their activities or those of site operators to whom they had leased the site. Second, for many prospective buyers, particular those negotiating the purchase of less valuable properties, the added costs of obtaining a certificate of completion—expanded site investigation requirements, DNR fees, higher transaction costs, administrative delays-made little economic sense. For these property transactions, a closeout letter from DNR, though not providing the same degree of liability protection as a certificate of completion, was often a more effective way of proceeding. The act's liability exemptions were better suited to more valuable properties, where the parties could better afford the added costs of participation in the voluntary program and the inevitable delays associated with more rigorous DNR oversight. Developers and other qualified purchasers at such sites could ultimately offset the costs of participation in the program with the substantial increase in the value of the property. Third, the legislation did not provide funding for parties to conduct site investigations. Due diligence requirements, site sampling and analysis, and consultancy fees-all components of a site investigation—are up-front costs that buyers are unlikely to recoup if a deal for a

contaminated property falls apart. The legislation exempted purchasers from future liability and allowed voluntary parties to walk away from a site if remediation proved too costly, but it inadvertently blunted enthusiasm for brownfields property by not providing support to help buyers assess the environmental conditions of a site. Fourth, for those parties considering whether to undertake a cleanup to obtain a certificate of completion, the law did nothing to soften what the business community saw as the state's tough environmental remediation requirements, particularly state groundwater cleanup standards. DNR would issue a certificate of completion only when the site met its closure requirements. For groundwater cleanups, this meant the remedial action had to result in a contaminant level below the enforcement standard—a level that at many sites could not be met even with lengthy pump-and-treat operations. One observer asked, "What private party would consider redevelopment of a tainted property when there is no end in sight to the groundwater cleanup?"

A year after Act 453 was passed the limitations of the legislation had become more evident. In one assessment at the time, "the law has actually imposed a more rigorous examination of sites by the DNR in an effort to see greater assurance in the face of granting liability protection. This in turn has actually resulted in what is seen as a more conservative approach by both the agency and consultants" (Proceedings from Brownfield Discussion Group 1995). In the next few years, the debate in Wisconsin about contaminated sites would no longer be focused on tax-delinquent properties or limited to prospective buyers. A more vigorous national debate in Washington about revising Superfund was working its way into state legislatures. The themes of the debate would soon reverberate more loudly in Wisconsin. What are appropriate cleanup standards? How can contaminated site cleanup programs be made more cost-effective? How should a site's future use influence the level of cleanup required? What types of incentives can harness the resources of the private sector to undertake more site cleanups? At the national level, with cleanups completed at only 13% of 1,320 Superfund sites after more than a decade of activity, EPA was put on the defensive by a Republican Congress and by the regulated entities that were most affected by Superfund liability (Probst et al. 1995).

In Wisconsin one can observe a similar pattern. The reforms ushered in by Act 453 were an innovative first step, but relatively few sites were brought into the voluntary program, and the reforms did little to reduce the backlog of contaminated sites on DNR's inventories. By 1995 this lack of progress was marshaled as evidence by policy brokers

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to package and promote a new set of policy innovations. Where the Burke Special Committee had considered various risk-minimizing instruments, such as liability exemptions, in brownfields policy development, this new policy coalition of brownfields practitioners concerned itself with the hierarchy of values and goals behind cleanup policy itself. How should redevelopment efforts, for example, balance the relationship between the need for streamlined, less costly remediation and environmental protection in the long term? How should the legislature assign regulatory functions between the private and public sectors in relation to site cleanups? What kinds of incentives might be more effective in creating opportunities for joint gain? But policymaking is not simply a process of problem solving, it is also a matter of contestation and power. In questioning the normative assumptions of cleanup policy, the new group of policy entrepreneurs would spark debate over cleanup standards and the level of remediation required to close out sites. And in this process, DNR, like its federal counterpart EPA, would be put on the defensive.

2.3. The Panzer Committee: How Clean Is Clean?

The locus for negotiations and strategic maneuvering was yet another special committee that met between 1994 and 1996. This new committee, chaired by Republican state Senator Mary Panzer, like the Burke committee before it, comprised both state representatives and senators and public members. Known as the Special Committee on Remediation of Environmental Contamination, the participants were directed to (1) study the remediation of environmentally contaminated land and issues related to the funding of that process, including the funding of cleanups where responsible parties were insolvent or no longer in business; (2) review the adequacy and funding of the Petroleum Environmental Cleanup Fund Act (PECFA) program; and (3) oversee the recodification of the state's environmental statutes.

The Panzer committee ultimately did not write any brownfields-related legislation, but its role in the history of brownfields policy development is significant in three areas. First, it enlarged the terms of the brownfields debate beyond tax-delinquent properties by focusing on the large number of petroleum sites that are regulated under the Spill Law. Unlike CERCLA, which specifically excludes petroleum from its definition of

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hazardous substances.²³ this law applies to the thousands of small and large petroleum sites in Wisconsin. The Panzer committee used DNR's lackluster record of petroleum site cleanups to militate for changes to both the Spill and groundwater laws. The reforms it proposed would apply not only to those properties contaminated by petroleum products but also to all brownfield sites. In this way, the PECFA program, as we describe below, became the motor for more general brownfields policy reform. Second, the committee sought more flexibility for regulated entities by limiting DNR's discretion to apply either enforcement standards or the more stringent preventive action limits at sites with contaminated groundwater. Third, the committee recognized that to enact significant reforms, it had to line up the necessary political resources to influence the regulatory culture of DNR. Many members of the committee saw the agency as an impediment to thoroughgoing cleanup reform. Not surprisingly, DNR sought ways to blunt this threat to its authority and to the state's comprehensive program to manage groundwater. The resulting dynamic was markedly different from the Burke committee's relationship with DNR. When the Burke committee was developing new policies, DNR, according to one observer, "was remarkably inactive" and "not policy oriented" and "didn't closely monitor what was happening." But in dealing with the Panzer committee, one official said, the agency had to face the prospect of "a full-scale assault on groundwater standards because of PECFA" and was thus forced to become more strategic. The agency well understood that any revision to the state's groundwater laws would apply far beyond sites in the PECFA program and include landfills, mines, hazardous waste cleanups, and wellhead protection areas, as well as brownfield sites. As we discuss below, the agency attempted to counter the Panzer committee's legislative proposals to amend the state's groundwater law with administrative reforms of its own design.

2.4. The Impact of PECFA on Brownfields Policy Development

Brownfields policy development in Wisconsin has been strongly influenced by an unlikely federal requirement. In 1988 EPA required businesses that used underground storage tanks to replace or upgrade them with more durable tanks within a decade. The federal regulations also required owners to demonstrate financial responsibility or carry

²³ 42 U.S.C. §9601(14).

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insurance policies to pay for environmental damages of up to \$1 million in the event of a spill or a release of hazardous substances from underground storage tanks. Many businesses in Wisconsin, particularly gas stations, argued the federal requirements would force them out of business. Few small to mid-size companies, it was said, could meet a net worth test to satisfy the financial responsibility requirements of the law, and premiums for private environmental liability insurance would be too steep. The new regulations affected thousands of small businesses throughout the state, with DNR estimating that some 12,000 sites were contaminated with petroleum products. Against this backdrop of financial hardship, the Wisconsin legislature created the Petroleum Environmental Cleanup Fund (PECFA). The program's central provision was to reimburse owners of leaking underground storage tanks for costs associated with testing tanks and lines, investigating the site, preparing remedial action plans, removing petroleum products from water or soil, treating and disposing of contaminated soil, restoring environmental quality, paying contractor costs, compensating third parties for property damage, and monitoring. The maximum reimbursement initially was fixed at \$146,250 for commercial cleanups and \$7,500 for home heating oil tanks. PECFA did not pay the entire costs of cleanup. Owners had to pay a deductible, and compensation levels varied according to the use of the site (residential versus commercial), the size of the tank, and the number of tanks a claimant owned. The program was initially funded by a 2-cent-per-gallon inspection fee assessed on petroleum products imported into the state by wholesalers and was administered by DNR.

The availability of PECFA funding for the investigation and cleanup of contaminated petroleum sites has cut several different ways in its effect on brownfields policies. With the state paying approximately 95% of all cleanup costs and owners the remaining 5%, the program has been an enormous boon for thousands of site owners, helping them defray the costs of environmental cleanup and allowing them to demonstrate compliance with federal and state regulations. Since 1987 PECFA has paid out a staggering \$1.28 billion on 11,000 claims, with nearly 90% of this funding going to commercial underground storage tank facilities.

For the Panzer committee and others in the legislature, however, PECFA was seen as something of an regulatory albatross, the antithesis of what the state's emerging brownfields policies should resemble. In 1995, it was becoming increasingly clear that with the state paying such a large percentage of cleanup costs, site owners had little incentive to control costs. Indeed, some argued that owners of petroleum-contaminated

sites, with one eye on property values, had the financial incentive to conducts cleanups beyond the level needed to ensure protection of human health and the environment. In addition to these unconstrained remedial costs, PECFA's detractors pointed to the zeal of DNR field staff in cleaning up groundwater to background levels, the agency's heavyhanded enforcement attitude, and a pervasive incentive for consultants to seek unnecessarily extensive cleanups. And most problematic for the Panzer committee members was the difficulty in obtaining closeout from DNR for PECFA sites with contaminated groundwater. Without a determination from the agency that no further action was needed, committee members argued, owners of property with contaminated groundwater were left in regulatory limbo. If the level of contaminated groundwater after active remediation was above the state's groundwater cleanup standards, site owners were typically required to operate and manage pump-and-treat remedial systems and regularly monitor the site until the contamination level fell below the cleanup standards. The nub of the problem was what to do at PECFA sites when monitoring data showed that the level of groundwater contamination, even after months or years of operation and maintenance, was not declining but "flat-lining"-that is, the engineering remediation system had reached the limits of its effectiveness and the level of groundwater contamination remained stubbornly above the enforcement standard. Some argued that if this was regulatory purgatory for site owners, it was a financial paradise-a long-term retainer-for environmental technical consultants who recouped fees from site operation and maintenance activities and from monitoring. The Panzer committee believed that such pervasive uncertainty about case closeout and long-term liability severely constrained redevelopment of thousands of properties in the state.

The sheer weight of numbers can explain why the Panzer committee focused on groundwater standards. As Figure 1 shows, the Panzer committee met at a time when the PECFA program had an increasing backlog of sites. From 1990 to 1994 nearly 10,000 sites were added to the PECFA program, yet site closeouts could not keep pace with new sites discovered. As a result, the number of active sites skyrocketed. By 1995 some 7,200 sites were open and active, of which nearly 50% had moved to the operation and maintenance phase (State of Wisconsin Legislative Audit Bureau 1998; State of Wisconsin Legislative Fiscal Bureau 2001; Gallo n.d.). The costs of operating pump-and-treat systems and compliance monitoring were not negligible. Estimated annual operation and maintenance costs for sites with pump-and-treat activities were running \$60,000 per year, and the costs at sites with passive low-tech systems amounted on average to

\$30,000 per year (Gallo n.d.). An analysis of PECFA cleanups by a member of the Panzer committee put the matter starkly: sites were not being closed efficiently because of the existing groundwater laws, and the costs of operation and maintenance at these sites—estimated at \$174 million per year—would not only exhaust PECFA funding (\$75 million in 1995) but also preclude much-needed cleanups at new sites (Gallo n.d.). The need for some sort of closure flexibility that could reduce the time and cost of cleanups, the committee argued, was inescapable.

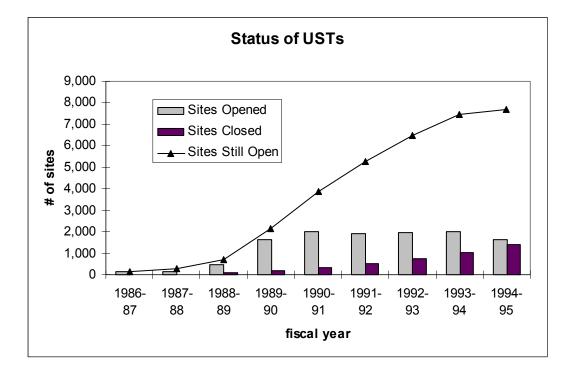


Figure 1

The negotiations that ensued between policy entrepreneurs and DNR anticipate many of the debates that would characterize later brownfields policy development in Wisconsin. The negotiations centered on regulatory flexibility and, by implication, the

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discretion of DNR site managers to interpret the law. The Panzer committee, it should be noted, was not alone in pushing for greater regulatory flexibility and groundwater reform; the powerful Wisconsin Petroleum Marketers and the Wisconsin Manufacturers and Commerce, a lobbying association representing business interests, were advocating reform to cleanup laws. Many of these views were mooted by participants on the committee.

One reform debated by the committee was a risk-based corrective action (RBCA) approach to PECFA sites, an approach supported by EPA and already used in some form by 32 states to clean up leaking underground storage tanks. The RBCA approach was advocated as a means of lowering cleanup costs by tailoring cleanup levels to site conditions and the risk posed to public health and the environment. It focuses on the reduction or elimination of risk and considers both source reduction and severing exposure pathways to achieve the goal. Although DNR's regulatory blueprint for cleanup at contaminated sites—the so-called NR 700 and NR 140 series—provided flexibility to use site-specific or generic cleanup standards, it did not allow for expanded use of natural attenuation as a passive remedy at contaminated sites. The Wisconsin approach, unlike RBCA, did not incorporate the predicted effects of natural attenuation on contaminated groundwater plumes in site-specific risk assessments.

Under intense pressure, and in response to proposed changes to groundwater legislation to address flat-line cleanups, DNR proposed flexible closure standards to address the problem, trying to head off any changes to the groundwater standard or the introduction of an aquifer classification system. DNR promulgated flexible closure regulations in 1996. The rules authorized the agency to approve closures at sites where groundwater cleanup activities had reached the limit of their effectiveness and yet groundwater contamination still exceeded groundwater standards. The flexibility closure rule enables responsible parties to use natural attenuation to attain groundwater standards provided certain conditions are met:

- monitoring demonstrates a stable and/or receding contaminated groundwater plume, and groundwater will meet cleanup standards within a "reasonable period of time";
- adequate source control measures are taken to prevent any additional releases of contamination to groundwater;
- groundwater contamination remains within the property boundaries; and

• no risks to human health or the environment will result.

If these conditions are satisfied, DNR provides the responsible party a closeout letter, which typically states that at the time of the review, the agency determines that no further action is necessary. As part of the closeout conditions the agency requires the responsible party to record groundwater use restrictions at the county deed office on the deeds of all properties affected by the contamination.²⁴

The flexible closure standards were crucial to brownfields policy development. Previously, DNR staff were not under any obligation to consider the cost-effectiveness of a cleanup, and according to one DNR official who has been with the agency for more than two decades, regional staff would exercise their discretion to require more cleanup instead of agreeing to a consultant's request for closure—their goal was to get groundwater cleaned up to PAL standards. The flexible closure standards were put forward as a reasonable way to control costs by substituting natural attenuation for more active technologies, such as pump-and-treat systems.

The standards also served a more political purpose. During the two years the Panzer committee met, DNR came to recognize that it needed to advance its view about site closures at contaminated properties by suggesting administrative reforms—changes it could put in place under its regulatory framework. The alternative was to have sweeping changes imposed on it by the legislature. With the development of the NR 700 series, a comprehensive site regulatory blueprint to guide responsible parties through site cleanups, DNR could effectively parry the efforts to revise the state's environmental statutes. The NR 700 series was an enormous undertaking spanning six years (1990– 1996). Though it was not initially tied to brownfields policy development, in subsequent years the rule became the regulatory framework in which brownfield cleanup decisions were made. The NR 700 series provided more consistent oversight by DNR staff and made cleanup requirements more transparent to regulated parties not only at Spill sites (i.e., those contaminated with hazardous substances) but also at landfills, corrective action sites under the Resource Conservation and Recovery Act, and petroleum sites. With the NR 700 rules, DNR intended to establish a single set of procedures and

²⁴ In 2001 applicants no longer had to record a groundwater use restriction on their deed. DNR developed a Web-based GIS system to make this information available to the public.

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standards for cleanups and detail the actions necessary for responsible parties to satisfy state environmental law.

Brownfields innovations have thus taken place on two fronts: amendments to the Spill Law in the state legislature, and revisions and additions to the DNR's regulatory blueprint, the NR 700 series, which shape much of the action on the ground.

3. Reforming DNR: Adding "Redevelopment" to the Job Description

The state's early brownfields reforms were championed by those involved in economic development and by the regulated entities who felt the sting of Spill Law liability, but for many DNR field staff, they signaled an unwelcome intrusion of political influence into the workings of the agency. The demands on the agency to "better meet the needs of our customers" smacked of a political sellout and created a feeling that, in the words of one DNR official, "the legislature sold the program down the river." For many people at DNR, particularly those in the field who had been with the agency the longest, the flexible closure policy, among other things, led to a moment of truth about whether they could continue to work for an agency that appeared to have lost its moorings.²⁵ Although the resignations were not provoked solely by the ongoing brownfields reforms, some 30% of DNR site cleanup staff left the agency in the runup to and in the aftermath of the agency reorganization in 1996. Stepping back, we can see more clearly how the state's brownfields innovations, in effect, expanded the agency's mission, requiring DNR staff to consider the explicit trade-offs between the stringency of a cleanup, the costs to the responsible or voluntary party, and the indirect impacts to the community. This new mission cast DNR field staff into the uneasy role of facilitators, a role many considered inimical to the reasons they joined the agency in the first place—to protect the environment and not, according to one DNR staffer, "to help the polluters." According to one DNR official "... agency staff were under no statutory obligation to consider costeffectiveness of a cleanup and some DNR staff would flatly refuse to use natural attenuation as an appropriate remedy." The agency had a dilemma. Given the

²⁵ A survey completed by 1,537 DNR staff (more than half of the agency) conducted in 2000 by the Public Employees for Environmental Responsibility indicates roughly half the respondents agreed with the statement that scientific evaluations at the agency are influenced by political considerations. One third of the respondents, however, disagreed with the statement.

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traditionally strong autonomy granted to its regional offices, DNR was caught between political heat from the state legislature and governor's office to make good on the reforms and a rebellion from below.

Regulatory reform, of course, is rarely smooth and often contentious. And as this example of DNR resistance makes abundantly, clear statutory reform is only the first step in policy innovation. Without the support of DNR staff, the Land Recycling Act (Act 453) and the flexible closure policy would be, at best, unevenly implemented. The question facing the state brownfields policy advocates was how to change DNR's institutional compass and have it take on fully the broader mission given it by the legislature. The literature on bureaucracies show that there are many ways an administrative agency can be made more responsive-or susceptible, depending on one's point of view-to political influence (Mintzberg 1983). One approach is to start with the top agency positions and assign political appointees who will work to achieve the governor's priorities. Alternatively, an administrative agency can be restructured to enable it to more effectively pursue state legislative reforms, a situation DNR faced in the mid-1990s, when it was asked by the legislature to balance economic redevelopment and environmental protection. A more incremental approach to changing the values of an agency can be taken by recruiting individuals with a different orientation and skill set (in this case, economic development). And for those organizations that have independentminded regional offices, more consistency in implementing legislative reforms can be encouraged by instituting new oversight arrangements with headquarters and rotating staff among regions.

What transpired in Wisconsin in the mid-1990s was in many ways the regulatory equivalent of "shock and awe." Before 1995, the DNR secretary was appointed by the Natural Resources Board, an institution with a proud history of independence and allegiance to environmental protection. In 1995, when Republicans had gained control of both legislative houses in the state, the post was made part of the governor's cabinet, and the secretary became a gubernatorial appointee, serving, as it were, at the governor's pleasure. The change meant that DNR was less insulated from political influence and could be run increasingly to suit the agenda of then-Governor Tommy Thompson. This sentiment was captured in a survey of DNR staff conducted by the Public Employees for Environmental Responsibility (PEER) in 1999. The survey indicated that the overwhelming majority of the respondents (91%) felt that the governor should not appoint the DNR secretary (Public Employees for Environmental Responsibility 2000)

and that political influence was, in the words of one of our interviewees, "corrupting" DNR.

One needs, of course, to tread carefully here. This is not to say that Wisconsin's brownfields policy reforms indelibly bore Thompson's imprint. Indeed, compared with his neighboring Republican governor in Michigan, John Engler, who made brownfields a top priority for his government (Hula 2001), Thompson played a much less active and visible role in state brownfields policy. The sentiment expressed in the PEER survey may well reflect Thompson's hegemony in state politics—that is, his ability to influence policy development in the state even without directly intervening. The relevant point is that for many DNR staff, the fact that Thompson was the boss of the well-respected DNR secretary, George Meyer, fed the notion that even in the smaller sphere of brownfields, they were expected to become cheerleaders for positions increasingly aligned with business and industry.²⁶ One consequence, of course, was that some DNR employees, dismayed by the political controversy swirling around DNR, dug in their heels and resisted the demands for more regulatory flexibility and the new role of natural attenuation to close out sites on which much of brownfields is premised.

A more substantive and direct attempt to reshape the culture of DNR began in June 1995, when an advisory group first met at the request of Secretary Meyer to "define the strategic direction for and organization of the cleanup program in the Department of Natural Resources." The group was composed largely of DNR staff but included a handful of brownfields policy entrepreneurs who had participated in both the Burke and the Panzer special committees. The group recommended that DNR should "fully embrace the concept of remediating contaminated lands for beneficial reuse" (p. 3), that "partnership should be the key element of the overall program…and the bureau director

²⁶ During his tenure as secretary, Meyer asserted that DNR was able to maintain its independence from the governor's office. In a remarkable interview after he left DNR, he said, "In terms of the appointment of the Secretary, I am concerned ultimately that it could lead to political decisions within the agency. I didn't change my decision making when I switched from board appointment to cabinet...But, it really is, I can tell you, it is an open invitation and somewhere down the road it will become politicized. I've seen it in other states and the thing is, it could happen, and no one would even know that it was happening. Where the governor says, 'I really like you and the job you're doing, but I need this decision for the people of the state. I want you to stay, Secretary, isn't there some way that we could make this work?' It could happen, where the governor puts his thumb on the decision making process in a very subtle way. People would have an idea of it, but they couldn't prove anything." http://www.wiscwetlands.org/Interview.html (accessed 10/30/02).

should establish a program to define and secure the employee skills, partnership tools (legal, procedural, etc.) and working climate conducive to building successful partnerships." (p. 5), and that "the department should focus is staff recruitment and training effort to broaden staff skills beyond just technical proficiency to include understanding of the secondary consequences of making particular cleanup decisions. Developing a better understanding of the timing of property transactions, lender concerns, neighborhood and community groups, etc., should also be incorporated into staff training plans" (p. 5). And given the reality that many site cleanups include a mix of contaminants—asbestos, lead, building debris, hazardous substances, petroleum products—regulated under different statutes, the report urged DNR to take a more integrated approach to remedial actions and use a "one-stop shop" to coordinate regulatory actions at contaminated sites.

The recommendations, though rather diffidently stated, called for nothing less than a profound change in the way DNR staff would have to work with the private sector to return sites to productive use. Not only would cleanup decisions have to be timed to facilitate real estate transactions, but DNR officials were expected to consider what we can call "spillover effects" in their cleanup decisions. The advisory group, in other words, asked DNR staff to take into account the impacts of their cleanup decisions beyond the narrow regulatory channel that linked them to a site owner or end user. It asked them to consider how cleanup decisions would spill over this regulatory channel and possibly dampen the welfare of the local community if the site was not returned to productive use. It is little wonder why a number of DNR staff felt a sea change had occurred. For many at DNR, the report's call for partnerships, premised on the idea of engaging the private sector to create synergies and to integrate cleanup in a broader scheme of public welfare, did not look very different from market-led advocacy—a kind of ideological promotion of the private sector's values into a government agency.

The advisory group was not blind to the culture of DNR. It recognized the need to change it. Following the advisory group's recommendations, DNR managers combined formerly separate programs for underground storage tanks, active hazardous waste sites, sediment sites, Superfund sites, state superfund sites, and brownfields into one bureau, the Bureau of Remediation and Redevelopment (BRR). The time was ripe to attempt this integration. The agency, as we noted earlier, had recently promulgated the NR 700 rule series, which was intended to be uniformly applied to all environmental remediation actions. The advisory group as well as DNR management saw here an opportunity to

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create a consistent, seamless cleanup program, one that could bring together all the compliance issues into a timeframe that was more suited to the pace and demands of real estate transactions. But to do so would require considerable tugging and pulling and negotiation between the DNR regions and headquarters.

The new Bureau for Remediation and Redevelopment inherited a decentralized staff. Of the roughly 110 people who worked for BRR at the time, 30 were in headquarters and the rest were dispersed in five regions. The regional offices were further split into satellite offices, making the job of coordinating a new program even more difficult. To limit the autonomy of the regions and to encourage more consistency in contaminated site policies, DNR created a series of teams in which selected regional staff would work closely with headquarters in developing policies for such areas as land recycling, NR 700 implementation plans, outreach, and standards and streamlining. Then, vested in the process, these teams would go out and promote the new policies to their regional colleagues. While these new ideas were presumably percolating across the regions, DNR senior staff in Madison were trying to build political support for many of the initiatives. They worked closely with legislative aides, lawyers who represented private firms and municipalities in real estate negotiations, and the technical consultants who would implement the cleanup component and who needed to understand how DNR would apply the new regulations. Without this political support and a careful orchestration of success stories, showing that a new era of cooperation had begun, DNR was concerned it might lose momentum and the opportunity for dedicated funding for the program and for new staffing.

In the regions, however, DNR managers found a good deal of resistance to the reforms. The field staff, for the most part hydrogeologists, for many years had implemented and enforced stringent groundwater laws that required aggressive cleanup. Many simply refused to close out sites that did not meet groundwater standards. When negotiations between headquarters and the regions reached an impasse, DNR senior staff and regional supervisors held face-to-face meetings with project managers and told them, as one of our interviewees reported, "we need to partner to survive" and "you got to learn to live with it or get out of the program." Roughly a third of the staff did indeed leave.

Despite initial reservations about the shifting orientation of the program, however, the majority of regional BRR staff have changed they way they work and by extension how the statutory reforms and new regulations are implemented. A typical project manager now spends some 300 to 400 hours each year on brownfields outreach and

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targets these efforts to include local redevelopment authorities, economic development agencies, local town clerks, and county treasurers. Each year, depending on staffing levels and funding, a regional office tries to expand its outreach activities, focusing on appraisers or housing authorities or other groups that have not been very active in brownfields. It would be a mistake to assume, however, that the negotiations between DNR management and field staff about the direction of the program are over. As one DNR official noted, the agency is still trying to win the hearts and minds of the field staff, and from 20% to 30% of BRR regional staff do not yet agree with the direction of program.

Brownfields policy development in Wisconsin has demanded that DNR staff step out of their customary roles and interact with new people and groups. In this process, old procedures, routines, and institutional norms are changed and new ones are formed. Regulatory agencies are expected to be more risk taking and to work more cooperatively with the private sector. In a broad sense, through brownfields policy initiatives, DNR staff have been negotiating a set of principles needed to help a regulatory agency determine new lines of accountability. One feature of public sector management, in contrast to private management, is that the actions of regulators must have their bases in public law, not in the financial interests of private entrepreneurs and real estate interests. In the devolutionary context of brownfields, these lines of accountability have blurred, allowing perhaps a more creative engagement with the complex problem of brownfields, but at the same time forcing regulatory agencies to question and negotiate the terms of their involvement.

4. Mainstreaming Brownfields Policy: The Brownfields Study Group

Until 1998, the development of brownfields policy in Wisconsin was the handiwork of a small network of policy entrepreneurs who participated in the Burke and Panzer special committees. This group by all accounts was influential. A number of their proposals for legislative and regulatory reform were taken up, particularly between 1997 and 1999, when Brian Burke became chairman of the powerful Joint Committee on Finance and could use his influence to pass brownfields legislation as part of the biennial budget process.

In reaction to this concentrated influence, particularly the aim of some members of the Panzer committee to reopen the state's groundwater laws, DNR and allies in the

legislature mooted the idea of creating a broader-based group of stakeholders who could, according to one DNR official, "take discussions out of the brownfields backroom deal." Increasing the transparency of decisionmaking wasn't the only motivation for the agency. DNR also wanted to put together a more public, higher-profile body to counter what the agency and others saw as a reluctance on the part of the governor to adequately fund the program. A legislative aide said at the time, "I think it's safe to say brownfields is a \$1 billion problem. Without any money out there to do some of these demonstration programs, we have not been able to show others the benefits of getting these sites redeveloped" (Webbe 1997). In sessions leading up to the 1997–1999 biennial budget, the legislature had considered establishing a fund to help cities and companies clean up brownfields. Then-Governor Thompson proposed making \$20 million from the state's recycling fund available to local governments and businesses for brownfields redevelopment. Brownfields stakeholders took exception and argued that the governor was taking money intended for one environmental program and using it to temporarily bolster another. Without sustained funding, many believed the program would not have the resources or the staff to capitalize on the program's early successes. DNR and others wanted a dedicated funding source and hoped an influential blue-ribbon panel could help them get it.

The idea for such a panel gained political momentum in the statehouse, and in 1998 the legislature directed DNR to create a study group to evaluate current brownfields initiatives and develop additional incentives. The legislative charge for the group was wide ranging, a mix of the exhortatory and pragmatic, and included the following:

- study the means by which Wisconsin can increase the number of brownfields that are cleaned up and returned to productive use;
- study the potential methods to provide long-term funding of brownfields financial assistance programs;
- study optional methods to clean up groundwater on a comprehensive rather than property-by-property basis;
- study the effectiveness of existing laws concerning the redevelopment of brownfields;
- study the definition of *voluntary party* (section 292.15(1)(f));

- identify and evaluate additional legislative proposals to further the cleanup and redevelopment of brownfields; and
- identify potential sources of funding for brownfields cleanups for which the state becomes responsible because of liability exemptions for those who did not intentionally or recklessly cause the contamination (section 292.15).

DNR appointed 30 persons to the Brownfields Study Group (BSG). Members included local elected officials, real estate and environmental lawyers, county treasurers, city development directors, environmental consultants, planners, and representatives from other state agencies. DNR also invited a representative from an environmental nongovernmental organization and a community health advocate. The one stakeholder group absent from the deliberations was the state's tribes.

It was not hard for the agency to recruit members. Although many blue-ribbon committees are created more for cosmetic than for substantive reasons, in Wisconsin there were strong inducements for interested parties to participate. With Burke heading the Joint Finance Committee, most people realized that the recommendations of the study group would not simply gather dust but have a very good chance of influencing state legislation.

The committee organized itself into five subcommittees, on which people who weren't Brownfields Study Group members could serve: (1) area-wide groundwater cleanup approaches; (2) financial incentives; (3) liability issues, including voluntary parties; (4) local government units' liability issues and financial incentives; and (5) public outreach and education. In nine months, the committee produced a consensus report that made 70 recommendations to improve and more effectively target various incentives for brownfields redevelopment. Many of these recommendations were incorporated into the subsequent state biennial budget (Act 9) and included such provisions as site assessment grants for local government, funding for Department of Commerce brownfields grants to promote economic development and environmental cleanup, the creation of the Sustainable Urban Development Zone program (SUDZ), a pilot program to experiment with area-wide approaches to cleanup and reuse, expanded eligibility to qualify for voluntary party liability exemptions, and more powerful cost-recovery mechanisms for local government. In our companion paper, Brownfields Redevelopment in Wisconsin: Program, Citywide, and Site-Level Studies, we describe the extent to which these

incentives have been used by local governments and developers in the context of brownfields.

After the success of the first Brownfields Study Group, the state legislature requested DNR to coordinate two additional rounds, one in 2000 and the other in 2002–2003. For the most part, the original members of the 1998 study group continue to participate, thereby establishing a context of familiarity and trust. And like the first BSG, the subsequent groups have proposed a range of new incentives based in large measure on participants' experience in implementing earlier reforms at contaminated sites.

Rather than discuss these incentives individually, it is perhaps more useful to consider more broadly what role the study group has had in regulatory innovation. They clearly were able to take brownfields deliberations out of the backroom and into public light; its meetings were open, and for those who couldn't attend the minutes of the meetings were placed on the DNR Web site. It also brought to the table interests such as public health and city planning that were not represented in earlier discussions to revise the Spill Law. However, environmental groups—despite DNR outreach efforts to include them²⁷—were only marginally involved, and as we noted earlier, Wisconsin tribes were not involved at all, perhaps in part because the initial focus of the study group was on contaminated urban properties in the southeastern corner of the state. Nevertheless, the Brownfields Study Group is more inclusive than earlier forums and has brought together powerful public and private economic interests to negotiate and suggest new approaches to clean up and redevelop contaminated properties.

The Brownfields Study Group by all accounts has been remarkably collegial, and its members have reached consensus on several difficult issues. In the often polarized world of regulatory reform, the institutional setting of the study group created the conditions for a sustained, nuanced, and sophisticated approach to brownfields and is a rare example of how an institution can be set up to examine the effectiveness of regulatory incentives in order to refine them. But the primary importance of the study

²⁷ According to one state official, DNR has attempted to recruit environmental NGOs to participate in the Brownfields Study Group but has had limited success attracting such groups because of resource constraints on the part of NGOs, and a focus of many groups on natural resources issues rather than on "brown" issues. An environmental NGO staffer noted that they keep an eye on the deliberations of the Brownfields Study Group but because of resource and staff constraints rely on friends within DNR to alert them to policies that could weaken environmental protection.

group to Wisconsin's brownfields history lies elsewhere. The group may have been initiated by DNR, but it was the members of the group—local government officials, lawyers, lenders, economic development directors, and consultants—who invested their political resources in an effort to persuade reluctant private actors to participate in brownfields redevelopment. To do so, members of the study group relied on their own experiences as active initiators of brownfields projects, learned from the impediments and barriers they found in their work, to in turn fashion a more powerful set of incentives to engage the private sector.

5. Summary

This paper has illustrated how brownfields policies emerged from the framework of the Spill Law, how these policies both required and led to changes in the institutional behavior of DNR, and how they were refined and diffused by new kinds of relationships and exchanges, both formal and informal, among regulators and public and private economic development interests. We have tried to show the trajectory of policy change that is, how the underlying problem of contaminated site cleanup was bounded to notions of forgiveness and then reconceptualized more broadly, and how in this process the rigid policy divisions between environmental protection and economic development were first questioned and then assailed as the unintended consequences of cleanup policies became more evident in the landscape of Wisconsin cities. By recognizing the economic benefits of cleaning up contaminated sites—by, in other words, redefining the subject matter policy entrepreneurs in government and the private sector were able to motivate government action to reform the state's Spill Law and explore policies where remediation and redevelopment would intersect.

But in Wisconsin, regulation was only one body of options that was used to push forward new policies. As we have seen, brownfields policy development was also grounded in the broader powers of state and local government, enabling them to provide incentives and subsidies to potential developers and site owners. Policy innovation also occurred because of structural changes in DNR and in its relationships with regulated entities. And more generally, policy entrepreneurs were able to generate policy reforms through leadership and persuasion. These are the factors that led to a new agenda for brownfields cleanups and to a more thorough integration of environmental and economic policy.

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Appendix A. Individuals Interviewed

Phillip Aiello Barry Ashenfelter Les Blum Linda Bochert Steve Born Brian Borofka Loren A. Brumberg Greg Bunker Joe Carroll Jerome S. Chudzik **Beverly Craig** Charles S. Cuttell Ralph Dashner Chris De Sousa Jim Dunning Kathryn M. Erdmann David A. Erickson John Evans Michael Flesch Darsi Foss Lilith Fowler Nancy Frank Donald P Gallo Mark Giesfeldt Kory Groetsch Brian Hahn Arthur J. Harrington Steve Hiniker Jeffrey L. Hosler Geoffrey F. Hurtado Bruce A. Keyes Jackson Kinney Larry Kirche Larry Lapachin Dee Allen Mayo Peter McAvoy Patrick McCutcheon Steven P. McDowell Robert B. Monnat Michael Morrissey Thomas J. Mueller Tom Nelson

Robert J. Neumann Mark Patronsky Peter Peshek Dean Prohaska Brian Reilly John Robinson Wavne Rollin Robert E. Schmidt III Jason Scott Gary Shuettpelz Michael D. Siegel John F. Stibal John Stimac, Jr. Michelle Syring James Tarantino Caryl Terrell Peter Thillman Mark Thimke Anna Thomas Dan Tyrolt Bruce G. Urben Christine Van De Yacht Scott Williams Blair W. Williams Russell W. Wilson